The effectiveness of the Albertina Sisulu Executive Leadership Programme in enhancing leadership competencies of public health service managers in South Africa

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By

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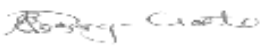

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DEDICATION

I dedicate this research to my parents,

Danie and Jeanette van der Berg

for the loving parents they were

and

for always believing in me

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EXECUTIVE SUMMARY

The purpose of this study was to assess whether the part-time modular Albertina Sisulu Executive Leadership Programme in Health (ASELPH) Fellowship training, based on competencies and using case studies as a core methodology, successfully enhanced the leadership performance of public health service managers in South Africa (SA). The problem statement was that organisations spend on leadership training and development, but seldom assess their impact. This research adds to the scarce literature on the subject.

A mixed-method quasi-experimental study determining pre-post changes in competence and performance of the ASELPH Fellows, was undertaken. The sample was public health sector managers in the second cohort of the ASELPH Fellowship, drawn from eight of the nine provinces in South Africa. ASELPH had determined 14 competencies that it sought to develop and the researcher developed four indicators of performance for each competency. The Fellows' self-assessments and a 360° assessment by their supervisors, peers and subordinates (assessors) were used to determine changes in the Fellows competence and performance. Information on the standard of the course, the Fellows' learning journey and the factors affecting their performance in the workplace were obtained from a survey that accompanied the 360^0 assessment, as well as from Fellows' reflective essays and evaluations of course modules.

The methodology was tested and the sample size was found to be sufficient, the questionnaires reliable and the training intervention applicable. There was no significant difference in the Fellows' assessments of their own competence and performance and that of their 360° assessors, indicating that the self-assessments were consistent. In spite of the small sample, statistically significant improvements were found in 11 of the 14 competencies and 44 of the 56 performance indicators. The improvement was corroborated by the retrospective assessments of the 360° assessors. Therefore, the study provides evidence that the training was effective in enhancing the leadership competencies and the performance of the ASELPH Fellows.

This was despite human and financial resource shortages and a poor governance environment impacting negatively on their ability to implement their learning. All Fellows and assessors affirmed the difference that leadership training and development could make to the healthcare environment in SA.

The unique strengths of the ASELPH Fellowship were its case-based method, eLearning, reflective assignments, round-table conference-style classrooms, group-work, networking, mentorship and focused assessments. The facilities and the quality of lecturers enhanced interactive learning. Aspects to be improved included the balance between class and online learning, the number of SA case studies, greater involvement of Fellows' senior management and improved mentorship in the workplace. The study confirms the effectiveness of the ASELPH Fellowship and the value of investing in leadership development to influence the performance of public health sector managers in South Africa.

Keywords: leadership, leadership training and development, healthcare leadership competencies, leadership training assessment, 360^0 leadership assessment

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LIST OF ACRONYMS AND ABBREVIATIONS

ART	Antiretroviral Therapy
ASELPH	Albertina Sisulu Executive Leadership Programme in Health
CHWs	Community Health Workers
ClickUP	University of Pretoria e-Learning platform
DH(M)IS	District Health (Management) Information System
DoH	Department of Health
DPSA	Department of Public Service and Administration
EQ/EI	Emotional Intelligence
F2F	Face-to-face
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HPCSA	Health Professions Council of South Africa
HRH	Human Resource for Health
HST	Health Systems Trust
KMO	Kaiser-Meyer-Olkin
KPAs	Key Performance Areas
KSAOs	Knowledge, Skills, Abilities and Other characteristics
LD	Leadership Development
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MLCF	Medical Leadership Competency Framework
NCD	Non-communicable diseases
NDoH	National Department of Health
NGOs	Non-Governmental Organisations
NHI	National Health Insurance
NHS (UK)	National Health Service (United Kingdom)
NQF	National Qualifications Framework
OHSC	Office of Health Standards Compliance

PHC	Primary Healthcare
PMDS	Performance Management and Development System
PP	Pre-post (PP) (study design)
ROI	Return on investment (factors)
SA	South Africa
SANC	South African Nursing Council
SAQA	South African Qualifications Authority
SCM	Social Change Model
SDGs	Sustainable Development Goals
SDI	Strength Deployment Inventory
UFH	University of Fort Hare
UNAIDS	Joint United Nations Programme of HIV/AIDS
UP	University of Pretoria
WBOTs	Ward-Based Outreach Teams
WEF	World Economic Forum
WHO	World Health Organization

CHAPTER 1 INTRODUCTION AND RESEARCH OBJECTIVES

1.1 Introduction

Leaders are progressively facing more challenges in the changing environment.[1-2] These challenges include limited resources, increased litigation, diverse teams, strikes and service delivery protests.[1-2] When organisations face collapse, the first question asked is "*Where was the leadership?*" Performance and success of organisations boils down to leadership, and leaders who have to adapt to changing environments.[3-6] Healthcare professionals often are expected to undertake leadership roles without adequate training or experience.[7-8] Increasing leadership capacity has the potential to contribute to successful organisations.[9-10] Therefore, organisations, including public entities and services, should equip leaders with the skills to perform optimally in changing environments.

In South Africa (SA), the Minister of Health has expressed his view that healthcare leadership might not be at the desired level to deal with changing policies and the introduction of new initiatives. The National Health Insurance (NHI) system has been tabled in SA and is in the early stages of implementation. Effective leadership and governance are crucial for the success and sustainability of such a system.[11] The NHI is a collaboration between private and public health systems, but the public health system has been criticised for poor performance of staff and facilities, mainly due to ineffective leadership and management.[12] This ineffectiveness results in negative consequences for patients and health professionals and for implementing policies.[12] Implementing the NHI in the public health system demands that public health sector managers be equipped with the leadership skills to deliver quality, efficient healthcare to all South Africans. To address this demand, the Albertina Sisulu Executive Leadership Programme in Health (ASELPH) (referred to as the ASELPH Fellowship in this study) was established in 2013.

The ASELPH Fellowship (Appendix A) is an initiative, endorsed by the SA Minister of Health to address the healthcare leadership needs in SA today and for the envisaged

NHI. The ASELPH Fellowship was designed to equip public sector managers and future managers with the necessary management and leadership skills and competencies, to address the health service needs of the people of South Africa. The ASELPH Fellowship undertook a needs assessment, through interviews with provincial and national public health sector executive managers, to help determine the objectives of the Fellowship. The results revealed that performance was poor in a wide range of areas and the programme needed to address: planning and management, political interference, leadership and management, management of financial and human resources, change management, inadequate strategic thinking, communication and project management, mentoring and performance management, support from supervisors and senior managers, and generally poor monitoring and evaluation (Appendix B).

The ASELPH Fellowship was specifically designed to equip emerging and executive leaders with a set of competencies identified by the Fellowship as being crucial for successful leaders.[13] The part-time case-based Fellowship has 13 modules (Table B4) each presented for a week, with pre- and post-contact time tasks. The completion of the ASELPH Fellowship training equates to a Diploma in Health System Management (Executive Leadership) at the University of Pretoria. The unique features of the Fellowship include the case-based method with case studies, eLearning, group-work, reflective and practical 'real-time' assignments, continuous assessments and mentoring.

Leadership training is common in organisations and receives wide endorsement but the benefits which are repeatedly mentioned and acknowledged in the workplace need to be steadfastly established.[14-17] It is due to this lack of leadership training assessment, that this study assessed the effectiveness of the ASELPH Fellowship in enhancing the leadership competencies of public health service managers in a South African context.

1.2 Problem statement and research questions

The purpose of the study was to determine the extent to which the ASELPH Fellowship

training has changed the leadership competencies and performance of public health sector leaders and managers (referred to as Fellows in the study) who attended the Fellowship. This study was a combination of a quantitative and qualitative assessment. The question this research tried to answer was: *"Does the part-time ASELPH Fellowship training based on competencies, using case studies as a core methodology, successfully enhance the leadership performance of health managers in South Africa?"*

The ASELPH Fellowship has since its commencement in 2013, not been assessed to determine its effectiveness or impact in the workplace. Few studies have done thorough assessments of leadership training[17-20] and the King's Fund (UK) report[21] on healthcare leadership stated: *"there is very little evidence for the effectiveness of leadership development programmes and evidence-based approaches are needed to ensure a return of huge investments made*".[21] This indicates there is a great need to assess the effectiveness and impact of leadership training on healthcare organisations. This research therefore investigated the effectiveness of the ASELPH Fellowship in the workplace by trying to respond to the following questions:

1.Did the competencies and performance of ASELPH Fellows improve after attending the ASELPH Fellowship training?

2. What factors inhibited or enabled Fellows' effectiveness?

3. How did the Fellows perceive the ASELPH Fellowship training?

1.3 Objectives of the study

The main aim of this study was to assess the effectiveness of the ASELPH Fellowship in enhancing the leadership competencies and performance of public health service managers in the South African context. The specific objectives were to:

1. Determine whether the competencies and performance of Fellows changed from before the ASELPH Fellowship to afterwards, from the perspectives of the Fellows themselves and that of their immediate team i.e. supervisor, peers and subordinates (referred to as assessors in the study).
2. Determine the factors influencing the effectiveness of the ASELPH Fellowship in relation to the health system, the workplace and the individual.

3. Explore Fellows' perceptions of the Fellowship, with regards to its curriculum content, strengths and benefits, weaknesses and areas needing improvement, teaching approaches/pedagogies, mentoring and assessments.

Given the above objectives, the following was hypothesised: *The ASELPH Fellowship will improve Fellows' leadership competencies and performance.*

1.4 Significance of the study

There is a scarcity of literature on whether or not leadership training is effective. Organisations invest a lot of money into this leadership training and the question remains, is it worth it? In the SA context, a number of training programmes are available. The criticism about these programmes is that the training has not had the desired effect of equipping leaders with the necessary skills. The ASELPH Fellowship tried to distinguish itself through its curriculum content and teaching approaches and it was important to establish whether it had the desired effect. If the ASELPH Fellowship did have the desired effect, it could lobby for its values to recruit students on the Fellowship; if not, it would have to reevaluate itself. This study is significant at two levels; firstly, to contribute to the SA context and secondly, to global literature.

1.5 Conceptual Framework

This study seeks to look at the effect of the ASELPH Fellowship on the performance of the Fellows. The conceptual framework is built around the competencies and the method to measure these.

ASELPH used the following competency frameworks to align the ASELPH Competency Framework (Appendix B): Health Systems Trust (HST) (for the Department of Health/DoH), the Department of Public Service and Administration (DPSA) and the competencies in Higher Education (South African Qualifications Authority/SAQA 2012) for the National Qualifications Framework (NQF) level 8 and 9. A self-assessment was also conducted on the first (2013-2014) cohort of ASELPH Fellows at the University of Pretoria, to determine their perceptions of their individual competencies

This approach ties in with the model and framework recommended by Patel et al.[22] The researcher adapted this model to depict the process of the ASELPH Fellowship training as well as how the assessment was done in this study (Figure 1.1).

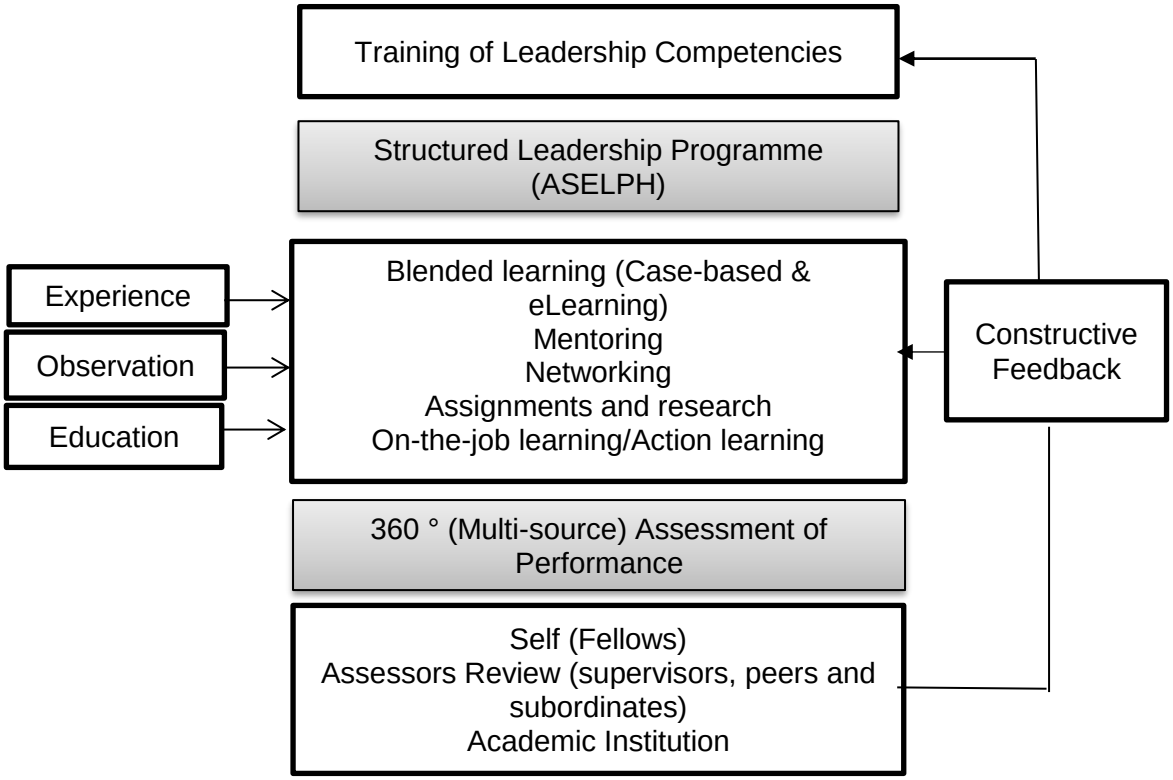

Figure 1.1: Conceptual framework depicting the ASELPH Fellowship training and assessment

(Adapted from *Training and assessment of leadership skills Model)*

The model depicts the relationship between the training and development of competencies through a structured leadership programme (such as the ASELPH Fellowship) and the final process of assessing the effectiveness of the Fellowship. The training methods in the ASELPH Fellowship include blended learning (case-based method, interactive lectures and eLearning), group-work, mentoring, networking, assignments, research, and action (in service) learning. The ASELPH Fellowship recognised factors such as experience, observation and education as important factors contributing to leadership development. These factors were taken into account in the

ASELPH Fellowship training through the selection process of the Fellows and captured as part of the study.

The ASELPH Fellowship training was assessed through the 360° (multi-source) assessment of performance, which included self-assessments by the Fellows and their assessors. The review by the academic institution (University of Pretoria) included the completion of the diploma.

Constructive feedback was a regular process of the ASELPH Fellowship training as part of assignments, presentations and research. The Fellows' self-assessments and the 360° assessments from the Fellows' assessors, form part of the overall constructive feedback regarding the Fellows' performance and the ASELPH Fellowship training.

Although Kirkpatrick's four level model[23-24] was not specified as a conceptual framework for this study, the assessments during the ASELPH Fellowship training and this study followed these levels intuitively in the following manner:

- *Level 1 measures the leader's reaction to the programme[24]:* This was measured by module and self-assessments during the ASELPH Fellowship training, as well as the assessments done for this study.
- *Level 2 includes indicators of the learning that took place during the training[24]:* This was assessed in each module through feedback on group discussions and individual and group assignments. A further indicator was the personal reflective essay, an assignment that depicts the tools learned over the course of the ASELPH Fellowship training.
- *Level 3 is the application of the skills and knowledge in the workplace[24]:* This was assessed through extending the reflective essays to include the implementation of new tools in the workplace, and through their own and the 360° assessments by their assessors of changes in their competence.
- *Level 4 measures the impact on the organisation's goals and objectives[24]*: As explored in the methodology, the impact on health indicators is vulnerable so this was measured by determining change in Fellows' indicators of performance, the

effect on the team and the changes implemented at the workplace. The effect on the team was assessed through the 360° assessments from the Fellows' assessors. The changes in the workplace were confirmed by the Fellows in the study survey and their reflective essays, as well as by their assessors.

1.6 List of key terms

Leadership

Leadership has proven to be quite difficult to define. Aalateeg[25] in their *Literature Review on Leadership Theories* presented eight definitions of different authors and realised the common word in all these definitions was *"Influence"*.[25] Therefore, in line with a number of authors, in this study leadership is defined as *the influence of an individual on a team and the organisation to achieve a common goal".*[26-29]

Leadership development

For the purpose of this study, Leadership development (LD) is defined as the combined process by individuals and organisations to produce and advance leaders to achieve the organisation's goals,[30] and to grow the organisation's capacity.[30-31]

Competencies

Competencies are defined as the *"underlying knowledge, skills, abilities, and other characteristics (KSAOs) of people that indicate ways of behaving or thinking, generalising across situations, and enduring for a reasonably long period of time*" These other characteristics include personality traits and inherent talents.[32-34]

Assessment

Assessment is defined as "*the systematic collection of data regarding the success of training programmes through linking individual performance to the performance of the organisation".*[24]

360^0 leadership assessment

One of the uses of the 360° assessment method, is to measure the effectiveness of leadership training and development.[35] This process involves the assessment of the participant by people with whom they work, to give a more complete picture of their competencies compared to just a self-perception. This tool has been proven one of the best to assess a leader's effectiveness and actual organisation performance, due to the reduction of the subjectivity that is sometimes found in self-assessments.[36]

Mentorship

Mentorship is "*a two-way relationship and type of human development in which one individual invests personal knowledge, energy, and time in order to help another individual grow and develop and improve to become the best and most successful they can be".*[37-38] A mentor provides help, guidance or encouragement to an aspiring leader.[20,37-41]

1.7 Summary and chapter overview

This thesis comprises Chapters 1 to 6. Chapter 1 described the main aim of the study, to assess the effectiveness of the ASELPH Fellowship in enhancing the leadership competencies of health service managers in the South African context. The chapter explained the significance of the study, bolstered the scarcity of literature on the effectiveness of leadership training and determined whether the investment in training was worthwhile. Further objectives were specified to gather information on factors that could influence the effectiveness of the training and how to improve the ASELPH Fellowship. The study as a whole evolved out of a conceptual framework built on a competency model.

Chapter 2 provides a review of the pertinent literature, Chapter 3 the methodology and Chapter 4 the findings, which are interpreted and discussed in Chapter 5. The final chapter, Chapter 6 covers the recommendations and the implications for future research.

CHAPTER 2 LITERATURE REVIEW

This literature review explores research related to leadership, leadership theories, competencies and leadership training and development. It also provides an overview of healthcare leadership in South Africa (SA) indicating the history, structures and challenges, including those of the envisaged National Health Insurance (NHI) for SA. In relation to the aim of the study, to assess the effectiveness of leadership training, the literature review focuses on the significance, methods for and assessments of leadership training and development.

The literature process was conducted using various databases including Google Scholar, E-Journals, Scopus and Google websites including World Health Organization, Department of Health (South Africa) and Health Systems Trust. The staff of the University of Pretoria assisted in the process. The specific keywords used for the search included leadership, leadership training and development, leadership training effectiveness and leadership training assessments. Articles' abstracts were first explored before the applicable article was imported into the researcher's database. These articles were then scanned and analysed for this study's literature review.

Following is a review of the literature that presents authoritative scholarship in relation to the research problem of this study.

2.1 Introduction

Leaders in all sectors are experiencing increasing pressures to deliver in a dynamic environment. At the heart of delivery is the 17 United Nations (UN) Sustainable Development Goals (SDGs) with 230 targets, launched in 2016, that were developed to succeed the Millennium Development Goals (MDGs).[42-43] SDGs are linked to healthcare through SDG3 that addresses healthy lives for all.[43-44] The SA government has adopted the SDGs to be achieved by 2030.[45] Progress of these goals are globally tracked by a number of bodies, including the World Economic Forum (WEF). Given the challenges that leaders face, global leadership's traits and competencies, and the

development thereof, have been seen as vital. The World Health Organization (WHO) recognised this when it introduced a conceptual framework for strengthening leadership and management capacity, which included managerial competencies to be developed to improve health service delivery.[46-47]

As with all sectors and their leaders, healthcare systems are experiencing many challenges including diverse teams, financial and human resource constraints, strikes, service delivery protests, client profile changes with an increase in life expectancy, increase in chronic disease resulting in an increased demand for healthcare, increased litigation, advanced technologies, economic pressure with mounting healthcare cost and global involvement.[1-2] Strong healthcare leadership, with the right skills and competencies, is needed for this changing environment to ensure good relationships amongst all stakeholders.[48-49] Performance and success of organisations ultimately boils down to leadership and this includes leaders changing with the evolving environment.[3-6]

Organisations, including public entities and services, should develop their leaders in order for them to perform successfully in their roles. In the context of the healthcare environment, as with any other organisation, the main purpose of an organisation, under the leader, is to run a cost-effective service and achieve customer satisfaction.[16-17,50] While leadership training is common in organisations and receives wide endorsement, the benefits repeatedly mentioned and acknowledged in the workplace are not widely established in research.[14-17]

2.2 The importance of leadership

Leadership development is not an area that industries in SA particularly emphasise, but the healthcare industry now realises how important leadership skills are for the success of the system.[50-51] The Health Professions Council of South Africa (HPCSA) and other countries adopted the CanMEDS framework, developed by the Royal College in the 1990s,[52] which emphasises that medical doctors need to fulfil their roles not only as a healthcare professional (clinical expert), but also as a communicator, collaborator,

leader/manager, health advocate, scholar, and professional.[50-53] The adoption of the CanMEDS framework emphasised the importance of leadership and hence leadership training to enable medical doctors to acquire the necessary skills to fulfil these leadership roles. The National Health System (NHS) in the United Kingdom (UK) recently developed the Medical Leadership Competency Framework (MLCF) to guide the development of leadership skills in the health profession.[54] Leadership training is therefore gradually being incorporated into the curriculums of health professionals' training due to the growing need for competent healthcare leaders.[53-55]

Leadership has proven to be quite difficult to define. Aalateeg,[25] in their *Literature Review on Leadership Theories*, presented eight definitions from different authors and realised the common word in all these was *"Influence."* Therefore, in this study, in line with a number of authors, leadership is defined as "*the influence of an individual on a team and the organisation to achieve a common goal.*[26-29] The King's Fund report[21] on healthcare leadership in the UK's NHS, specifies the key role that leaders play as individuals, in teams and in the organisation. Individual effective leaders need to satisfy clients and the team, where their role is to ensure a high standard of service delivery and responding to clients' complaints. Motivation and innovation are important factors for success.[21] At team level, the key role is to ensure a good working environment where the whole team feels valued. Team leadership ensures the team is committed to a common vision and goal to ensure high quality service delivery. Leaders also ensure that regular performance monitoring and evaluation is done. The next level is the leadership of organisations where leaders, as part of the executive leadership, play a role in ensuring that clients, team members and all external stakeholders are heard and valued to contribute to a successful organisation.[21]

John Maxwell[56] argued that some people function easily as leaders while others find it a struggle since leadership is a dynamic process. He confirmed that even though some people may not have the natural predispositions of leadership, a competent level could be developed. Leaders are able to function at different levels and Maxwell came up with the Five Levels of Leadership[56], as depicted in Table 2.1.

Table 2.1: Five Levels of Leadership

Level	Meaning	Description
Level 1 – Position Level	Entry Level (Positional Leaders)	• People follow the leader because they have to • Leader has no influence- influence is through the title • Are only bosses and never leaders • Anyone can be appointed to a position but are not necessarily a leader
Level 2 – Permission Level	Based on relationship	• People follow the leader because they want to • Leaders begin to develop influence, they know the team and build trust
Level 3: Production Level	Based on results	• The leader gains influence and credibility • People follow because of what the leader has done for the organisation • The leader finds it fun to lead and influence others
Level 4: People Development	Based on ability to empower others	• The leader invests in followers to eventually become leaders as well • Increased teamwork and performance • People follow because of what the leader has done for them
Level 5: Pinnacle	Highest and most difficult level	• Requires effort, skill, intentionality and talent • Are naturally gifted leaders • These leaders develop level 4 leaders • People follow these leaders because of their positive reputation.[56]

What Maxwell wanted to prove with these levels is that each leader, who wants to lead others, needs to start at the bottom with another person and work their way up through the ranks. This has become a challenge in organisations since many leaders are appointed to levels and positions where they are not competent or comfortable. It can result in resistance from followers, no accountability and resultant poor performance. Leaders therefore should be equipped with the necessary skills and competencies, through training and development, to lead at senior level.[56]

Goleman[57] in "*What makes a leader"* stated that both Intelligence Quotient (IQ) and Emotional Intelligence (EQ) are important. IQ determines the type of job you can manage, while EQ will let you become an excellent leader.[57] Goleman[58] further emphasised, in the *Focused Leaders,* that leaders should be focused, focusing on

yourself, on others, and on the wider world. Leaders who focus on themselves and others, draw on the primary EQ elements. *Focusing on yourself* starts with self-awareness and listening to your inner voice and such leaders make better decisions. Together with self-awareness, comes self-control, which results in exercising willpower. *Focusing on others* includes empathy and building relationships. Followers usually respect these natural leaders and the team wants to work with them. Those focusing on the wider world are visionary leaders, meaning outward looking. These leaders are strategic, innovative, system thinkers and are great with big picture concepts. Goleman[58] puts it excellently: "*failure to focus inward leaves you rudderless, a failure to focus on others, renders you clueless, and a failure to focus outward, may leave you blindsided*.[58]

Effective leaders have been shown to ensure open and honest communication, receive regular feedback and do continuous reflection to keep improving; this results in good teamwork.[46] Vriesendorp, de la Peza, Peabody, Seltzer, et al.,[59] stated that many healthcare performance problems, including low staff morale, are related to poor leadership. Management Sciences for Health (MSH), a global nonprofit organisation responsible for sustainable health systems, formulated eight leadership practices that improve health outcomes[59]:

- Scanning: awareness of the environment
- Focusing: clear organisational strategy
- Aligning/mobilising: teamwork
- Inspiring: shows trust and confidence in staff
- Planning: sets organisational goals and objectives
- Organising: puts structures and systems in place
- Implementing: coordination of activities
- Monitoring and evaluation: feedback and improvement

Unfortunately, leadership can have a negative side and can affect the team adversely.[60] Schyns et al[61], in their meta-analysis, called it the *"dark side"* of leadership, where leaders' actions are destructive to their team and the organisation. Destructive leader

behaviour is defined as "*harmful actions by leaders towards their team and the organisation"*.[62] This toxic leadership was first described in the US military and was recognised as self-centred leaders who adversely affect their team and the organisation. Types of destructive behaviour include abusive supervisors, bullying and dictatorship. Destructive behaviour can be categorised into leader-related (abusive leader and resistance from the team), job-related (make it unpleasant for the follower), organisational (leads to turnover of followers since the followers do not feel protected at the organisation), and individual follower concepts (destructive leadership behaviour causes stress and influences the overall employee's life).[62]

The literature once again affirmed the importance of leadership and the crucial role of effective leaders to ensure positive employee outcomes.

2.2.1 The importance of leadership in healthcare in South Africa (SA)

SA is a good example of where healthcare leadership has become an urgent matter. The next section will give an overview of the SA healthcare system with its challenges, and the importance of leadership to deal with these challenges. This is imperative in the light of the proposed NHI system, since leadership will be crucial for the success and sustainability of such a system.[11]

The SA Minister of Health has expressed his concerns that the leadership might not be ready for the implementation of the NHI. In 2010, the Minister introduced his 10-point-plan[45] to improve healthcare services in SA, in which the first action would require good and effective leadership to succeed. This theme of the 10-point-plan continued in 2014 as part of overhauling the SA healthcare system. The minister has therefore advocated leadership development and training to equip leaders with the skills to perform optimally.[63].

To understand SA's healthcare challenges, such as the lack of leadership, quadruple burden of disease and resource constraints, it is important to have a picture of the history of SA, the healthcare structures and systems, the healthcare challenges and

the possible solutions to these challenges. These are discussed in the sections that follow.

History and structures of the South African healthcare system

In 1994, the South African democratic government inherited a health system that had been structured to support apartheid ideology rather than healthcare equity for all its people. Before 1994, South Africa (SA) was prejudicially divided along racial lines (Black African, Coloureds, Indians, Whites), with a consequential inequity in healthcare.[64-65] The health system was fragmented, racist and unequal, with Black South Africans receiving much poorer healthcare. Since then, extensive restructuring has been achieved towards the goal of the Constitution and Bill of Rights to give expression to the right to healthcare and equality of healthcare for all.[64-65] However, after almost 25 years since the evolution to a democratic country, South Africans are still suffering the legacy of apartheid. This legacy includes unemployment, poverty, wealth inequalities, high burden of disease, poor healthcare infrastructure, continuing social inequalities and human resource shortages that are insufficient to provide healthcare for an ever-growing client base.[66-68] Even with a healthcare expenditure of 8.5% of the gross domestic product (GDP)[12] which is higher than the 5% of GDP recommended by the World Health Organization (WHO)[44], the public sector remains under pressure.

The SA health system constitutes the public sector together with a smaller parallel private sector. The public sector supplies healthcare services to 82% of the estimated 57.7 million South Africans[69] accounting for 51.5% of health expenditure, while 48.5% is spent on only 16% of the population in the private sector.[45] These public healthcare services are rendered at approximately 4,200 public health facilities[70] across the nine provinces by about 46,091 doctors and 6,466 dentists registered with the Health Professions Council of South Africa (HPCSA)[71] and 140,598 professional nurses registered with South African Nursing Council (SANC 2016).[45] The healthcare sector also has a number of statutory bodies to support the sector,[72] as depicted in Table 2.2.

Table 2.2: SA Healthcare statutory bodies

Statutory body	Function
Allied Health Professions Council	Regulates all allied health professions falling within the mandate of council
Compensation Commissioner for Occupational Diseases	Responsible for the payment of benefits to workers and ex-workers, in controlled mines and works, who have been certified as suffering from cardiopulmonary diseases because of work exposures
Council for Medical Schemes	Regulates the Medical Scheme Industry
Dental Technicians Council	Regulates the dental technicians' professions
Health Professions Council of South Africa	Regulates the health professions falling within the mandate of Council,
Interim Traditional Health Practitioners Council	Regulates traditional health practice and traditional health practitioners including students engaged in or learning traditional health practice in South Africa
National Health Laboratory Service	Supports the Department of Health by providing cost effective laboratory services to all public clinics and hospitals.
Office of Health Standards Compliance	Monitors and enforces health-establishment compliance with the prescribed norms and standards of healthcare. Ensures that complaints relating to non-compliance with prescribed norms and standards are considered, investigated and disposed of in a procedurally fair, economical and expeditious manner
South African Health Products Regulatory Authority	Provides for the monitoring, evaluation, regulation, investigation, inspection, registration and control of medicines, scheduled substances, clinical trials, medical devices, in vitro diagnostics and related matters in the public interest
South African Medical Research Council	To promote the improvement of health and quality of life through research, development and technology transfer

South African Nursing Council	Regulates the nursing profession
South African Pharmacy Council	Regulates the pharmacy profession[72]

Challenges and possible solutions in the SA healthcare

Policies mandate the healthcare sector that serve as a framework to address the challenges in the SA healthcare system. Despite the healthcare challenges in SA over the past decades, working towards the NHI, some changes were introduced that are still in early stages of healthcare evolution.

SA has been confronted with the quadruple burden of disease which refers to four groups of health conditions, as portrayed in Figure 2.1.

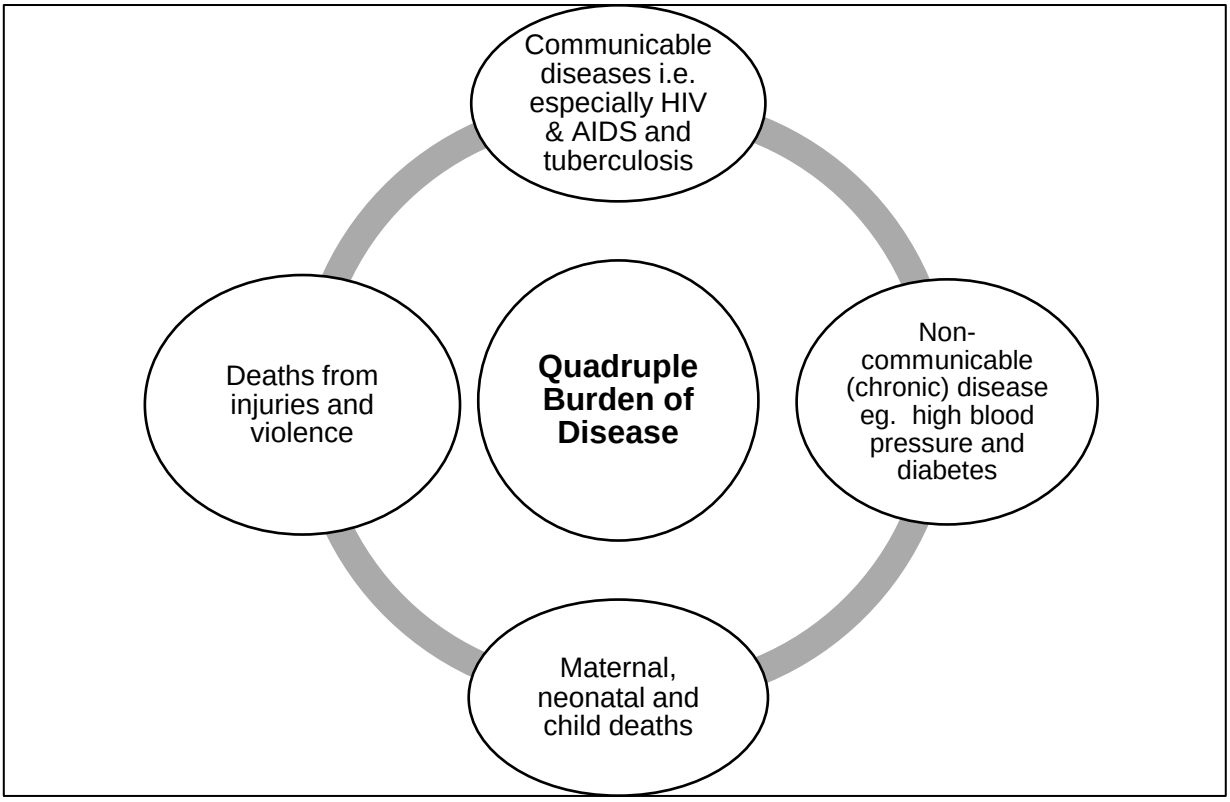

Figure 2.1: Quadruple burden of disease

With regard to *communicable diseases, i.e. HIV/AIDS and tuberculosis*, even with notable accomplishment with HIV/AIDS over the past years, the epidemic still remains challenging. Of the world's population living with HIV/AIDS, 17% are found in South Africa.[73] Social factors such as colonialism, apartheid, growing economic disparities, incompetence and corruption, still affects the HIV/AIDS fight.[73] Only 40% of eligible adults were receiving anti-retroviral treatment despite the fact that SA has the largest programme in the world. The 90-90-90 targets were launched by the Joint United Nations Programme of HIV/AIDS (UNAIDS) in 2014 to eradicate the AIDS epidemic by 2030.[74] These targets specify diagnosing 90% of all HIV-positive persons, supplying antiretroviral therapy (ART) to 90% of those diagnosed, and viral suppression for 90% of those treated by 2020.[74] SA has adopted the 90-90-90 targets and intends to achieve these targets through the HIV and AIDS sub-programme, which is responsible for policy formulation, coordination, monitoring and evaluation of HIV and sexually transmitted disease services.[72]

Non-communicable diseases (NCD's), as the second leg of the quadruple burden of disease, remain a problem, with cardiovascular deaths ranking with HIV. Research has shown that policy development, reinforced NCD surveillance with continued monitoring and top management support, are important to manage the disease burden,[75] which will keep on flooding the public sector system. Policies introduced to enable healthier lifestyles included Tobacco Products Control Act, healthy nutrition for early childhood, sugar tax/health-promotion levy, monitoring of salt content and awareness campaigns about the risk factors of NCDs.[72]

Maternal, neonatal and child deaths, as the third leg of the quadruple burden of disease, shows a decline in infant deaths from 48.1 per 1,000 live births in 2002 to 32.8 infant deaths per 1 000 live births in 2017. The under-five mortality rate (U5MR) declined from 71.3 child deaths per 1,000 live births to 42.4 child deaths per 1,000 live births between 2002 and 2017.[69] The maternal mortality ratio is 310 per 100,000 live births. Three-quarters of children less than one-year-old die annually due to lack of access to quality child health services and to poor childcare in homes and communities.[70] The Strategic

Plan for Maternal, New-born, Child and Women's Health (MNCWH) and Nutrition 2018/19-2022/23 ensures an effective healthcare system for women, young girls, mothers and children. Various strategies and policies to reduce maternal, neonatal and child deaths have been formulated and include Ministerial Committees on Maternal Mortality and South African Campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA) strategy. Interventions for the CARMMA strategy include: *"deploying obstetric ambulances, strengthening family-planning services, establishing maternity waiting homes, establishing kangaroo mother-care facilities, conducting Essential Steps in Managing Obstetric Emergency (ESMOE) training for doctors and midwives, intensifying midwifery education and training, and strengthening infant-feeding practices*".[72] Additional policies and committees include *National Committee for the Confidential Enquiries into Maternal Deaths (NCCEMD) and National Perinatal Morbidity and Mortality Committee (NaPeMMCo),* the Last Mile Plan to eliminate mother-to-child transmission of HIV, MomConnect to increase antenatal visits before 20 weeks, a national comprehensive Expanded Programme on Immunisation (EPI), Child, Youth and School Health and National Adolescent and Youth Health Policy 2017.[72]

Deaths from injuries and violence, as the final leg of the quadruple burden of disease in SA, has been regulated by the Trauma, Violence, EMS and Pathology Medical Services sub-programme[72] SA has a challenge with intentional inflicted injuries, with homicides topping the list; firearm-related injuries are the main cause of these violent deaths.[76-77]

Contributing to the challenge of the quadruple burden of disease, is staff shortages in the SA healthcare system.[45] Despite high human resources expenditure in healthcare, shortages result in lower capacity to meet the increasing healthcare demand in SA. Brain-drain and the ageing of the public-sector personnel also contribute further to these staff shortages. In 2016, the doctor-patient ratio in SA, was 0.8 per 1,000 people, however, considering the majority of practitioners are in the private sector, this ratio is in reality much less favourable.[78] With these staff shortages and the increased demand

in healthcare, clinical health associates (midlevel health-care providers), community health workers (CHWs) and ward-based outreach teams (WBOTs) were introduced.[72] These CHWs connect the neighbouring communities with their PHC facilities. The CHWs visit the community and provide basic healthcare services within their scope of practice. A total of 3,323 PHC Outreach Teams provided basic healthcare services to children and adults between 2017/18. The department budgeted approximately R1.4billion for CHW salaries in 2018/19.[72] The WBOT programme has proven successful in countries such as Brazil in increasing healthcare access and improving health outcomes, hence its adoption in SA.[79]

Staff shortages directly contribute to challenging working conditions for SA public health sector employees. A healthy workplace has been shown to be an encouraging environment, where individuals feel empowered through growth and development with employee involvement, excellent teamwork, effective leadership with respect, good listening and communication.[80-81] In a study by George and Gow[82], comparing public, private and non-governmental organisations (NGOs) in SA, the public sector health professionals compared to their private and NGO counterparts, emphasised higher workload, more stress, lower level of remuneration, lower standard infrastructure and lower adequacy of available human resources. This study highlighted the importance of good working conditions as well as non-financial incentives for staff to feel valued and to be retained.[80,82]

The purpose of the DoH is to improve community lives through effective service delivery and performance of employees is important to deliver this service. To improve public service delivery and access, as well as accountability of public health workers to deliver a high standard of healthcare services, policies such as the Batho-Pele Principles and the Patients' Rights Charter were introduced,[72] as well as the Performance Management and Development System (PMDS). The PMDS is a system to ensure maintenance of optimal performance of health professionals and client satisfaction. The PMDS is an instrument used to assess DoH employees on their performance, e.g. during probation, poor performance and the receiving of rewards and awards. The

whole process is a comprehensive process of employees knowing their job description, developing a draft work plan based on their key performance areas (KPAs), outputs standards and competencies. The PMDS is therefore important in monitoring staff performance and dealing with poor performance, e.g. when an employee is performing unacceptably, the system indicates that *'prescribed incapacity procedures must be followed'*.[83]

To address staff and infrastructure challenges in SA healthcare, the Ideal Clinic (IC) initiative was started in July 2013 to improve quality and efficiency in PHC facilities in the public sector.[84] It was introduced to certify clinics with "*good infrastructure, adequate staff, adequate medicine and supplies, good administrative processes, and sufficient adequate bulk supplies. It uses applicable clinical policies, protocols and guidelines, and it harnesses partner and stakeholder support".* The ultimate positive aspect of this concept is the collaboration between other government departments. The Ideal Clinic dashboard determines the status of a clinic, e.g. platinum, gold, silver, and considers 212 elements categorised into 10 components and 32 sub-components.[84] The progress is monitored through a web-based application. As from the end of March 2018, a cumulative total of 1,507 facilities qualified as Ideal Clinics.[72] This achievement has been enabled by collaboration between the NDoH and National Treasury in resolving supply chain management challenges faced by clinics, especially with regard to equipment, essential supplies and infrastructure.[84]

The Ideal Clinic framework includes the District Health Information System (DHIS),[84-85] which has been recognised as an important system for high quality healthcare service delivery in SA. The main purpose of the DHIS is to track health service delivery in the public health sector. An effective DHIS is important for quality healthcare service delivery to monitor and evaluate strengths and weaknesses and implement improvements where required. Despite many excellent achievements, the DHIS in SA healthcare has experienced its own challenges, basically staff and resource shortages, including trained personnel and inadequate interfaces.[84-85]

Challenges that have become a real financial burden for the healthcare system and may even bankrupt the department, are those of medico-legal claims and corruption. Claims amounted to R56.1billion (if all were successful) at the end of 2016/17, which amounts to one-third of the consolidated health budget for 2016/17.[86] Corruption in SA, especially the health sector, has proved to amplify poverty, increase income inequalities, diminished resources resulting in reduced healthcare access and increase costs.[87]. Behr,[88] in an updated European Union (EU) study on corruption, identified the following types of corruption in healthcare: *bribery in medical service delivery; procurement corruption; improper marketing relations; misuse of (high) level positions; undue reimbursement claims; fraud and embezzlement of medicines and medical devices; health professionals working privately during their normal working hours; friends and family appointed to positions (nepotism).* These types of corruption are familiar in the SA healthcare system.[89] Although it is difficult to measure corruption in SA, irregular expenditure is a good measure to indicate corruptive activities.[90] In their study, Rispel, De Jager and Fonn[90] established that in the four financial years between 2009 and 2013, the total amount of irregular expenditure within provincial health departments was over R24billion. They asserted that legislation does not dissuade corruption, but that lack of mechanisms to detect this corruption and non-consequence for those corrupt individuals, enhances corruption. Rispel et al.[90] concluded that there should be political will to rid healthcare services of corruption, and better law enforcement together with involvement from the public to hold corrupt individuals accountable. They emphasise the importance of ethical, competent public servants in the healthcare system.[90]

Rispel et al.[90] further acknowledged that the centralised functions in the SA public sector could sometimes be linked to corruption.[90] With this in mind, and to improve service delivery, decentralisation has been recommended as a solution for some of the challenges in SA.[91] Hendricks, Seekoe, Roberts, Buch, et al.,[91] in their article, confirmed that many countries, such as Canada, Australia, the United States of America, India, Indonesia and Brazil, have decentralised systems with the intention of improving universal proficiency and cost-effectiveness. Decentralisation is described

as the "*transfer of authority and responsibility for some public functions from one level of government, especially national government, to a second sphere (provincial) or a third sphere (local governments).*" Three different types of decentralisation are:

- Deconcentration: shifting of responsibilities from national level to officials in geographic areas, e.g. Department of Home Affairs and South African Police Service (SAPS).
- Devolution: transfer of functions to lower levels, e.g. municipal governments.
- Delegation: transfer of certain central functions to organisations at provincial or district-level.[91]

A major advantage of decentralisation is that employees feel more empowered due to the rapid decision-making, resulting in improved efficiency and quality.[91] The disadvantage of decentralisation should also be considered since it may result in increased expenditure because of duplication of functions and equipment and local variation versus standardisation that may affect quality. Some of the functions that were recommended for decentralisation were human resource recruitment and selection, as well as certain financial functions.[91] Decentralisation studies in Nigeria and Fiji, have proven to be successful with positive results on workers and leaders.[92-93] Some functions in the SA healthcare system are decentralised already, but need to be reviewed as part of the implementation of the NHI.

With an overburdened healthcare system with increasing demands, community engagement is an aspect that the SA health system needs to embrace in future. Research has shown how involving communities in healthcare delivery, results in better health outcomes.[92,94] De Weger[94] identified the following eight principles to ensure community engagement:

- Supportive staff and leadership with transparency
- A safe and trusting environment
- Early community involvement
- Shared decision-making and governance control
- Address power imbalances

- Equip community with the necessary skills
- Create successes
- Acknowledge all stakeholders' motivations and expectations.[94]

In a high demanding South African health system, community engagement is crucial to increase healthcare delivery capacity and De Weger's principles are good principles to introduce for success.

The above challenges are unfortunately directly linked to leadership and management in the public healthcare system. The tolerance of incompetence, including amongst leadership and management, results in negative consequences for patients, health professionals and policy implementation.[12] To overcome the healthcare dilemma in SA, the NHI Scheme was announced as part of the transformation to secure universal access to healthcare for all South Africans. The NHI will ensure all South African citizens have access to good-quality health services in both the public and private sectors, regardless of socioeconomic status, thereby eliminating financial barriers to healthcare access.[72,95-98]

The major obstacles for the NHI are cost and funding, which was estimated to be at R256billion in annual funding, based on 2010 prices, with a shortfall of R72billion in 2025.[66] Despite the NHI funding predicament, Phase 1, in 11 NHI pilot districts, was implemented between 2012 and 2016. Phase 1 focused on the following: (i*) improving the management of health facilities; (ii) improving throughput from training institutions to address key Human Resources for Health requirements; (iii) strengthening infrastructure programme and procurement of equipment; (iv) implementing improved and integrated health information systems and technology; (v) rationalising of laboratory services; (vi) effective and integrated procurement of health commodities; (vii) the implementation of and compliance with National Quality Standards for Health; (viii) Re-engineering of Primary Healthcare; (ix) the contracting of health practitioners to strategically enhance the quality of Primary Healthcare; (x) restructuring and improving the provision of Occupational Health, Mental Health, Disability and Emergency Medical Services as part of the comprehensive set of health entitlements*

that will be covered by the NHI Fund.[72] Phase 2 commenced in 2017, with the establishment of seven NHI bodies, structures and commissions with CHWs playing an essential role in this phase.[72]

Despite the concerns still remaining around the successful implementation of the NHI, many positives can result from this system, including potential for more funding into the public sector through taxes from the private medical schemes, improvement of the quality of healthcare due to more motivated staffing in an underfunded public sector, redressing of the inequality in healthcare and reducing the burden of disease, better use of money resulting in better performance due to service standards that need to be met, better governance including decentralisation that will potentially get rid of corruption.[99] These are the potential areas that the NHI will provide for, and although a lot of detail is not yet finalised, what is clear, is that there will be new demands and expectations on leaders and managers.

To further deliberate the problems and solutions to these challenges, a presidential health summit was held in SA in October 2018, with the theme of *"Strengthening the South African Health System towards an integrated and Unified Health System".*[100] Leadership and governance was one area that was mentioned as crucial for the success and sustainability of the SA healthcare system. It was recommended that leaders in the healthcare system in the country, need to know how to operate in this structure with its strengths and limitations and be gearing the health system towards the need of the NHI. It was recommended that leaders in the healthcare system need to have competencies to address the range of challenges outlined and be able to successfully implement solutions. Leaders therefore have to develop and have to be equipped with the necessary skills and knowledge for the changing environments.[100]

2.2.2 Leadership and Management

For leadership training and development to be successful, it is important that organisations first understand what leadership is and what is really expected from their leaders.[101] The concepts of leadership and management are often confused in practice

and it is important to distinguish between leaders and managers. While the two overlap, especially as far as administration is concerned, a definite distinction between leadership and management is made in literature. Leaders are responsible for change, while managers are more involved in maintaining activities effectively and efficiently. Leadership skills are sometimes required in managers, but the main difference still remains that managers make sure things get done, while leaders ensure employee commitment.[102] Table 2.3 summarises the differences between managers' and leaders' competencies.[25,59,102-104]

Table 2.3: Difference between leadership and management

Leader	Manager
Heart of the organisation	Brain of the organisation
A relationship through which one person influences the behaviour or actions of other people	Getting work done through the efforts of other people
Setting a direction: developing a vision for the future and share with the team	Create rules and procedures including planning and budgeting: setting targets for the future
People-orientated: aligning people according to their knowledge, abilities and personality; communicate the vision or new direction to people in the company	Task-orientated: Organising and staffing; creating the organisational structure and systems
Motivating, encouraging and inspiring: appealing to human needs, values and emotions	Controlling and problem-solving: creates rules and procedures, monitor results through reports, meetings and other tools
Asks what and why and takes you to a new place	Ask how and when and takes care of where you are
Wonder if a different solution can be used if the problem is set in a new environment	Think that a successful solution to a management problem can be used again.
Leaders get organisations and people to change	Managers write business plans, set budgets and monitor progress.
Do the right thing	Do things right [25,59,102-104]

Management is seen as "*a set of task-oriented processes of planning, budgeting, organising, staffing, controlling and problem solving."* Leadership on the other hand, is "*a process of enabling others to work in a specific context and involves the creation of a vision and strategic direction for the organisation, the communication of that vision to staff and stakeholders, and inspiring, motivating and aligning actors and the organisation to the achievement of the vision".*[105] Healthcare leaders and managers need both managerial and leadership competencies. Managers who lead can run healthcare systems holistically while strong leadership with managerial skills results in improved healthcare services.[59]

With all the controversy around leadership definitions, several theories have been formulated in an attempt to explain the leadership concept. Many of the theories have similarities but also differences as to what qualities the leaders possess, the role of the leaders and how they behave in certain situations.

2.2.3 Leadership Theories

Leadership has been researched for years and there are many different theories reflecting on various leadership styles. The first theories of leadership go as far back as the Great Man Theory by Thomas Carlyle, in the late 19th and early 20th centuries.[106-108] In 1840, Carlyle delivered six public lectures on heroes who were placed on earth by God to make a difference in humankind. His theory alleged that leaders are born with specific qualities that are part of their personality, and that these cannot be developed. The criticism of this theory was the particular gender bias where the heroes were portrayed as men, the worshipping of "The Great Man" as well as the fact that qualities can indeed be developed.[106-108] This theory formed part of the traditional leadership theory that was a male-dominated system.[109] Despite the criticisms, one can appreciate the initial concept of the leadership role in relation to that of being a hero.

Spector[108] further elaborates how Sigmund Freud worked with the unconscious working of the mind and his theory was linked to the need for a single person (usually male)

that can be followed. He related his theory to Moses who was a biblical hero. The differences between Carlyle and Freud were that Carlyle's was a divine intervention, whereas Freud's was linked to the position in the family. What is quite remarkable about these theories, is that it gives us a history of where the leadership concept of someone being the hero, i.e. leaders saving organisations, originates from.[108] These two theories, which were quite patriarchal with almost a trace of follower fear associated with it, were later replaced by theories such as transformational leadership by Burns in 1978, which speaks of the goodness of leadership.[108]

Research on leadership theories continued and the next early theories were based on trait and behaviour. The *Trait Theory,* through early research by Stogdill (1948) and Mann (1959), concentrated on the leader's personality, motives, values and skills.[25] This theory stated that leaders are born or are made with certain characteristics. The critique of this theory was that traits alone were not sufficient to guarantee successful leaders. Agreement of important traits could also not be established.[25] The *Behavioural Theory* was introduced around World War II (early 1950s), where researchers explored how the leader's behaviour affected their followers. Researchers found that the situation in which the leader performed, was important as well, and introduced the *situational theory* together with the behavioural theory.[25,107]

Sashkin[110] saw the controversy of the trait, behavioural and situational theories, and came up with a theory to define leadership according to the basic element of human nature, as distinct from the earlier trait theories. Sashkin[110] quoted the psychologist Ernest Hilgard (1980), who determined the three human nature elements as personality building blocks around *thinking (cognition, reason), feeling (emotion, desire) and behaving (action, courage)*. Sashkin[110] then formulated the following leadership theories from these human nature elements:

- Confident leadership: action, goal-directed leaders who confidently are in control of their actions.
- Follower-centred leadership: leaders using power in a positive manner.

- Visionary leadership: leaders think critically about decisions to ensure positive outcomes.

Many studies were undertaken and more leadership theories and styles were proposed from these. These leadership theories and styles are summarised in Table 2.4.

Table 2.4: Leadership theories and styles.

Behavioural theories (started early 1950s)
Autocratic leaders (Lewin and Lippitt, 1938) lead by power and control, with little input from followers.[111]
Democratic Leaders (Lewin and Lippitt, 1938) is a participative leadership style, with delegation of authority, valuing subordinates' opinions and respecting all. The team respects this leader and work well together to achieve a common goal.[25,111]
Laissez-faire style (Lewin and Lippitt, 1938) is a "hands-off" approach; when the leader is absent or avoids their role. This inactive leadership style is the opposite of participative or democratic.[25]
"Consideration" and "initiating" styles (Fleishman, Harris and Burtt, 1955): this is two-way communication, building trust, respect and rapport with the team and hence creating a leader-follower interaction.[15,25]
Employee-centred and job-centred leaders (Likert, 1961): focusing on employee and task respectively.[25]
Managerial grid by Blake and Mouton (1964): aimed at both task and team
Contingency Theories[25,112]
This suggests that the leadership influence depends on the situation and position, meaning the same style may be effective in one situation and ineffective in another. Different types of contingency models follow:
Fiedler's Contingency Model (Fred Fielder, 1964): correlation between the leadership style and situation.
Situational Theory of Hersey and Blanchard (1969): this theory states that these leaders adapt to their situation, i.e. organisation or team. This means there is no specific leadership style that is the ultimate one.

House and Mitchell Path-Goal Theory: postulated by House in 1971 and refined in 1974 by House and Mitchell. This describes the influence of leaders on individuals to achieve their goals.

Leader-Participation Model (Vroom and Yetton, 1973): focuses on decision-making ability of leaders and follower's approval of these decisions

Transactional Theories

Transactional Leadership was described by Burns (1978) and expanded by Bass (1985) as a relationship between leaders and the team, bound by rewards to achieve the task. It is seen as a transaction where the teams' needs are met when goals are achieved. The exchange can be negative or positive depending on the team member's performance[25] and is focused on reward systems and punishments.[25,113-114] Transactional leadership is further divided into a coercive style ("do what I tell you"), an authoritative style ("come with me"), bureaucratic style (manage by the book) and laissez-faire (laid-back non-leadership style). The success or failure of this leadership style have been proven to be influenced by the leaders' personality, the team as well as the organisation.[114]

Social Exchange Theory (Hollander, 1979) is a negotiated exchange between parties involving a cost-benefit process.[115]

Leader-Member Exchange (LMX) Theory by Graen (1976) and Graen and Scandura (1987), is a two-way leader-follower relationship that relies on trust and respect, and influences the followers' responsibility, decisions, access to resources and performance.[116]

Passive leadership is "hands-off" when things are going well and the team functions independently and that enables people to express themselves. Good passive leaders will intervene when appropriate.[117]

Task-oriented behaviours is about the task at hand and ensuring the team meets the demands.[117] Autocratic leadership fits into this theory.[25]

Transformational Theories

Transformational leadership was established by Burns in 1978, together with transactional theories. Bass in 1985 proved the difference between the two styles. Transformational leaders have positive effects and influence on their team's values and needs. They motivate the team to concentrate on the team and organisational need rather than self-need.[25,118] These leaders are strategic or visionary, vital for organisational change. They are role models with a positive attitude and are inspirational, intellectually stimulating, creative and innovative, adapt well to change, results-oriented, persistent, purposeful, have good communication skills to motivate

the team to stay true to the vision as well as good mentoring and coaching skills to support their team members.[33,112-113,119]

Kouzes and Posner's Leadership Participation Inventory (Kouzes and Posner, early 1980s) includes The Five Practices of Exemplary Leadership: model the way, inspire a shared vision, challenge the process, enable others to act, encourage the heart.[120-121]

Change-orientated Behavioural leadership: These leaders focus on change within the team through a vision.[117]

Ethical Leadership is the ethical personal actions of leaders perceived by their team.[122] Characteristics include integrity and honesty, workplace ethics, social responsibility, fairness, trustworthiness, and the awareness of one's ethical actions. They do the right thing and act ethically in all aspects of their lives.[122] Ethical leadership fits into other theories, i.e. transformational (ethical role modelling), authentic leadership (principled decision-making) and spiritual leadership (integrity and ethical treatment of others). If the followers are unethical, the ethical leaders may be pushed to act as transactional leaders, since not keeping to ethical behaviour may result in punishment for the team.[123]

Charismatic Leadership is a type of transformational leadership that was described by Bass (1985) as "*leaders with referent power and influence".* These leaders form the foundation for their team through inspiration and motivation.[124]. They confidently communicate their expectations, make personal sacrifices, have a high power need, high confidence and strong principles. Their followers relate to this and hence strive to be like these leaders. They are very passionate about the vision and builds the teams' confidence, and followers become committed.[124]

Authentic Leadership theory was postulated by Luthans and Avolio in 2003 and further developed by Gardner, Avolio, Luthans, May, and Walumbwa in 2005.[125] These leaders are high on moral character and are always aware of their values and principles. It is seen as the root of transformational, ethical, and servant leadership styles. Characteristics include *positive moral perspective, self-awareness, balanced processing, relational transparency, positive psychological capital and authentic behaviour*.[125] These leaders' behaviour results in followers' job satisfaction, structural empowerment, work engagement and managerial trust.[126]

Spiritual leadership Spiritual leadership encompasses vision, hope/faith and altruistic love. Motivation of self and the team happen through spiritual actions. The team see a purpose for their lives and are more committed.[127]

Relational-oriented behaviours Focuses on group relationships.[117]
Distributed Leadership is seen as a collective approach involving all stakeholders instead of an individual leader.[128]. It empowers followers to take on a leadership role. Distributed Leadership is almost equivalent to team leadership. It lessens followers' dependence on their leaders and these followers feel more part of the organisation and decision-making processes.[129-130]
Servant Leadership, developed by Robert Greenleaf (1970, 1977), is about leaders wanting to serve the team first and then lead.[131] Characteristics of these leaders include: listening, empathy, healing, awareness, persuasion, conceptualisation, foresight, stewardship, commitment to the growth of others, and building community. It shares many features with transformational leadership as well.[132-134] This leadership is different from traditional leadership theory, which favours an individualistic approach of the leader being the boss.[109].
Shared leadership is described as *"A dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organisational goals or both."* Influence involves upward, downward and lateral. Benefits of this theory of leadership include synergy, expertise, and diverse decision-making, collaboration, being motivated towards achievement and less stressed due to shared responsibility.[135]
Team leadership is where team members are fulfilling a leadership role. It is focused on enhancing the effectiveness of the teams of the organisation. The full team is responsible for ensuring the vision of the organisation is achieved instead of only keeping the leader accountable.[18]
Resonant leadership focuses on relationships that create positive work environments. This creates commitment from employees with resultant enhanced work satisfaction, security and productivity. Resonant leadership is based on emotional intelligence and includes the visionary, coaching, affiliative, and democratic leadership styles. Better conflict management and less stress are seen with these leaders in organisations.[136]
Responsible leadership
"A values-based and through ethical principles driven relationship between leaders and stakeholders who are connected through a shared sense of meaning and purpose through which they raise one another to higher levels of motivation and commitment for achieving sustainable values creation and social change".[137] The steward, visionary, and change agent roles that form part of responsible leadership, mimic that of transformational leadership.[138]

> The vital characteristic that distinguishes responsible from transformational leadership is that responsibility is missing from transformational leadership. It is stated that an irresponsible leader cannot be an effective leader.[139]

Most of these leadership theories originated from an ontology that was drafted by Bennis and described as a tripod consisting of an interdependent relationship between a leader and a follower to reach a common goal. The tripod ontology creates a sense of the leaders being the boss and the rest must follow instead of sharing the vision for organisational success.[140] Drath et al [140] in their review, criticised the Bennis's leadership tripod and articulated the limitations, replacing it with the Direction Alignment Commitment (DAC) framework, while incorporating the leader-follower aspect of the tripod. The meaning of the three elements, *direction, i.e.* linking the people to the organisation's vision, *alignment,* i.e. effective organisation and incorporation of the work, and *commitment,* i.e. personal responsibility and accountability to ensure organisational success. The benefits of the DAC framework are the integrative nature that can function independently to produce positive outcomes, whereas the tripod is dependent on all three elements to create a successful outcome. Through the DAC framework, new leadership understanding was introduced that did not depend on leader-follower interaction, but supported the shared and distributed leadership.[140]

Each of these various theories and leadership styles have a role to play in different leaders and different situations. Taking these into account, many researchers deliberated about the competencies needed for these leaders to perform in different situations.[141-142] The section to follow will elaborate on the competencies required for effective leaders.

2.2.4 Leadership Competencies

Effective leaders are crucial in improving healthcare systems therefore they need key competencies before they take on leadership roles.[141-142] Competencies are defined as the *"underlying knowledge, skills, abilities, and other characteristics (KSAOs) of people that indicate ways of behaving or thinking, generalising across situations, and enduring*

for a reasonably long period of time These other characteristics include personality traits and inherent talents*".*[32-34,141-142]

Different approaches have been used by various researchers that reflected on the leadership characteristics which lead to a core set of competencies for effective leaders. Bolden[143] proposed three pillars of leadership competencies:

- Management competence: forms part of leadership competencies and is about the job, i.e. its role and related standards on how to behave in the workplace.
- Behavioural competence: is about the relationship between behaviour and optimal performance. It includes five clusters namely goal and action management, leadership, human resource management, focus on others and directing subordinates.
- Organisational competence: is about the organisation, i.e. innovation, learning and performance; this is not about the individual alone.[143]

Chaundry[144] talks about the fact that leadership is an amazing achievement and mentions three scenarios that leaders can go through when appointed: those leaders who think they can buy everyone since they believe they are untouchable (USA, 2008 and India), those leaders who perform at an average level until retirement or those leaders who become exceptional leaders. Exceptional leaders will need the following leadership Traits.[105,133,144-146]

- Physical traits (internal strengths): basic intelligence, energy, drive and professional will, enthusiastic, competitiveness, preparedness.
- Mind traits (external traits): pragmatic focused and visionary, transactional skills (to build teams), perseverance (overcoming obstacles), stress tolerance, internal locus of control, motivation, cognitive intelligence, analytical, success-oriented.
- Conscience traits (heart of the leader): where leader's heart is crucial, wholeness, compassion, transparency, consistent courage, inspirational, honesty and integrity, low needs for affiliation, emotional intelligence (EQ) and social intelligence, caring about individuals. These conscience traits relate closely to an ethical competence in leaders.

Emotional Intelligence (EQ or EI) has proven to be a very important competency for leaders to stay motivated and to have better relationships with others.[36,147] Goleman[36] described the effects of self-awareness on relationships. A leader with emotional self-awareness and emotional self-control and adaptability that will result in empathy towards others. In the team, these leaders have a heightened influence that positively affects coaching, mentoring, conflict management and teamwork. They will also have a positive outlook that will directly affect organisational awareness. Goleman[36] concluded by describing leaders with high EQ, as inspirational leaders.[36] Goleman and Boyatzis[36] further confirmed the importance of balanced EQ domains since increased values in one of the EQ domains could result in an imbalanced performance from the leader.[36] EQ has proven to consist of many of the core competencies that curricula wish to teach health professionals,[148] indicating the importance of EQ in leaders.

Stefl[146] wrote about The Healthcare Leadership Alliance (HLA), which is a consortium of six major professional membership organisations that developed the HLA model with the following top five leadership domains:

- Leadership: visionary, inspiring, change management.
- Communication and Relationship Management: concise internal and external communication, and building and sustaining relationships[35]
- Professionalism: ethical personal and organisational conduct.
- Knowledge of the Healthcare Environment: understanding the healthcare environment and systems in which they function.
- Business Skills and Knowledge: including systems thinking, financial management, human resource management, organisational dynamics and governance, strategic planning and marketing, information management, risk management and quality improvement.

Stefl[146] confirmed that the competencies were interdependent, with the leadership competency being the core of the model. An HLA competency directory containing 300 competencies was established from this process.[146] Other competencies vital for effective leaders, recommended by researchers included financial management,[47,149]

time management skills,[150] entrepreneurial skills, creative thinking and innovative problem solving.[21,151]

Giles' study[152] asked 195 leaders to choose the 15 most important competencies from a list of 74, and the following were mentioned: high ethical and moral standards (67%), provides goals and objectives (59%), clearly communicates expectations (56%), has the flexibility to change their opinions (52%), committed to ongoing training (43%), communicates openly and often (42%), open to new ideas and approaches (39%), creates a feeling of succeeding and failing together (38%), helps staff grow into next-generation leaders (38%) and provides safety for trial and error (37%). This study once again proved the importance of leaders' ethical guidance and communication for employees to feel empowered and safe. Empowered employees have proved to be more productive, have improved job satisfaction and delivered high quality car.[152]

Despite the many strengths of competencies, weaknesses of some competency frameworks recognised by researchers are that it is a fragmented approach rather than an integrated approach.[153] Competencies are also dealt with in a generic way, through a limited and mechanistic education approach. It should be made relevant to the situation and tasks and focus on what is required in the future, not emphasising the past. Another weakness is the lack of agreement on "standard" leadership behaviours. While research has shown how various competencies are important for effective leaders and for them to be equipped with these competencies, research has also shown that achieving a competency framework alone is not enough. What is needed is reflection and linking competency to the organisation's vision and performance.[153]

2.3 Leadership training and development

Literature has confirmed that leaders need the necessary competencies, together with reflection, to be effective and competent in their roles, and many competencies have been listed as important. Leadership training and development is therefore critical to equip leaders with these essential competencies.

Some believe that leaders are born, but research has shown that leadership competencies can be taught.[154-155] Peter Drucker said that *"leaders (are) grow(n), they are not made".*[35,46]

Leadership development (LD) is defined as the combined process by individuals and organisations to produce and advance leaders to achieve the organisation's goals.[30] and to grow the organisation's capacity.[31] LD improves individual knowledge and skills[156-157] organisational performance and change, supports succession planning and ensures accountability and alignment.[31,158-159]

Healthcare professionals are often expected to undertake leadership roles when they start their careers, but most receive almost no leadership training other than through their work experiences.[160] Hsiang et al.[161] in their study, quoted a study that proved two-thirds of medical students at 18 medical schools perceived leadership skills as important in their career and wanted to attend formal leadership training courses in the future.[161-162] Important factors for LD to keep in mind is that it happens from early childhood and through adolescence, that formal education is key and that it is a life-long process and not a once-off event.[18]

2.3.1 Design and methods of leadership training

Programmes need to be designed according to the needs of the individual, team, situation, organisation and the society.[163] Many researchers have shown that most often LD is directed towards the individual's development and not to the organisation's needs; when leadership programmes are considered, this should be priority. Leadership programmes often fail, due to being designed as a "one size fits all".[134] McAlearney[35] recommended that the type of leadership required for an organisation should determine the type of training programme, and the content of leadership training programmes needs to be thought through carefully. LD programmes should be designed and focused on developing the employee, improving the team and contributing to an effective and learning organisation.[35] The following factors are indicated as key to the success of leadership programmes:[35]

- the programme must be actively supported by the top executive team of the organisation;
- a thorough needs assessment must be done in order to set clear objectives that should be achieved;
- selection of suitable participants;
- effective instructors with effective techniques and aids;
- sufficient time and suitable venue;
- a supportive structure and systems that allows leaders to grow;
- a well-designed programme that is practical with assessment based on real case studies to assess the effectiveness of the training;
- the programme must develop constantly to stay relevant;
- rewards for success;
- policies to address training shortcomings;
- sufficient budget to ensure quality training.[16,24,35]

The Social Change Model (SCM) of Leadership Development has been recognised by many researchers as a viable model on which to base leadership development.[163-164] Figure 2.2 depicts the SCM domains and critical values.

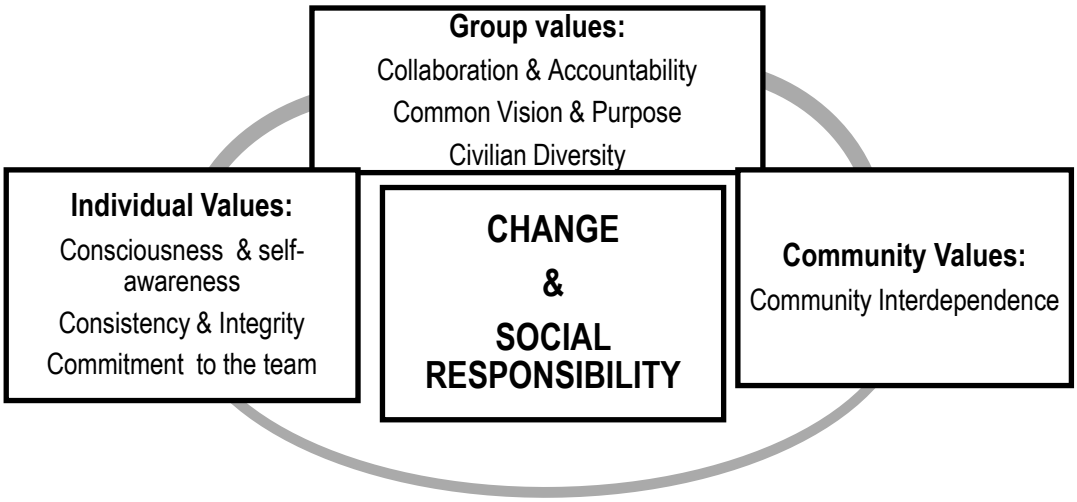

Figure 2.2: Adapted from the Seven C's: The Social Change Model of leadership development

The Social Change Model considers LD from the perspectives of the individual, group and community.[163-164] Each of the three domains include critical values resulting in the overall seven C's of leadership development. What the model indicates, is how the individual's values of consciousness and self-awareness, consistency and integrity, and commitment to the team, influence the group values. In turn, the group values, of collaboration and accountability, common vision and purpose and civilian diversity, affect community values. This is an indication of how the individual values contribute to the group and eventually impact on the community. Community interdependence (citizenship) results in the individual becoming connected to the society through their actions. Development of individuals without linking it to this bigger context will be less beneficial. This model depicts how the individual, group and community values of the Social Change Model should be considered when leadership and development programmes are designed to bring about social responsibility and change.[163-164]

Three healthcare leadership training models that have made quite an impression on researchers to be used for leadership training and development, are the CanMEDS model (Figure 2.3) [52], the Medical Leadership Competency Framework (MLCF)[54] and the Duke Healthcare Leadership Model.[165]

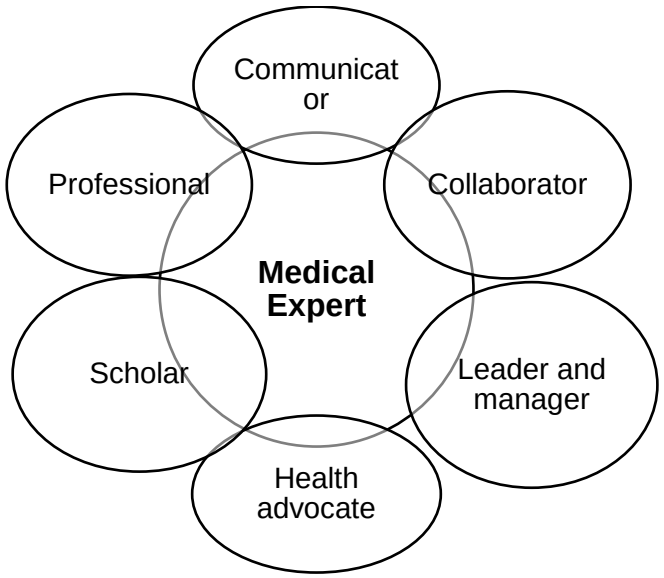

Figure 2.3: CanMeds Framework

(Adapted from CanMEDS framework of Frank et al.[52])

The CanMEDS model is an outcomes adapted competency framework, developed by the Royal College of Physicians and Surgeons of Canada (RCPSC).[52,166] The framework was introduced to ensure a competency-based curriculum for medical doctors which included a leadership pillar. The framework emphasises medical doctors not to just be experienced professional clinicians, but should be leaders with good communication and people skills that support health in general through professional knowledge and guidance through life-long learning.[52,166]

The Medical Leadership Competency Framework (MLCF), first introduced in 2008, is another model for healthcare leadership training.[23,54] The framework has five sequential domains to be taught at undergraduate and post-graduate levels, as well as continuously throughout the physician's career The domains are: *demonstrating personal qualities, working with others, managing services, improving services and setting direction.* The framework follows sequential steps, starting with self-awareness skills and moving to the next domains of working with others to manage and improve the services. These skilled effective leaders will eventually function at the fifth domain, to set a visionary direction for the organisation.[23,54,167] The challenges of the MLCF are that it is assessed as being oversimplified and ambiguous with the division into the separate domains. During the data analysis of a study on South African dental students' perceptions of the most important non-clinical skills according to the MLCF, skills were found to be overlapping in more than one domain of the framework.[54] This study resulted in a modification of the original MLCF to dispel these ambiguities and created overlapped domains, which occurred between some of the domains.[54] This study proved the importance and integration of skills to perform at different levels.

The Duke Healthcare Leadership Model was introduced due to the difficulty in defining the most important leadership competencies to teach.[165] This model recognised the following competencies as important to be considered during training: finances and economics, emerging issues and strategic planning, personal professional development, adaptive leadership, conflict management, time management, ethical considerations and personal life balance.[165]

When the requirements of training programmes have been established, it is crucial to decide on the methods that will successfully relay the leadership message. Various methods have been recommended for LD and there is a place for each of them depending on the needs and the objectives of the training. Leadership development can be done either formally or informally, and Table 2.5 summarises the advantages and disadvantages of different methods.

Table 2.5: Leadership training and development methods

Method	Description
Formal Training This still remains the most common approach of teaching	
Face-to-face (F2F) teaching	The F2F indicates the traditional classroom set-up, but with a difference of where the facilitator and the student interact (interactive lectures). It creates close relationships and spaces where teaching and interaction could take place. The F2F includes individual learning (IL), collaborative learning(CL) and instructor-led learning (ILL),[169] Research has shown that the IL and ILL have better exam results, while the CL has better assignment outcomes.[168] Disadvantages of this method is that the learning comes more from the facilitator, it is an individualistic approach and perception of limited time and space to achieve a task.[169]
Case-based	The case-based method uses real-world organisational problems.[170] Case study method/live problem/project assignment are said to enhance the transfer of training learnings into the workplace. This teaching method has proved to be superior to the traditional lecturing method to improve student interest through the interactive approach that improve analytical skills, learning skills, communication and cooperation.[171-172] Facilitators benefit as well, since they have to stay informed and act as facilitators and not lecturers.[173] Case-based allows for constructive feedback in the group,[174] it strengthens long-term relationships, improves networking and makes the curriculum relevant.[175]
Web-based/ e-Learning	Web-based/ e-Learning creates flexible, efficient and accessible training from anywhere. Up-to-date information stimulates innovation.[169,176-177] Students are shown to engage better and it enhances student learning.

	The negative aspects of web-based learning relate specifically to assignments in this study where students realised the cognitive overload of content and answers to the same questions. Security of information is also a concern for students.[169]
Blended learning	Blended learning combines different models of Face-to-Face (F2F) (including traditional and interactive lectures) as well as online learning; it increases access to training.[168,178-179] and creates a learning atmosphere that sustains motivation and promotes self-learning. It makes it possible to build a flexible course with limited resources.[180] Blended learning has enhanced student engagement and learning outcomes.[169,181-183] Flipped classrooms have been favoured, where videos are watched at home and the class used for discussions. Blended learning creates a group interaction while F2F relates more to an individual control.[179]
Informal teaching Occurs outside of a structured curriculum and classroom	
Mentoring	Mentorship is *a two-way relationship and type of human development in which one individual invests personal knowledge, energy, and time in order to help another grow and develop and improve to become the best and most successful they can be*.[37-38] A mentor provides help, guidance or encouragement to an aspiring leader.[20,37,39-41] Mentoring enhances job and organisational commitment, retention and satisfaction, promotion, improves self-esteem, reduces work stress and conflict.[184-185]
Executive Coaching	Executive coaches offer support and teach the individual new skills on how to deal with complex problems and become more effective. There is limited research on the effectiveness of coaching, but some research has shown that leaders were more productive due to coaching.[21,186]
Multi-source (360º) feedback	The 360° (multi-source) feedback method involves the completion of a questionnaire to assess the leader's performance. This process unfortunately shows mixed results as an LD method in affecting change in performance of leaders. The reason for this was because organisations' questionnaires are not up to standard, with insufficient theoretical foundation and unfamiliar validity.[21]

On-the-job learning/Action learning	This is learning in the workplace and may be offered by the organisation or out-sourced. The methods may include 360°, feedback, mentoring, coaching, networks, job rotation and action learning.[21]
Developmental Assessment Centres	This involves multi-source feedback, in-basket exercises, aptitude tests, interviews, group exercises, writing assignments and intensive reflection processes. It has proven to have positive effects on leaders, but it is expensive and not often used.[21]
Developmental Assignments	Leaders are given challenging assignments and need to find solutions. Effective learning for this method depends on the quality of the assignment and the feedback.[21]
Networking	Networks (together with mentoring) are another way in which leadership development can take place and allows for interaction with leaders with a wide-spectrum of knowledge, skills and experience.[21]

2.3.2 The effectiveness of leadership training

Research has proven leadership training and development to be beneficial to develop skill, attitude and behaviour in individuals,[105,170] resulting in a positive effect on teams, organisations and the society. Despite these positive outcomes of LD to improve healthcare services, assessing the effectiveness of leadership training has challenged many researchers to come up with good techniques of doing it.[14]

Effectiveness is all about the quality of the programme design, the learning objectives and then the management support after training.[187] The effectiveness of leadership training and development should measure not only whether the programme and learning objectives were achieved, but also whether the participants would perform better at their workplaces after training. Transfer of training should happen before, during and after training, and needs to be monitored continuously in the workplace for effectiveness.[170]

Return on investment (ROI) healthcare factors have been recommended by literature to assess whether leadership training was effective.[142] ROI factors should be agreed

on as part of a strategic plan and include emergency waiting times, hospital length of stay, asthma measures, operating room usage, diabetes measures, infection control outcomes and radiology procedures per period. [142] These ROI factors are all indicators that could be monitored by an effective leader after training.

2.3.3 Factors affecting leadership training and development

Literature shows a wide range of factors influencing the effectiveness of leadership training and these relate to programme design, facilitators' knowledge and skills, participants' motivation, workplace support and an environment conducive for sharing training knowledge and skills.[21] LD programme design is crucial to the success of the training and should include the following criteria:[21,35,188]

- Support from management with a conducive environment.
- Organisational value for leadership development.
- A strong link between the LD and health system strategies.
- Clear learning objectives to ensure appropriate focus.
- Clear and meaningful content for participants to follow easily, recall and implement.
- Appropriate sequencing of content by introducing simple then complex concepts and also schedule intermissions in training to allow participants to embed learning at their workplaces.
- Appropriate mix of training methods, i.e. formal lectures, practice sessions, role plays, coaching and experiential exercises.
- Programme expertise.
- Opportunity for active practice, i.e. take the learning and strive to implement it at the workplace.
- Relevant timely feedback regarding the participant's changed behaviours before, during and after training.
- Promoting the self-confidence of trainees, i.e. commend them to feel confident at each step of the training.
- Follow-up activities, i.e. assessment of successes at the workplace and organisations.

- Human resource policy on training and development of organisations that focus on skills development and behavioural change.
- Well balanced programme in order to provide the relevant theory that can be applied in the workplace.[104,170]

A number of authors have identified that factors such as the psychological status of participants, locus of control, conscientiousness, anxiety, age, cognitive ability, self-efficacy, job status,[170] open-mindedness of participants,[189] available resources, resistance to change,[190] type of training implemented, training content, trainee expertise,[170] and trainer characteristics,[187] affect the effectiveness of the training. It has been shown that participants also showed more motivation for training when management nominated them for the programme.[170] Participants' level of motivation can affect their enthusiasm and energy towards the programme; the higher their level of motivation, the more they are interested in the training and the more they are committed to share their learnings at the workplace.[191]

From the above, it is clear that many factors affect training and development, but it starts with the participant's motivation, attitude and emotional intelligence (EQ). Punia[170] stated that motivated employees will learn better, their attitude together with their EQ will affect them sharing the learning at their workplace and they will inspire others.[170]

Leadership training and development have shown to be crucial to prepare leaders for their roles and have an impact on the individual, team, organisation and society. Literature has illustrated that many factors may affect the effectiveness of training and development. Other challenges and concerns that have been associated with training and development include managing competing priorities, programme evaluation, programme resources and constraints, as well as future development.[35]

2.3.4 Assessment of leadership training

Assessment is crucial to evaluate the effectiveness of leadership training and

development as this gives an idea of the current strengths of the programme, the areas that need to be improved as well as the effect on the student.[24] Assessment is defined as the systematic collection of data regarding the success of training programmes through linking the individual performance to the performance of the organisation. Assessment criteria and plans should be decided on even before the programme is offered.[24] Impact of leadership training is defined as *"the measurements of effectiveness or efficiency (of the organisation) relative to core outputs of the system, subsystem, process or individual that have led to improvement of the leadership style of management, satisfied workers and customers, productivity, overall profitability, service quality, efficient work teams and organisational change"*.[18] As the effect should start at the individual level to then have an effect on the team and eventually on the organisation and society, the assessment should look at the programme's objectives and leadership characteristics and competencies. Feedback is key to assessment success, since this will determine whether there are areas that need further improvement.[16]

Assessment of leadership training effectiveness is not easy due to the fact it does not always measure what should be measured, such as leadership skill and impact.[192] Leadership training can be assessed at different levels and be done before, during, and/or after the training followed by assessment of effectiveness in the workplace. Different methods can be used to do the assessment, but incisive questions are of utmost importance for the significance of these assessments.

Kirkpatrick's[24] four-level evaluation model has been used extensively to assess training, and Phillip's model added a fifth level to this.[193-194] Figure 2.4 (below) explains the different levels that start with the measurement of the participants' reaction to and satisfaction of the programme, emphasis on the learning during the training, application and impact on the organisation and the monetary value of the training.[193-194] Noe[170] further added the participant's level of motivation to the Kirkpatrick's model, which indicates that highly motivated participants will see the benefits of training.[170]

Level 1	•Reaction: measures the participant's reaction to and satisfaction with the program
Level 2	•Learning: measures skills and knowledge gained
Level 3	•Application and implementation: measures application of skills and knowledge in the workplace
Level 4	•Impact: measures the impact on the organsiation's goals and objectives
Level 5	•Return on investment (ROI): measures the monetary value of the results against the cost of the programme

Figure 2.4: Kirkpatrick/Phillips five-level model

(Adapted from the Kirkpatrick/Phillips model[193-194])

The Kirkpatrick model was critiqued by Holton, stating that the participant does not have to have a positive experience to obtain knowledge. He further suggested that the change of the participant's behaviour in the workplace could be a result of other factors.[193-194]

Researchers looked at various factors that measure the effectiveness of training. These factors include direct and indirect costs, efficiency as well as behaviour and performance change[170] linking this to a performance development plan.[16] An instrument often used to measure the core values to assist leaders during and after training, is the *Strength Deployment Inventory (SDI)*. This tool explains why people behave in a certain manner when things go well and in conflict situations.[195]

The 360° assessment is another method of assessing the effectiveness of leadership training and development.[35,196] This process involves the assessment of the participant by people who work with them to give a more complete picture of the competencies achieved compared to just a self-perception. This method has been found to be one of the best methods to assess a leader's effectiveness, actual organisation performance and engagement, and employee satisfaction due to the reduction of subjectivity that is sometimes found in self-assessments.[20] The 360° assessment process has its own challenges of effective assessment of competencies. As a result, organisations need

to make sure their questionnaires are up to standard, with sufficient theoretical foundation and validity, and must be suitable to measure what it is supposed to measure.[21] A meta-analysis by McAlearney,[35] assessing the establishment, organisation, content, process, evaluation, and evolution of executive leadership development programmes of 49 health systems with leadership programmes in USA, showed that 79% used the organisations evaluation process to evaluate the effectiveness of the training, 67% used self-assessments and only 50% involved 360° assessment processes. The effectiveness of the leadership programmes were mainly measured by employee job satisfaction, succession planning, quality improvement and patient satisfaction.[35]

Collins[18] stated that a common weakness is that assessments tend to measure only one aspect, when a more integrated and multidimensional approach to performance measurement would be more effective. Another weakness is when measurement criteria are quite subjective and, as a result, do not give a true reflection of the change since it is not linked to the workplace. Some organisations also feel that assessments are too complicated, expensive and time-consuming, therefore they treat them casually and some are just not equipped to do proper assessments.[18] Organisations acknowledged that they neglect to assess training because it takes a lot of post-training energy. This has proved undesirable to the organisation, since huge expenditure goes into training, and results in leaders and trainees perceiving this as just another “box to tick” without any consequences.[18]

Literature has shown the importance of assessment of leadership training. Unfortunately, much research is still needed to develop an optimal model to measure the outcome and effectiveness of training successfully.

2.4. Conclusion of literature review

This chapter reviewed and highlighted the importance of leadership, especially in SA, the differences between leadership and management, leadership theories, leadership

training and development together with the different methods, the effectiveness and factors affecting the effectiveness of training and the assessment of leadership training and development.

The literature has proven the importance of leadership and management in organisations and especially in SA in light of the NHI. The challenges in the SA's healthcare system have been highlighted and could be crippling to the healthcare sector; literature has proved that effective and competent leaders are needed to deal with these challenges. Ethical leadership and culture in healthcare were suggested to keep public officials accountable.

The differences between leadership and management have been illustrated, as well as the fact that leaders need skills to function optimally at all levels. Various leadership theories were discussed and the most important similarity of all these theories was the fact the leader should be someone who can influence others towards a common goal. These leadership theories have been shown to play a role in the leadership skills development process. A positive correlation was shown between ethical, authentic, spiritual and transformational leadership styles in ensuring positive employee and healthcare outcomes. Various leadership competencies were recommended by the literature, and research has shown it is not easy to determine a "standard" set of competencies for effective leaders. It is important to note that competency development should equip leaders to build themselves, relationships, the organisation and the society. Reflection as part of the competency development process has been shown to be crucial for successful leadership development.

Leadership training and development were proven to be essential to equip leaders with the necessary skills to perform in the ever-changing healthcare environment. For development to be effective and have an impact, it should start with the organisation's needs and not with the individual and their required competencies. An analysis of the positive effects of leadership training and development on the individual, team, organisation and the society have been elaborated on in this chapter. Various

leadership training and development methods have been discussed, with both formal and informal training shown to make a difference, and that both have a place in training. The blended learning approach, with the combination of case-based methods and e-Learning, has proved to have optimal learning outcomes and indicated to be the future choice of training. F2F interaction still makes a difference and the best informal training was shown to be mentoring as an effective method of equipping leaders with the necessary skills.

The effectiveness of leadership training and development has been shown to be affected by numerous factors, but the participants' motivation, attitude and EQ were seen as critical factors that affect training's effectiveness.

Assessments are crucial to determine a leader's strengths, performance and the areas to be improved, as well as the impact of the leader's competence on the team and organisation and eventually the society. Various assessment models, including Kirkpatrick's/Phillips model, to determine the effectiveness of the training and development were discussed. What these models proved were that it should measure what it was intended to measure for it to be successful. The 360° assessment was recognised as an effective tool for training and development assessment to give a more complete picture of the leader's development and performance compared to self-assessment.

The literature confirmed the importance of leaders and their development in the success of healthcare systems.

The question this research attempted to answer was, *"Does the part-time ASELPH Fellowship training based on competencies, using case studies as a core methodology, successfully enhance the leadership performance of health managers in South Africa?"* The following chapter will give an overview of the research design and methods selected to address this question.

CHAPTER 3 RESEARCH DESIGN AND METHODS

This chapter details the methodology used to answer the research question: *Was the ASELPH Fellowship training at the University of Pretoria effective?* The competencies process, study design, population and sampling, measurements, data collection, management and analysis as well as ethical considerations are enunciated.

3.1 Study Design

The design utilised for this study was an empirical mixed methods approach. The mixed methods approach includes the collection and integration of both qualitative (open-ended) and quantitative (closed ended) data to respond to the research question.[197] For this study, the questionnaire and module assessments served as the quantitative data sources. Qualitative data were collected from the questionnaire, the module assessments as well as the reflective essays of the Fellows.

A combination of the mixed methods design was used comprising the convergent mixed methods design and the mixed method experimental (intervention) design. The convergent mixed methods design included the collection of the quantitative and qualitative data at the same time[197] This was achieved through the questionnaire survey, where the Fellows had to score and reflected on their competencies and performance indicators. A side-by-side comparison was done, where the qualitative findings confirmed the quantitative statistical results.[197] The mixed method experimental (intervention) design is defined as a design where the qualitative data is added into an intervention to include participants' experience.[197] The module assessments and reflective essays were used as these secondary data sources. The strength of the mixed method approach is that it draws on and hence reduce the limitations of both qualitative and quantitative data.[197] The strength in this study was that different perspectives from all data sources were compared and the quantitative results of the competencies and performance indicators were explained by including

the Fellows' perspectives. The evaluation of the ASELPH Fellowship was therefore enhanced through this mixed method approach.

The study was a quasi-experimental, pre-post (PP) study design. A PP design measures variables at a specific point before and after an intervention.[198] The PP study design was the design of choice since the Fellows' competencies and performance was assessed before and after the ASELPH Fellowship training. The design was therefore used to assess the effectiveness of the intervention, the ASELPH Fellowship training on the ASELPH Fellows' performance.

The purpose of the sudsy was to assess the effectiveness of the ASELPH Fellowship and factors influencing its effectiveness. To determine the effectiveness, we compared the Fellows' perception of their competencies and their performance against indicators before and after the training. To validate Fellows' scoring of their performance, we tested whether there was a significant difference between their scores and those of their assessors. Additionally, to determine whether factors other than the course could have accounted for any improved performance, such as through enhancements in the health system or at the workplace, qualitative questions were asked of both Fellows and assessors. We also wanted to determine from the Fellows what they saw as the strengths and weaknesses of the Fellowship, including the curriculum content and teaching approaches.

3.2 Study context

3.2.1 Study setting

The study setting was the University of Pretoria in SA. It also included the ASELPH Fellows' assessors in their workplaces in eight of the nine provinces, i.e. Eastern Cape, Gauteng, North West, KwaZulu Natal, Limpopo, Mpumalanga, Free State and Northern Cape. The Western Cape Department of Health decided to have their leaders trained at universities in their province.

3.2.2 Study Population and Sampling

The research population was the two cohorts of the ASELPH Fellowship at the University of Pretoria (UP). An advertisement was placed in the press and through local e platforms for candidates to apply. Health Departments were briefed and requested to distribute the flyer and to encourage applications. The requirements for admission were a four-year degree plus three to five years' relevant health services experience. Experience in the health sector, demonstrating leadership potential was required. Applicants had to submit a CV and a letter of motivation. A joint panel comprising ASELPH Fellowship staff and representatives of the Provincial Department of Health, short-listed candidates for interviews in their province. The joint interview panel consisted of the ASELPH Fellowship staff and the provincial Head of Department (HoD) and the Deputy Director General (DDG) responsible for District Health Services (DHS)/Primary Healthcare

The first cohort completed the course during 2013/2014 and they were used as a pilot to test the surveys. The Fellows comprised selected leaders and managers in the public health sector from eight provinces in SA, as well as a few private sector leaders, mostly from Non-Governmental Organisations (NGOs). The sample for this study was the second cohort of Fellows enrolled in the ASELPH Fellowship (n=42) in April 2015 to June 2016 at the University of Pretoria (Table 3.1).

Table 3.1: Fellows' and assessors' response rate

	Sample	**Final sample (after exclusions)**	**Response Rate**
Fellows	42	36	27 (75%)
Assessors	168	144	83 (77%)

From an initial class of forty-two, six Fellows from the private sector and tertiary institutions were excluded, as the aim of the study was to assess the public-sector officials. The final sample for the Fellows was 36, however nine Fellows were considered non-responders since five did not complete their post-training assessments

and four did not submit their 360° assessor name list. The Fellows' final response rate was 75% (n=27).

The immediate team of the Fellows, a supervisor, a peer and two subordinates, were included in the study, resulting in 144 participants, after exclusion of the six Fellows (n=36). These assessors must have worked with the Fellows for at least the past 6 months at the time of completing the assessment. The Fellows were asked to name their supervisor (Appendix C) and the supervisor was contacted to determine if they were the appropriate person to assess the Fellow. The supervisor was also asked to confirm the name of a peer and subordinates (Appendix D) who would best be placed to assess the Fellows' leadership and management performance. The assessors were contacted via email to seek their agreement to participate in the study, and once they had agreed to take part, the informed consent form and the questionnaire were sent to them. The final response rate of the Fellows was 27 resulting in a final sample of 108 assessors. The final response rate for assessors was 83 (77%). Five assessors who retired or resigned and nine who did not want to assess the three Fellows who had resigned from that position, were amongst the assessors that did not respond.

Exclusion criteria

It was not suitable to include the first cohort in the study because of the evolution of the intervention, the measurement tools and systems. The original assessment tool used by the first cohort did not have performance indicators for the competencies, as these were only introduced for use in this study by the researcher in the second cohort.

3.3 Data collection

The data of the study were collected through a questionnaire administered to the Fellows before and after training. It also included post-training and retrospective assessments from their assessors through a questionnaire and interviews, as well as module daily assessments and reflective essays. Fellows' training was geared towards achieving a set of 14 competencies and 56 performance indicators against which the

Fellows' performance in this study were assessed. The process of determination of the 14 competencies is therefore salient

3.3.1 Competency Development process

Prior to commencement of the ASELPH Fellowship, competencies were identified from a needs assessment that was done through interviews with provincial and national public health sector executive managers to determine the critical management and leadership needs and challenges that the health sector is facing. The findings revealed gaps in competencies to deal with the following: planning and management, political interference, leadership and management, management of financial and human resources, change management, inadequate strategic thinking, communication and project management, mentoring and performance management, support from supervisors and senior managers, and generally poor monitoring and evaluation. These were all taken into account when designing the ASELPH competencies.

The competency frameworks of the Department of Public Service and Administration and the Health Systems Trust (Table B3) were used to identify a list of ASELPH core, managerial and leadership competencies each with a description and strategic intent (Table B1). The ASELPH drew on these frameworks and this resulted in the ASELPH Competency Framework for Executive Leaders in Health (Appendix B). The competency framework developed from a blending of these frameworks and a self-assessment that was conducted on the first (2013-2014) cohort of ASELPH Fellows at the University of Pretoria, to determine their perceptions of their individual competencies (Table B2). This self-assessment showed that most of the cohort of Fellows felt they were just average or below average in most of the competencies assessed. The first cohort validated the competencies process by confirming what they needed and what they lacked. These findings also confirmed the findings from the earlier needs assessment conducted with senior managers. ASELPH then aligned its 14 competencies to the DPSA Senior Managers Competency framework, the National Department of Health (Health Systems Trust /HST) and the Competencies in Higher Education (SAQA 2012) NQF 8 & 9 (Table B3)

The ASELPH competencies are also related to and encompass various leadership theories. Despite the fact that we have moved on from the "The Great Man" theory [106-108,] as part of the traditional leadership theory that was a male-dominated system,[109] the initial concept of the leadership role in relation to that of being a hero (taking full responsibility), can still be appreciated. The ASELPH Fellowship emphasises this concept of accountability and responsibility strongly through all the competencies. The Trait Theory was also criticised for the simple concept of leaders being born with certain traits, but the *self-management* and *honesty and integrity* competencies of the ASELPH Fellowship, could be seen as traits that are natural (born) to leaders, but was shown to be developed as well. The development of traits or competencies, is where the behavioural and situational leadership theories fit in. Many of the ASELPH Fellowship competencies are based on the transformational behavioural leadership theory. Transformational leaders have positive effects and influences on their team's values and needs. They motivate the team to concentrate on the team and organisational need rather than self-need.[25,118] These leaders are strategic or visionary, vital for organisational change. They are role models with a positive attitude and are inspirational, intellectually stimulating, creative and innovative, adapt well to change, results-oriented, persistent, purposeful, have good communication skills to motivate the team to stay true to the vision as well as good mentoring and coaching skills to support their team members.[33,112-113,119] These transformational characteristics are encompassed in the 14 ASELPH Fellowship competencies and 56 performance indicators; producing transformational leaders that have positive effects on their team, organisation and society. The Ethical Leadership theory as part of the transformational theory, also runs as a thread through the ASELPH Fellowship competencies, especially through the *honesty and integrity* competency. ASELPH Fellowship also embrace Distributed Leadership (part of the Relational-oriented behaviour theories), that is a collective approach involving all stakeholders instead of an individual leader.[128] Distributed Leadership is almost equivalent to team leadership where followers are empowered to take on a leadership role. It lessens followers' dependence on their leaders and these followers feel more part of the organisation and decision-making processes.[129-130] The ASELPH Fellowship competencies of *Client Orientation and*

Customer focus, Problem Solving and Analysis, Programme and Project Management and *Community/ Partnership Collaboration* speak to this leadership theory concept of involving all stakeholders in the leadership process.

Then ASELPH Fellowship competencies embrace the final theory of responsible leadership which is "*A values-based and through ethical principles driven relationship between leaders and stakeholders who are connected through a shared sense of meaning and purpose through which they raise one another to higher levels of motivation and commitment for achieving sustainable values creation and social change".*[137] The steward, visionary, and change agent roles that form part of responsible leadership, mimic that of transformational leadership.[138] The vital characteristic that distinguishes responsible leadership from transformational leadership is that responsibility is missing from transformational leadership. It is stated that an irresponsible leader cannot be an effective leader.[139] The ASELPH Fellowship competencies are strong on accountability and responsibility towards the individual, team, organisation and society. Responsible Leadership forms part of the Leadership module, illustrating the ASELPH Fellowship's strong emphasis on this important theory. The ASELPH Fellowship strive through the development of all 14 competencies and 56 performance indicators to develop the Fellows to be responsible transformational leaders.

From these competencies, the 13 ASELPH Fellowship modules, i.e. the different units with activities, were designed with their specific exit level outcomes. These modules were carefully structured to respond to the needs of the Department of Health, as well as to that of the DPSA and to the NQF framework. All the ASELPH Fellowship modules had core themes that were developed across modules (Table B4).

The 14 ASELPH Fellowship competencies were then further defined, and the researcher developed measurements for each (called *performance indicators* in this study) to give more meaning to the evaluation of the change in the competencies. The performance indicators were aligned to the competency frameworks (Table B3); four

performance indicators were therefore developed for each of the 14 competencies resulting in 56 performance indicators in total. This constituted the Assessment of Competencies and the indicators that determined the performance on these. These ASELPH competencies and performance indicators are in line with the literature where individual performance (self-management including EQ), performance towards others (people management, communication, problem solving) and performance in the organisation (change management, service delivery) have been emphasised.[36,105,133,143-146]

3.3.2 Data collection process

The purpose of the study was to assess the effectiveness of the ASELPH Fellowship training by determining if there was improvement in competencies and workplace performance after the Fellowship (Figure 3.1).

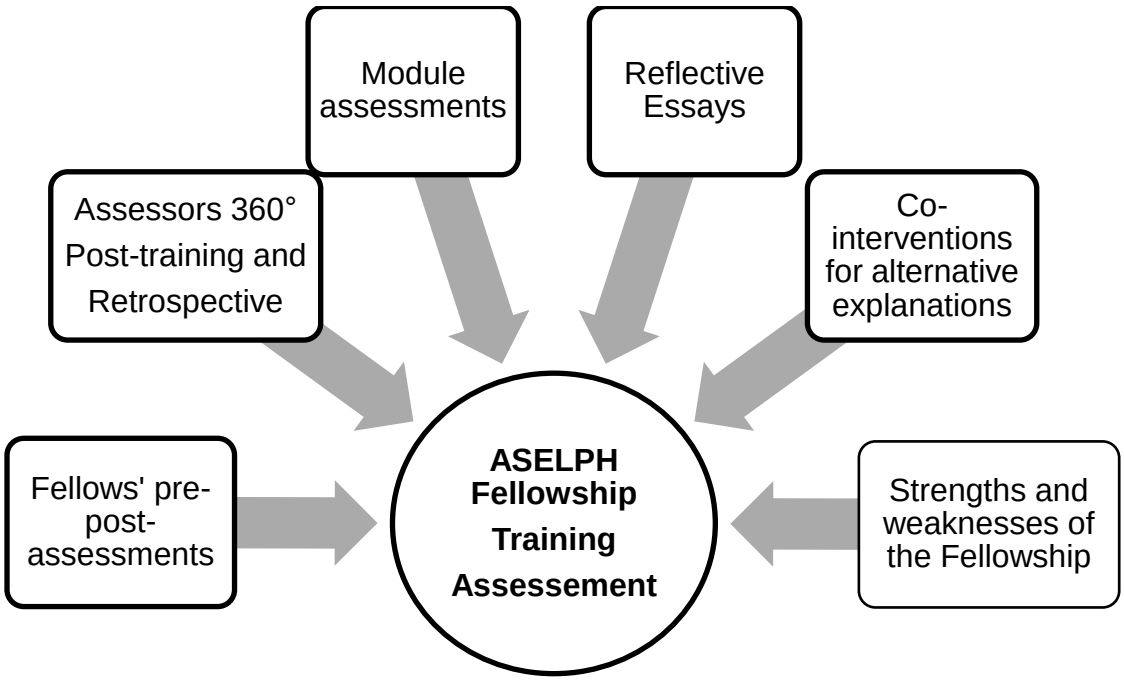

Figure 3.1: Assessment of the ASELPH Fellowship training

To determine this, we compared the Fellow's perception of their performance from before to after the course. However, there is always the concern that the Fellows may have over- or underestimated their performance. To determine the consistency of the

Fellows' perception of their performance improvement, we undertook a 360° analysis of their performance as viewed by their assessors. If there was no difference between the scores of the assessors and the Fellows, then the Fellows' self-assessment could be deemed accurate and any change in their performance could be seen as being true.

As the core of the study was to determine whether the Fellows improved their performance, it was necessary to determine if there had been factors in the work environment or health system that favoured or inhibited their improved performance. If the work environment or health system improved favourably, then it would be possible that any improvement in performance could be explained in part by these factors, rather than by the ASELPH Fellowship. Conversely, if the environment were more adverse, it would imply that any performance improvement after the ASELPH Fellowship training happened in the face of this adversity. To state the obvious, if there was no change in the system, any changes could be attributed to the ASELPH Fellowship. It was therefore important to understand if there were factors that might have influenced the Fellows' performance and therefore the effectiveness of the Fellowship. The first step in determining these factors was to establish whether the course (intervention) itself was satisfactorily delivered. This was based on the Fellows' assessment.

The last objective was to understand how the ASELPH Fellowship might have enhanced Fellows' performance by assessing what aspects of the Fellowship training had the most effect. The Fellowship's benefits and weaknesses, as well as looking at the curriculum content and teaching pedagogies, were therefore determined.

To address these objectives, the data was collected through a questionnaire that was designed with open and closed-ended questions, the module daily assessments and the reflective essays.

3.3.2.1 The Questionnaire Survey

The questionnaire survey method was chosen since this could be used to collect accurate data from respondents in a convenient, quick and cost-effective manner.[199]

An initial questionnaire, providing for a self-assessment on the 14 competencies, was developed by the ASELPH Fellowship. This served as a pilot study, and was completed by the first cohort to test the questionnaire for this study. The main weakness of this initial questionnaire was that rating only overall competency was too broad and allowed for too much subjectivity. The researcher therefore developed the performance indicators and expanded and tested the questionnaire for the Fellows and assessors for this study. The research study including the questionnaire and study design, was approved by the Ethics Committee on 26th August 2016 (Ethics Reference No: 325/2016) (Appendix E).

The baseline questionnaire (Appendix F), completed only by the Fellows, comprised three sections*:*

Section A: This section determined the demographic profile of the Fellows and assessors. The original questionnaire included a section on *Demographics* that provided information on gender, age, department and province of employment, qualifications and institution and current position. The researcher added the following questions: title of the highest qualification, management training including type and institution, length of managerial position, duration of service at present organisation and team size (direct reporting team and overall team). These questions were seen as important for some of the possible confounding factors of the study such as education, previous management training and managerial experience.

Section B**:** This section contained closed-ended questions for the assessment of the 14 competencies and four performance indicators for each competency (56 all together). This section addressed Objective 1 of the study in providing the basis for determining the change in the performance of the Fellows before and after training. Fellows were asked to rate their competence on a scale *not yet competent, below-average competence, average competence, above average competence or fully competent.* The Fellows were asked to assess their competence and performance against the requirements of their job and not by comparing themselves with their colleagues or team in the workplace. The questionnaire was designed to self-assess the individual's competency and performance for a specific task. The ASELPH

Fellowship's aim was to make all Fellows above average to fully competent, and used this performance indicator of competence in this study. Average was seen as below-average (together with not-yet-competent and below-average) in this study. The scores of the four performance indicators of each of the competencies were presented individually, and added and divided by four to determine an average score pre- and post-training for each of the competencies. Each competency question had a compulsory open-ended question for reflection, i.e. *Reflecting on the score you have given yourself, what has led you to give yourself that score?* (referred to as the *reflective-question* in the study). This served as one of the data sources that contributed to the richness of the qualitative data.

Section C: This section comprised open-ended questions about leadership, the biggest challenges faced by SA leaders and leadership training. This section also specifically looked at Objective 2, by determining the factors that influenced the training effectiveness. It also looked at Objective 3, which contained questions linked to determining the perception of the Fellows of the ASELPH Fellowship. Section C in the original questionnaire was expanded by the researcher from six to seventeen questions to obtain and capture this information.

The Fellows' post-training questionnaire (Appendix G) on the performance indicators was identical to the pre-training, with the exclusion of the demographics. The reflective and qualitative sections (nine instead of 17 questions) were included. The assessors' post-training questionnaire (Appendix H) was similar to the Fellows' baseline questionnaire, except for the questions being phrased with reference to the Fellow. The assessors did not complete a baseline questionnaire, but a retrospective assessment was completed by assessors.

The Questionnaire Survey Process

The Fellows were dispersed over eight provinces in SA. The online questionnaire was accessible to Fellows and assessors, with an emailed questionnaire as an alternative. However, a challenge was experienced with non-responses and delayed responses. Saleh and Bista[200] determined that low response rates to online questionnaires were influenced by factors such as curiosity, the construction of the survey, means of

communication and the privacy and confidentiality guarantee.[200] To address the initial low response rate, the due dates for assessments were delayed, follow-up emails were sent and telephone calls made; the researcher kept a logbook of all the calls made and messages sent to Fellows and assessors. Reasons for the non-responses included workload, technology challenges, length of questionnaire and wrong email addresses, as indicated by Fellows and assessors. The response delay amounted to six months to one year for both Fellows and assessors, resulting in the final data collection for some assessors in August 2017. This resulted in a delay of more than a year after completion of the Fellows' training since the Fellows completed the ASELPH Fellowship in June 2016.

The self-administered questionnaire was loaded onto Qualtrics, software for online data collection and analysis.[201] A link and password were created for each questionnaire and included in the email sent to the Fellows and assessors explaining the assessment process as well as the Qualtrics online steps. The survey could be completed on a mobile phone as well.

Approximately half of the assessors (n=41) had challenges completing the questionnaire on Qualtrics including access and time constraint. A Word document was emailed and completed by them or telephonic interviews were held (n=5). For the latter, a questionnaire was completed by the researcher during the telephonic interview. Following the telephonic interview, an email, including the completed questionnaire, were sent to thank the assessors and for them to confirm whether the information captured in the questionnaire was accurate. The researcher then captured the data from the Word documents and telephonic interviews into Qualtrics.

A baseline questionnaire (Appendix F) was completed by the Fellows before they started the course. The ASELPH Fellows were requested to rate their level of competency and performance at the start of the training (pre-training) (baseline assessment), and after completion (post-training) of the ASELPH Fellowship training (Appendix G). The reflective-question section was made compulsory in the online

questionnaire by not allowing the Fellows to continue to the next question without a reflective response. The reflection on each competency was important since themes according to the performance indicators were built from these that contributed to the richness of the data. These themes were quantified and presented in proportions. Quotes that offered a depth of understanding to what was behind the scores were selected from the *Reflective-question* responses. The reflective responses also had no responses (NR), which were taken into account when proportions were calculated, but were not commented on.

The Fellows' assessors completed a questionnaire post-training (Appendix G). A retrospective analysis was also conducted to enquire from the assessors how the Fellows' performance improved from when they started the ASELPH Fellowship training to after completion. In most cases (n=64) telephonic interviews were conducted for the retrospective assessment and this information was captured into Microsoft® Excel 2016. From the previous telephonic assessment interviews with assessors, the researcher gathered that the assessors had time constraints with completing a long questionnaire. The researcher therefore took the liberty of shortening the original Section B (competencies only) for ease of completion of the retrospective questionnaire (Appendix H). This shorter questionnaire version was not a concern, since the retrospective analysis followed almost immediately after completion of the post-training assessment due to the assessors' post-training response delay. The researcher during the interviews also reminded the assessors what the competencies and performance indicators entailed. The assessors were asked to rate the improvement of the competencies on the following scale: *No Improvement (1), Little Improvement (2), Average Improvement (3), A lot of Improvement (4), Exceptional Improvement (5).* The researcher also included the Fellow's improvement according to the assessor, under *General Comments on the improvement (or not) after the ASELPH Fellowship training (according to your previous assessment).* This information was copied from the assessor's Section C responses to make it easier for the assessors to complete this final questionnaire. Assessors were further requested to add more information if they wished to, *i.e. How ASELPH Fellowship developed the Fellow; How much better the*

Fellow is managing. The assessor was then asked to respond to these final two questions, either in an electronic or telephonic interview: *You knew the fellow before he/she attended the ASELPH Fellowship training. Above are some improvements you mentioned in your previous assessment. Are there any other comments re the improvement of the Fellow's performance that you wish to add? What are the specific areas from before the training where the programme made a difference?* Thematic analysis was used for the retrospective qualitative information. The themes were generated from the 14 competencies and the information was categorised accordingly.

3.3.2.2 Module daily assessments

The daily assessments covered the quality of the teaching and its appropriateness of the content, while the overall module assessments established whether the objectives were achieved, whether the Fellows' knowledge improved, how applicable the knowledge was for the workplace and the organisation of the modules (Appendix J). Each module was assessed by the Fellows immediately following the day's presentations as well as at the end of the week to assess the module in general. The objectives and outcomes of each module were included in the study guides. These objectives were also included in the narrative of the programme that was distributed to Fellows before the module started. All questions had a comment section for Fellows' qualitative responses. The information from these module assessments was used in the findings to indicate whether the Fellows had a perception that the training was done successfully. This was important since it would be a confirmation (or not) that if effective training was in place, the competencies of Fellows after the ASELPH Fellowship training, could be assessed without any doubt. This was to validate the ASELPH Fellowship training intervention. The daily module assessment response rate of Fellows was as high as 100% and as low as 20% for certain days and some modules. These assessments used for the analysis had complete responses. The response rate depended a lot on the follow-up by the specific coordinator, as well as the time allocated to the Fellows to complete the assessments.

3.3.2.3 Reflective Essays

The reflective essays were used to validate this change in the Fellows' performance further. All the Fellows (100%) completed a reflective essay as part of the Leadership module. The reflective essay process was explained to Fellows at the start of the course. Fellows had to keep a journal of their leadership journey during the ASELPH Fellowship training and had to reflect on the classroom experience, the tools learned, and the changes implemented at their workplace. The essay was submitted on the last day of the last module of the ASELPH Fellowship training. The reflective essay mark was part of the Leadership module mark.

The researcher analysed the reflective essays by using the following broad themes: *The Fellows' shortcomings as manager/leader (categorised into the 14 competencies), Fellows' initial expectations of the ASELPH Fellowship, the difference ASELPH made, the factors that played a role in the training, the modules and the tools learned and applied* and w*hether ASELPH was successful or not.* The responses from these essays added to the qualitative richness of the research and pertinent quotes were used to substantiate this. Fellows were aware that all assessments from the ASEPH training could be used for research. Codes were used to ensure anonymity and in such a way that the respondents were not identifiable in any way. The quotes were also used to validate the positive effect of the ASELPH Fellowship in changing the Fellows' performance.

3.4 Data management and analysis

3.4.1 Data management

The Fellows and assessors completed the questionnaires, and all data were treated as strictly confidential; the Fellows were continuously ensured of the confidentiality of the study. Participation was voluntary, and Fellows could refuse to have the information used in the research project. Each questionnaire was coded and allocated a unique number to ensure anonymity while data was analysed and discussed. Fellows were informed of the benefits for future leadership training, such as the ASELPH Fellowship.

Names were not disclosed in the research at any time. Codes were randomly allocated in Microsoft® Excel 2016 to the Fellows (S1-S27) and the assessors codes were S1A1-S1A4 to S27A1-S27A4; S1A1 means S1 is student (Fellow) one and A1 is assessor one. The code depended on how many assessors were linked to the specific fellow, since some Fellows had less than four assessors that responded. The coding did not make any differentiation between kinds of assessors, to maintain confidentiality. The researcher made the differentiation independently as was required during the analysis.

The questionnaires were retrieved from Qualtrics and the data were organised into Microsoft® Excel 2016 The data was cleaned, and the codes were immediately allocated to the Fellows and assessors for the researcher to work with the codes only. The Fellows' baseline and post-training findings were entered together in one Excel spreadsheet for ease of statistical analysis. These data were then converted into STATA format before the analysis began.

3.4.2 Data analysis

The analyses were performed using STATA 14.2. The first step was the pilot of the draft questionnaire on the 1st ASELPH Fellowship cohort. The reliability of the amended questionnaire was tested using the Cronbach's alpha test. The Alpha was established for the measurement of a test's internal consistency to ensure validity. This was developed by Cronbach in 1951 and equals a number between 0 and 1.[203] A Cronbach value of above 0.7 is considered acceptable for internal consistency. When the value is low (<0.5), this could be due to low question numbers or the questions are not interdependent.[202] Table 3.1 explains the values of the Cronbach Alpha where ≥0.9 is excellent and 0.5>α is unacceptable.[203]

Table 3.2: Cronbach alpha reliability coefficient

Cronbach's alpha	Internal Consistency
α≥ 0.9	Excellent
0.9> α ≥.0.8	Good

0.8> α ≥.0.7	Acceptable
0.7> α ≥.0.6	Questionable
0.6> α ≥.0.5	Poor
0.5> α	Unacceptable

The next step was to determine the sample adequacy for each of the 14 competencies as well as the 56 performance indicators. The Kaiser-Meyer-Olkin (KMO) Test was used to determine this. The meaning of the values is depicted in Table 3.2. The preferred KMO is 0.6 or above.[204]

Table 3.3: The KMO Kaiser-Meyer-Olkin (KMO) Test

0.00 to 0.49	Unacceptable
0.50 to 0.59	Miserable
0.60 to 0.69	Mediocre
0.70 to 0.79	Middling
0.80 to 0.89	Meritorious
0.90 to 1.00	Marvellous

If the questionnaire was proven to be reliable and the sample adequate, then statistical significance in the competencies and performance indicators before and after the training could be performed.

Descriptive analysis was used to present the socio-demographic characteristics of the ASELPH Fellows. The outcome of the 14 competencies and 56 performance indicators were presented in frequencies and proportions. These ratings were combined in two levels in the findings, (1) below-average (not yet competent, below average competence and average competence) and (2) above-average competence (above average competence and fully competent). The Mann-Whitney U test, a non-parametric equivalent of the paired t-test to determine the differences in values of samples,[205] was used to compare the before and after scores of the Fellows. This test was selected since the Fellows competencies was ordinal data[205] rated on a Likert scale of 1-5.

All p≤0.05 for this test was considered a statistically significant change, accepting the hypothesis that there is a difference between the pre- and post-training scores of the Fellows.[205] The level was sufficient for this study since the sample size was small and this value is suitable for such samples.[205] A significant changes meant that the ASELPH Fellowship has improved the Fellows' leadership competency and performance.

The Bartlett's Test were used to compute the inter-rater agreement between Fellows and assessors, as well as amongst the three levels of assessors in the 14 competency areas. This test has been proven to be superior for assessing similarities when the distribution is close to normality.[205] The Chi-square and Fisher Exact tests[205] were used to assess the association between responses on each question. These non-parametric methods were chosen because the resulting data from this research was categorical and not normally distributed.

The qualitative themes from the reflections on each competency were recorded in Microsoft® Word 2016 and analysed using the thematic content analysis approach. The thematic analysis is a method used in qualitative research to identify and analyse the data.[206] The advantage of this method is the flexibility and the versatility to be used in various theoretical frameworks and the fact that it is also suitable for small data sets.[206]. The researcher firstly familiarised herself with the data by critically reading through the responses. Each response was summarised by using words or phrases as themes. Themes were identified in the initial responses and then the data were scrutinised again to confirm the themes or search for possible themes that could be clustered or combined into categories. Recurring themes were coded and reported as such. Verbatim qualitative quotes are used to exemplify the Fellows' views and support the quantitative data.

3.5 Ethical and Legal Considerations

The protocol for this research was approved by the School of Health Sciences Ethics Committee on 26th August 2016 (Ethics Reference No: 325/2016) (Appendix J). The approval of The Dean of the Faculty of Health Sciences was obtained for the study to

be conducted in the School of Health Systems and Public Health, University of Pretoria (Appendix K). Permission was also obtained from the Department of Health to gather information from the ASELPH Fellows and assessors at the state facilities (Appendix L). Finally, permission was obtained from the ASELPH senior management committee and academic staff (Appendix M) to access any information that involved the ASELPH Executive Fellowship Programme.

This study was voluntary, and Fellows were under no obligation to partake. Informed consent was requested and Fellows and assessors were free to cease their participation at any time. Although the assessments formed part of the ASELPH Monitoring and Evaluation (M&E) leg, which was compulsory, the Fellows were specifically asked permission as to whether their responses could be included in the study. Fellows' informed consent was requested for their 360º assessors, who were nominated by their supervisors, to be surveyed. Fellows and supervisors were informed of how these 360º assessments would benefit the Fellows in their leadership development by being aware of their team's opinions about their competencies.

Fellows and assessors were aware and ensured of the confidentiality and anonymity of the assessments. Codes were used throughout the analysis and the reporting, to protect the participants' identity in the study. Quotes used in the findings, were used in such a way that they could not be linked to the Fellows or the assessors, or even the specific facility or province.

Fellows were also informed how the study would contribute to their own development, that of their team and their organisation, as well as future leadership training.

The findings will be shared with the Fellows, assessors, ASELPH faculty, funding partners, the Department of Health and all involved stakeholders. Scientific manuscripts will be prepared and submitted to reputable colleague-reviewed journals and the findings will be presented at an international conference. Data will be stored as

prescribed by the University of Pretoria for a minimum of 15 years from the commencement of this study.

Regarding conflict of interest, the researcher taught on one of the modules in the programme and therefore declares a potential conflict of interest, but the researcher's knowledge of the training and of the potential issues of the competencies, was essential to the study design. All questionnaires included a statement as to whether the Fellows gave permission for the findings to be used in a research study, and the researcher honoured the "NO" response. The researcher worked in conjunction with the ASELPH Fellowship M&E team, to ensure credibility of the data collection process.

3.6 Limitations of the study

When studying a situation in a dynamic health system, methodological challenges are being faced that are not ordinarily faced in a controlled laboratory environment. Throughout the research, the researcher has taken care to address potential limitations that can lead to selection bias, affect the integrity of the methodology and the method of the evaluation as well as having measures to assess possibilities of co-interventions.

Sample selection and size

The Fellows were selected based on their leadership position and hence the assumption that they already possess leadership skills. It may therefore be argued that the ASELPH Fellowship training itself may not have made the biggest change but that the Fellows' confidence was just improved through the training. The Fellows and assessors, through the 360° assessments, specified the Fellows' increased knowledge and skills with specific examples to indicate the changes after the ASELPH Fellowship training. That is an indication of the change the ASELPH Fellowship training generated.

The sample size was small, but it was limited by the size of the class and the students who met the inclusion criteria. Only one cohort preceded this one, and another was still in the process of completing their Fellowship training. The results of the three cohorts when studied could therefore differ, but the purpose of the study was not to compare

results. The study, therefore was vulnerable to a Type I error, where the limitations of the sample size would mean that statistically significant findings could be obviated. It also means that where a significant change was found with such a small sample size, the results were striking. The significant findings of the study were considered but the major feature of the study was the qualitative aspect and the reflections. The sample size therefore does not affect the study findings.

Fellows and assessors

Bias responses by Fellows and assessors towards the Fellowship cannot be excluded. The researcher tried to provide an environment where all Fellows felt safe within the study and did not feel the desire to influence the findings, but rather felt that they could express with honesty and accuracy. Various factors may have influenced participants' responses, unfortunately, this is an area the researcher could not control. The potential contamination of using the identical competency questions at baseline and post-training, is not considered a problem as these were used far apart.

The researcher can only assume that the responses were honest. This honesty can also be confirmed by the fact that the Fellows completed the course and graduated when completing this survey, and in no way were they accountable to anyone regarding not being honest.

The Fellows could decide whether they wanted their information to be used in the study. Despite this, the fact the Fellows and assessors had to include their names on the questionnaire could have resulted in the respondents not feeling comfortable to respond honestly to the questions. The researcher can confirm the honesty of responses through the fact that there was no significant difference between the scores of the Fellows and the assessors. The researcher avoided selection bias by requesting the Fellows' supervisors to nominate the Fellows' assessors. This could possibly have resulted in bias due the fact that the fellow could only have a small team that have to be included on the list. The fact the assessor also works with the fellow, could have resulted in bias responses. The subordinates' responses could have been influenced

by the power dynamics and the fear of the information being disclosed to the fellow. The researcher on numerous contact occasions, i.e. electronically or telephonically, ensured Fellows of the confidentiality of their responses. The type of responses by Fellows and assessors showed that participants thought through their responses and the researcher was confident that the responses were reliable.

The assessors only completed a post-training and not a baseline assessment. The retrospective assessment by the assessors was used in lieu of a baseline assessment, but the reality is that it could have been affected by recall bias. However, in discussion with assessors, they confirmed that based on the kind of questions asked, they felt confident that they had suitable recall of the Fellows' knowledge, skills and performance before the ASELPH Fellowship training. The assessors' retrospective responses can therefore be reported as an honest opinion of improvement over the training period and not current performance. Even in the Section C responses, about what difference the ASELPH Fellowship made, the assessors used examples of how the fellow's performance was before the training compared to how they changed. As the assessors' information was confidential, their anonymity was absolute, and they were therefore honest, as was acknowledged to the researcher.

A few Fellows changed jobs, had new supervisors and some supervisors retired. The responses may have been influenced by these factors as well. The researcher tried to keep this in mind during analysis of the data.

Methodology and validity

The methodology of the study was reviewed by and the statistical tests used confirmed by a statistician as sound and valid for the purpose, including validation of the questionnaires.

The ASELPH Fellowship training

It was hypothesised that the ASELPH Fellowship training would enhance all the competencies in the manager. The fact that only 11 overall competencies and 44

performance indicators showed significant changes, may be perceived as the ASELPH Fellowship not achieving the objective. The 360° assessment together with the qualitative data, as well as the assessors 'retrospective data, confirmed changes in all areas after the ASELPH Fellowship training, and showed its effectiveness.

The ASELPH Fellowship training made use of the case-based method of teaching. During the course of the study, compliance with the intended interaction, competencies and case-based method were reviewed, and intervention was as intended, within the operational flaws of any academic programme. The value of the case-based method was confirmed by Fellows in their assessments, which is an indication that the intervention was implemented successfully.

Co-interventions

The researcher also observed the field situation to assess for other co-interventions that could have had an impact on the findings. Some of the questions about co-interventions have been covered in the questionnaire i.e. any other training attended and any other factors that had an influence. The researcher was in contact with all the relevant healthcare stakeholders, scanned through all the DoH documents, as well as followed media coverage to note these possible co-interventions. The researcher is therefore confident that no other co-interventions were observed, except for those factors and challenges that might have affected the effectiveness of the training, as mentioned in the findings. Despite the previous management training of the Fellows, they still indicated their lack of competencies at the baseline assessment where some scored themselves below average for certain competencies, whilst an increase in the scores of these competencies were noted post-training. This is an indication that the management training did not affect the findings and that there was improvement after the ASELPH Fellowship training. It is important to note that it is impossible to contemplate all the external factors that may have had an influence on the ASELPH Fellowship training.

CHAPTER 4 FINDINGS

4.1 Introduction

This chapter presents the findings of the study by addressing the research question and objectives. A mixed-method quasi-experimental study design, with pre-post assessments of the ASELPH Fellows, was used to assess the effectiveness of the ASELPH Fellowship and factors influencing its effectiveness. Data were extracted from both the Fellows and assessors' questionnaires, the module assessments and the reflective essays.

The chapter provides evidence of the adequacy of the sample size, the reliability of the questionnaires, the suitability of the training intervention, the consistency of the Fellows' self-assessments and the significant differences in the before and after training performance of the cohort.

The chapter continues to provide the factors influencing the effectiveness of the training, as well as the Fellows' perception about the ASELPH Fellowship. Chapter 4 starts by profiling the fellows and assessors.

4.2 Profile of the Fellows and assessors

The Fellows are profiled in detail in Appendix N. The fellows comprised 70% females, 81% older than 40 years of age and 41% employed in Gauteng Province (41%). All the Fellows had a Bachelor's degree or higher as their highest qualification, with 44% of the cohort qualified at tertiary institutions and 59% received management training from tertiary institutions or other skills-development organisations. Fifty-two percent of the Fellows were at district manager or above and 48% at manager or supervisor level. The majority of the Fellows (78%) had more than five years' experience in a managerial position in any organisation and 62%, more than five years in their current organisation. The average number of people reporting to a Fellow was 11, with a minimum of two

and a maximum of 51 team members. The average size of their overall teams was 645, with a minimum of two and a maximum of 5323 (in a district).

The Assessors are profiled in detail in Appendix O, which shows that 29% were the Fellows' supervisors, 46% their peers and 25% their subordinates (Figure 4.1).

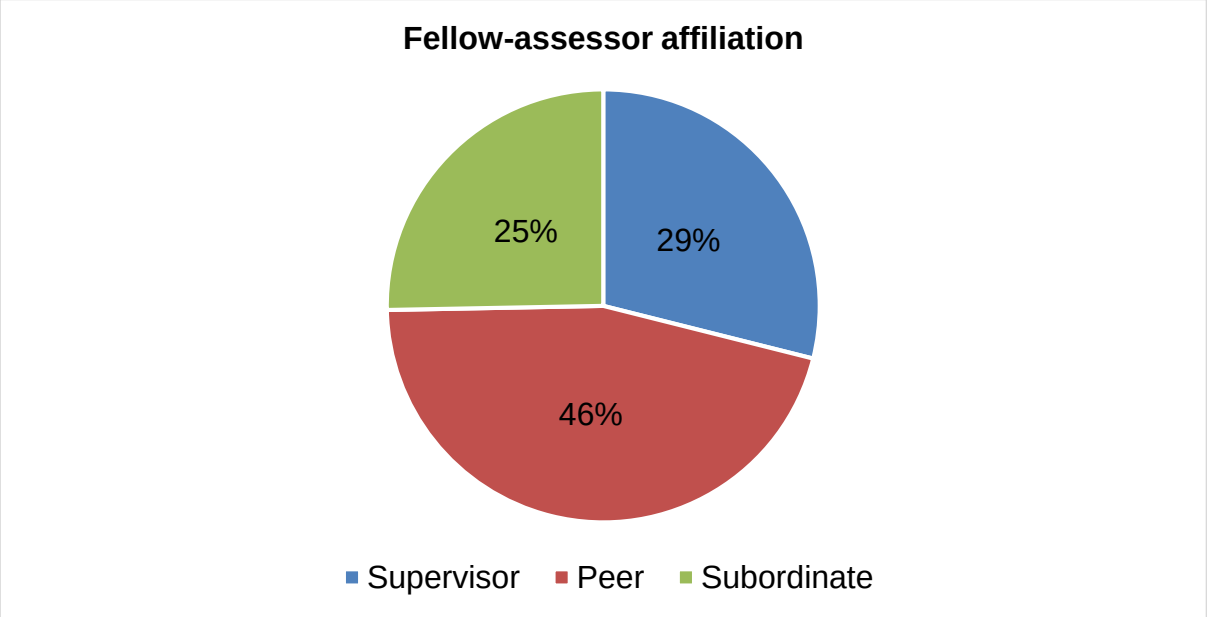

Figure 4.1: Fellow-assessor affiliation

The assessors' profile showed 60% were females with an average age of 47, the youngest assessor aged 25 and the oldest aged 68. In line with the Fellows, the majority (39%) were employed in Gauteng Province. Highest qualification was a Bachelor's degree and higher (75%), with 34% qualified at tertiary institutions. The proportion of the 60% who received management training revealed 75% supervisors, 63% peers and 44% subordinates. In response to the assessors' position, 53% were at assistant director level and above, i.e. 69% supervisors, 56% peers and 28% subordinates were at this level. Of these assessors, 73% (36% supervisors, 46% peers and 18% subordinates) had been in a managerial position for more than five years in any organisation. Sixty percent of assessors (28% supervisors, 50% peers and 22% subordinates) had been in their current organisation for more than five years. The average number of people reporting to an assessor was 17 with a minimum of one and

a maximum of 124. The size of their overall team, on average, was 65 with a minimum of one and a maximum of 850.

4.3 Adequacy of the sample size

The first step was to estimate the sample adequacy for each competency and the Kaiser-Meyer-Olkin (KMO) Test[204] was used for this purpose. This showed that the sample was adequate for all 14 competence clusters as well as the 56 performance indicators. Most of the KMO values were above 0.70, meaning they were middling to marvellous. The pre-training values ranged between 0.77 to 0.91 pre-training, and 0.70 to 0.85 post-training for the competencies. The KMO average for pre-training was 0.82, which was meritorious, and for post-training 0.77, which is middling (Table 4.1). This indicates the sample was adequate since the preferred value is above 0.6.[204]

Table 4.1 Fellows' KMO Results

Competency	KMO	
	Pre	**Post**
1. People Management and Environment	0.80	0.77
2. Self-Management	0.81	0.73
3. Honesty and Integrity	0.77	0.76
4. Client Orientation and Customer focus	0.80	0.75
5. Communication	0.80	0.79
6. Resource Management and Allocation	0.83	0.72
7. Financial Management	0.78	0.77
8. Problem Solving and Analysis	0.78	0.76
9. Programme and Project Management	0.86	0.84
10. Community/ Partnership Collaboration	0.85	0.77
11. Knowledge Management	0.91	0.85
12. Strategic Leadership	0.87	0.77
13. Change Management	0.78	0.78
14. Service Delivery Innovation	0.84	0.70
Average	**0.82**	**0.77**

The difference in the pre- and post-training KMO scores, can be explained by the fact that the Fellows gained new knowledge and skills during the ASELPH Fellowship training. Familiarisation to new skills takes longer, therefore the reduction in post-training KMO scores is normal. It simply implies that longer time is required for the Fellows to adapt to these lessons learned.

4.4 The reliability of the survey questions

The next step was to determine the reliability of the survey questions, for which the Cronbach Alpha test[202-203] was utilised. This test shows that no questions needed to be excluded from the study. The internal consistency measured by the Cronbach Alpha, which is how closely related the set of items are as a group, had acceptable to excellent alpha values, ranging from 0.88 to 0.99 for pre-training and 0.79 to 0.97 for post-training (Table 4.2). The pre-training consistency had an average of 0.94, which means excellent, while the post-training average of 0.88 was good. This means the data was reliable.

Table 4.2 Fellows' Cronbach Results

Competency	Alpha	
	Pre	Post
1. People Management and Environment	0.90	0.88
2. Self-Management	0.89	0.84
3. Honesty and Integrity	0.95	0.83
4. Client Orientation and Customer focus	0.93	0.88
5. Communication	0.92	0.89
6. Resource Management and Allocation	0.95	0.91
7. Financial Management	0.93	0.87
8. Problem Solving and Analysis	0.95	0.90
9. Programme and Project Management	0.97	0.97
10. Community/Partnership Collaboration	0.99	0.88
11. Knowledge Management	0.88	0.79

12. Strategic Leadership	0.95	0.91
13. Change Management	0.94	0.87
14. Service Delivery Innovation	0.98	0.93
Average	**0.94**	**0.88**

The Cronbach and KMO were analysed for the assessors as well. The results are shown in Table 4.3.

Table 4.3 Assessors' Cronbach and KMO

DOMAIN	ALPHA	KMO
1. People Management and Environment	0.88	0.79
2. Self-Management	0.91	0.83
3. Honesty and Integrity	0.88	0.78
4. Client Orientation and Customer focus	0.92	0.83
5. Communication	0.93	0.78
6. Resource Management and Allocation	0.88	0.80
7. Financial Management	0.91	0.80
8. Problem Solving and Analysis	0.88	0.77
9. Programme and Project Management	0.96	0.84
10. Community/Partnership Collaboration	0.95	0.79
11. Knowledge Management	0.94	0.86
12. Strategic Leadership	0.93	0.83
13. Change Management	0.92	0.84
14. Service Delivery Innovation	0.95	0.87
Average	**0.92**	**0.81**

Most of the values for the Cronbach Alpha ranged between 0.88 and 0.96 meaning good to excellent, with an average of 0.92. This indicated an internal consistency that was excellent. For the performance indicators, the Cronbach Alpha measure of reliability was 0.98, indicating an excellent internal consistency. The values for the KMO ranged between 0.78 and 0.87 meaning middling to meritorious, with an average KMO

of 0.81. This is meritorious, indicating that the sample size was adequate. The KMO for the performance indicators was 0.67 meaning mediocre, but it was still acceptable since the preferred KMO is 0.6.

4.5 The quality of the intervention

The module assessments of the Fellows were used to determine the quality of the intervention. The information from the module assessments indicated whether the Fellows had a perception that the ASELPH Fellowship training was done successfully or not. This is important since it would be confirmation (or not) that the intervention was of standard quality, and the competencies of Fellows after the ASELPH Fellowship training could be assessed without any doubt.

Eight of the 13 modules were assessed by Fellows online, as distinct from the incomplete hard copies, and were used in the study because they could easily be analysed. As there was no difference in the overall scores across the eight modules, these modules were considered a sufficient sample to use. Some modules' assessments were slightly different than the others, but the same conclusions could be drawn.

All Fellows (100%) agreed the objectives for all of these modules were achieved and that the modules were well-organised. Table B4 depicts the exit level outcomes of these modules. Following is the discussion of these eight modules.

Learning in Public Health

This was the first module of the training. This module provides the foundations of learning for the course and is linked to the competencies of *Knowledge Management* as well as *Research module*. Themes covered in this module included introduction to ASELPH and being a student, public health, critical thinking and research methodology. The assessments showed most (68%) fellows felt their knowledge was average to very weak before the training and this increased to 88%, to high and very high post-training. In response to whether their competencies were developed, only 3% were neutral,

while the rest (97%) agreed to the knowledge and skills development; these included leadership and governance, quality assurance, policies, transformation and research. They also were excited about the research that could be applied at their workplaces to explore specific work-related topics. The fellows vowed to do things differently by better problem solving, doing more research and becoming mentors themselves.

Executive leadership for health (to include responsible leadership)

This module addresses a golden thread through all competencies, since all competencies are linked to leadership and management, which is what the ASELPH Fellowship was designed for. The themes for this module included Primary Healthcare (PHC) re-engineering, meta-leadership, Emotional Intelligence (EQ), leadership styles, diversity, Strength Deployment Inventory (SDI), negotiation (Walk-in-the-woods), team-building, change management and responsible leadership. In response to development of their competencies, 75% agreed and 25% strongly agreed. On level of knowledge, 75% scored themselves average and 25% very high before training, which increased to 75% at high after training. Fellows were enthusiastic to share their knowledge, especially during the leadership exercises at the workplace. One Fellow stated, "*I guess there would be no harm in applying more leadership exercises. Most if not all topics coupled with exercises have not been forgotten"*. They gained a renewed understanding of diversity and felt strongly about encouraging others to embrace diversity at the workplace.

Ethics and Values in healthcare, organisational behaviour change and strategy in health

This module is linked to the *Honesty and Integrity* and *Strategic Leadership* competencies. The themes for this module included strategic planning and implementation, strategic thinking and Porter's Five Forces. All Fellows agreed that their knowledge increased from 13% pre-training to 96% post-training, high and very high. Fellows appreciated the involvement of all stakeholders in the strategic planning process and that staff should understand that strategic planning is not just a paper exercise.

Complex problem-solving and negotiating, coherence and coordination

This module is linked to the *Problem Solving and Analysis* competency. The themes for this module included: *NHI, complex problems and turnaround strategies and evidence-based practice.* All Fellows felt that the module was well-organised with one Fellow suggesting the following. *"I think this will be more interesting if you can apply videos where managers are confronted with a complex problem and the management of it".*

For level of knowledge, 73% of the Fellows scored themselves average and below pre-training, while 77% scored themselves high and above post-training. The Fellows recognised the challenge of power in problem-solving, as well as involving unions in the processes, *"Unions to be called to be part of this module to share their frustrations as well and how best together put both the interest of employer and employee forward."*

Implementation of quality improvement modalities (strategies) in health system

This module is linked to the *Service Delivery* competency. The themes for this module included quality assurance and efficiency, health sector reform and core quality standards, patient-centered care and patient safety, Office of Standards Compliance (OHSC) law and regulations and quality audits and implications of NHI. Pre-training, only 17% scored their level of knowledge high and above, which increased to 92% post-training. All Fellows (100%) felt that the course was well-organised although one Fellow suggested, *"Give out the readings on time to allow students to prepare for the lectures. This makes it easier to follow and participate in discussions. Speed reading on the other hand leaves most students unsure and with poor confidence to engage".* The Fellows acknowledged the importance of a task team that could do quality audits at their workplaces.

Health informatics, monitoring and evaluation

This module is linked to the *Programme and Project Management* competency. The themes for this module included monitoring and evaluation (M&E) frameworks, indicators, data sources, DHIS, descriptive statistics for monitoring. All Fellows (100%)

felt that the course was well-organised and recognised the importance of drafting and implementation of an M&E plan at the workplace.

Strategic Financial Management in Health

This module is linked to the *Financial Management* competency. The themes for this module included: *cost accounting, management control concepts and uses and value in health.* Fellows (100%) agreed that the module was challenging but they were satisfied about their improved knowledge. Nineteen percent felt that time constraint was the biggest challenge, as one Fellow stated "*The information presented was very good but time was too limited considering that we are non-financial managers. Considering extending the time for the course will be greatly appreciated since every aspect of the course was very much interesting. I would also suggest that more case studies be included".* They confirmed they would be more confident in having conversations with the finance manager, drawing up budgets and keeping track of costs.

Strategic Human Resources and Management Performance

This module is linked to the competencies of *People Management and Empowering Environment* and *Resource Management and Allocation.* The themes for this module included *global health workforce, health system capacity, supply and demand for Human Resource for Health (HRH) planning, education, management and finance capacity; performance incentives; HRH densities; HR challenges in rural areas; worker productivity; priority setting and sequencing.* The assessment showed all (100%) the Fellows scored the sessions for the week, good to excellent. The module also assisted Fellows (100%) to understand the HRM aspects. Fellows stated that the impact of the healthcare workforce, as well as how to keep them motivated, was re-emphasised.

Concluding remarks from module assessments

The Fellows' views reflected that the ASELPH Fellowship was of good quality.
The general comments from Fellows that further confirmed their satisfaction with the course included phrases such as *lots of information to share at the workplace, helpful*

and knowledgeable faculty/lecturers, the setup of the venue was comfortable, ASELPH is a good course for all managers; keep on this method of teaching with case studies as they link our understanding to the workplace". One fellow's response to whether the ASELPH Fellowship was well organised was, "*I strongly agree that this course has been well-organised and managed. The beauty of the course is the very helpful faculty from different universities and peers from all over the country with various experiences. The venue and supporting staff were very nice. Overall I am happy".* One Fellow shared, *"Having reshuffled the groups was good but detrimental too to others. One understands and appreciates the group dynamics. As a big group we came to accept one another as fellows but the initial subgroups created more close-knit families".*
Fellows also indicated that they would share the learning from the training with peers in the workplace, do things differently and implement the tools that were taught.

4.6 Consistency of the Fellows' assessments

The 14 competencies and their 56 performance indicators were assessed before (pre-training) and after (post-training) the ASELPH Fellowship training by the Fellows and post-training by their assessors. The assessment was done through the survey method on a scale of 1 to 5, where one was not competent and five fully competent.

Figure 4.2 gives an indication of the pre- and post-training average scores by fellows. The average scores of Fellows pre- training ranged between 1.82 and 4.98, and 2.90 and 5.00 post-training.

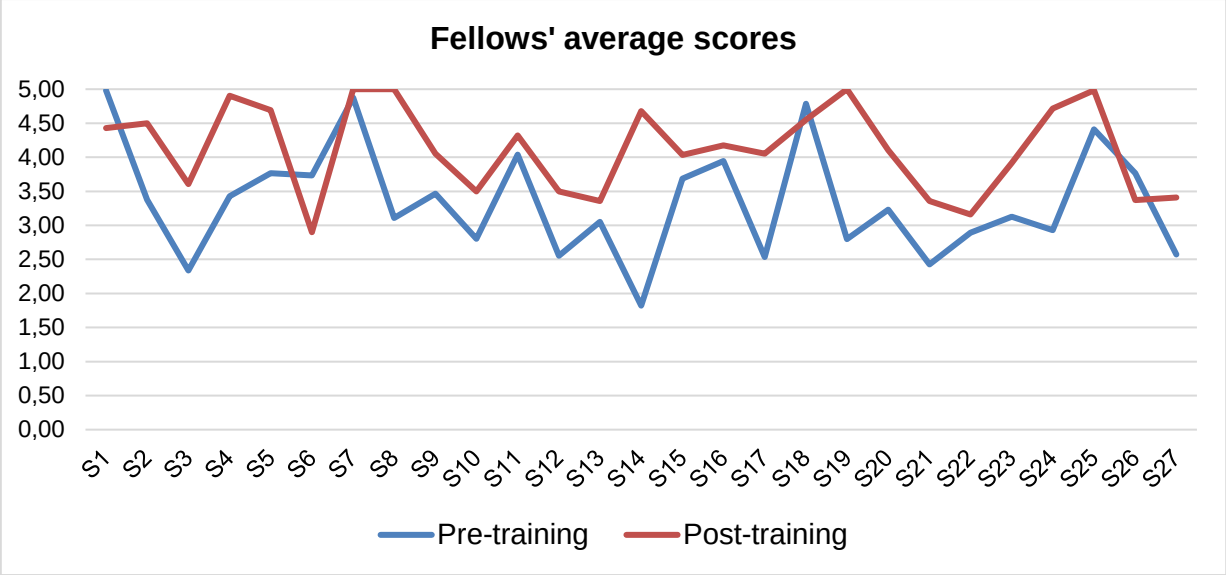

Figure 4.2: Fellows' average scores

To determine if Fellows had under-or overestimated their competence and performance and to validate their scoring, their assessors confidentially assessed the same competencies post-training. The average scores of the assessors per Fellow post-training ranged between 2.8 and 5.00, as shown in Figure 4.3. The Fellow S3 was scored low by the subordinates in certain competencies and the Fellow S13 was assessed by a supervisor only.

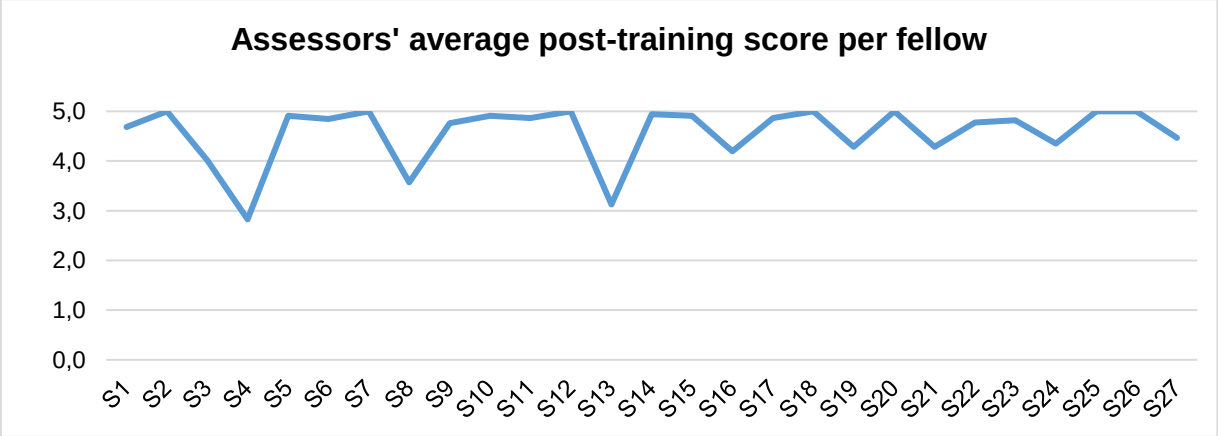

Figure 4.3: Assessors' average post-training score per Fellow

The Bartlett's test for equal variance was performed and confirmed the averages of assessors per student were consistent, showing no significant change (p=0.358).

The average scores of Fellows and assessors were assessed for each competency. Figure 4.4 gives an indication of the pre- and post-training average scores by Fellows; the average scores pre- training ranged between 2.44 and 2.89, and post-training 3.81 to 3.89. An increase in the post-training scores of most of the competencies were seen, except for *Honesty and Integrity* (3.81) and *Community/Partnership Collaboration* (3.04), whose scores did not change. The competencies *Client Orientation and Customer focus* and *Communication* average scores reduced from 3.22 to 3.1 and 3.07 to 2.89 pre- and post-training respectively.

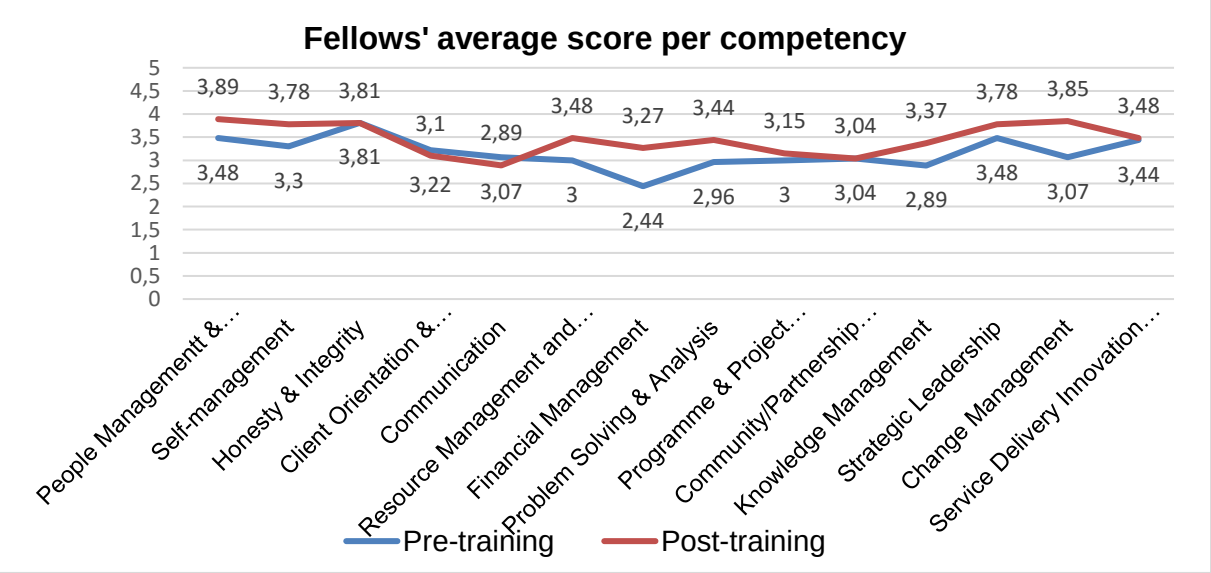

Figure 4.4: Fellows' pre-and post-training average scores per competency

Figure 4.5 depicts the average score per competency by the different assessor categories. Although the Bartlett test showed no significant difference between the assessors' scores, Figure 4.5 clearly shows that the supervisors scored Fellows lower for most of the competencies compared to the subordinates and peers, but it was not a significant difference. The average score per Fellow for the 14 competencies for supervisors was 3.83, for peers 3.97 and 4.03 for subordinates.

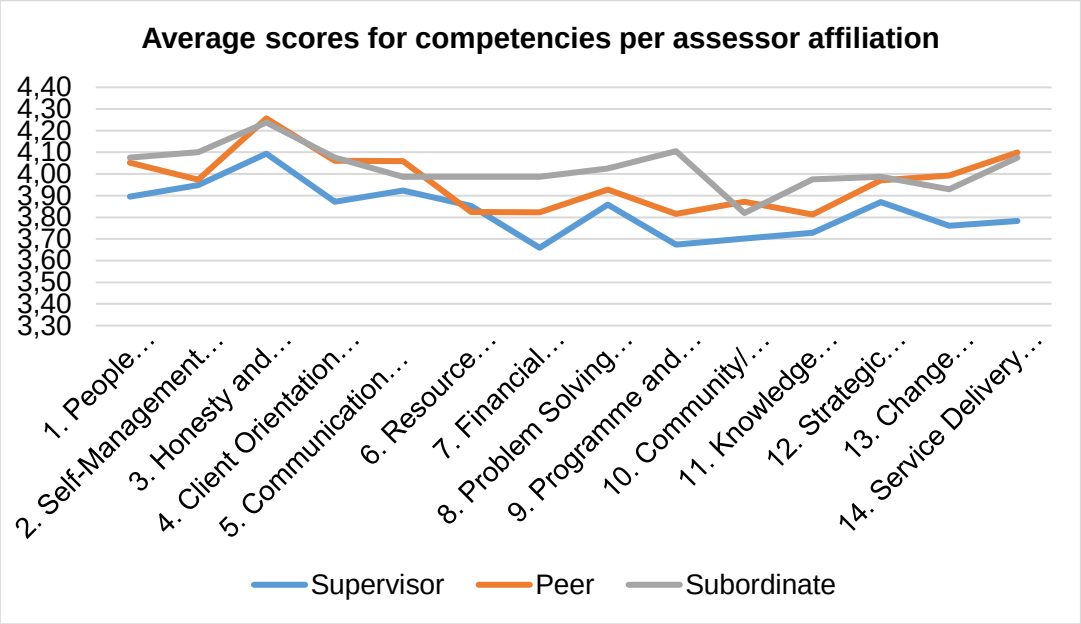

Figure 4.5: Assessors' average score for Fellows for the 14 competencies post-training

These comparisons of the Fellows and assessors' scores give an indication that the self-assessments of Fellows were consistent with those of the assessors.

4.7 Changes in the performance competence of Fellows before and after the ASELPH Fellowship training

The competencies of the Fellows were assessed both quantitatively and qualitatively and will be discussed in this section. The pre- and post-training above-average and excellent scores are depicted in Figure 4.6.

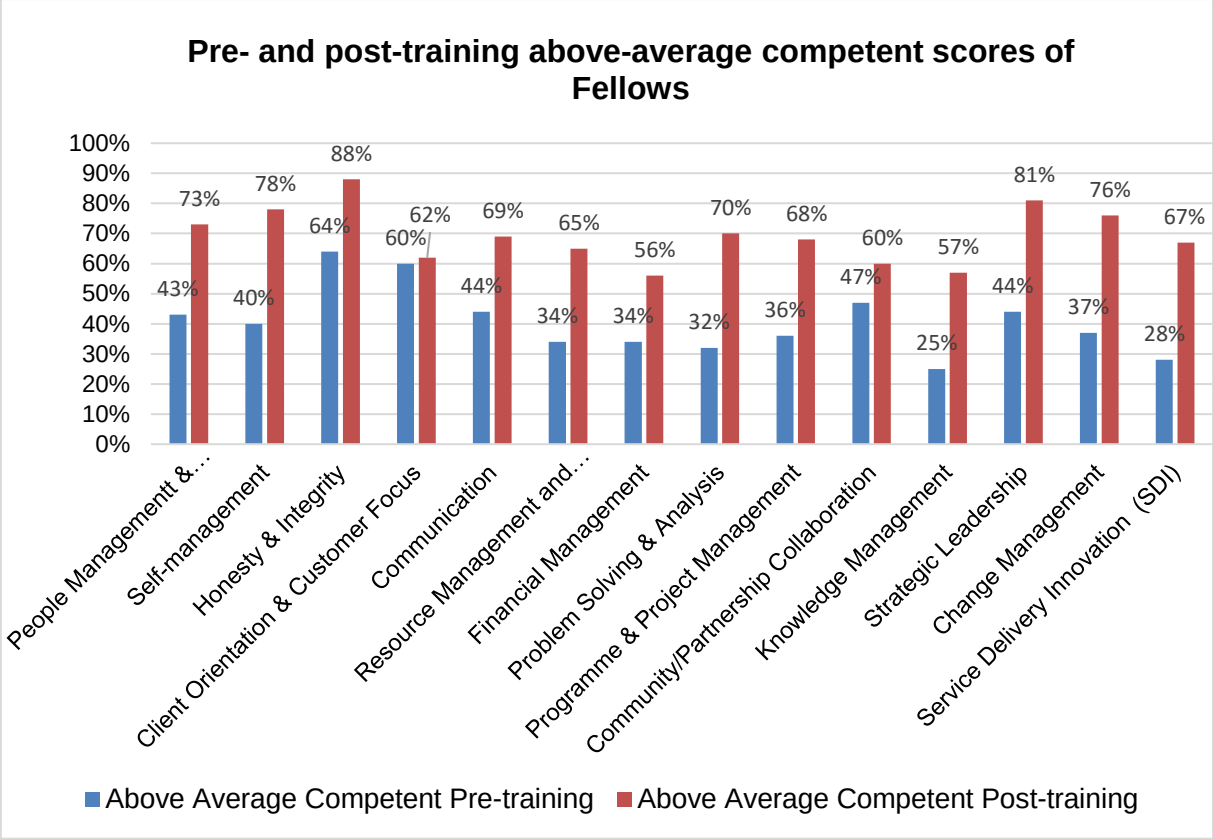

Figure 4.6: Pre-and post-training above-average proportions of Fellows

The Mann-Whitney U test[205] was used to compare the before and after scores of the Fellows to determine the probability and significance of the results of the 14 competencies and the 56 performance indicators. Eleven of the 14 competencies (Table 4.4) and 44 of the 56 performance indicators (Appendix P) showed significant changes. The hypothesis being tested here is that the post-training score assessment of these competencies and performance indicators differ significantly from the pre-training scores. Three of the 14 competencies that showed no significant changes were *Financial Management (0.118), Community/Partnership Collaboration (0.156), Client Orientation and Customer focus (0.449).*

Table 4.4: Changes of Fellows' competencies pre- to post-training

Competency	Probability (p≤ 0.05)	Significance (z)
People Management and Environment	0.000	-3.543
Self-Management	0.000	-3.901
Honesty and Integrity	0.000	-4.065
Client Orientation and Customer focus	0.449	-0.757
Communication	0.008	-2.656
Resource Management and Allocation	0.018	-2.357
Financial Management	0.118	-1.561
Problem Solving and Analysis	0.002	-3.160
Programme and Project Management	0.006	-2.753
Community/Partnership Collaboration	0.156	-1.419
Knowledge Management	0.001	-3.408
Strategic Leadership	0.002	-3.035
Change Management	0.001	-3.310
Service Delivery Innovation	0.003	-2.965

The assessors' below-average (includes non-competent, below-average and average competent) and above-average (includes above-average and fully competent) scores of Fellows for the 14 competencies (Table 4.5) showed that 69% scored above-average. *Financial Management* was scored by 61% of assessors as above-average and 80% scored *Honesty and Integrity* above-average. This is in line with the Fellows' post-training scores where *Honesty and Integrity* was scored above-average by 88% and Financial Management scored by 56% (Figure 4.6). The assessors' below- and above-average scores for Fellows for the 56 performance indicators are depicted in Appendix Q.

Table 4.5: Assessors' competency proportions after training

Competency	Below-average (%)	Above-average (%)
People Management and Empowering Environment	26	74
Self-Management	29	71
Honesty and Integrity	20	80
Client Orientation and Customer focus	27	73
Communication	29	71
Resource Management and Allocation	34	66
Financial Management	39	61
Problem Solving and Analysis	29	71
Programme and Project Management	36	64
Community/ Partnership Collaboration	37	63
Knowledge Management	38	62
Strategic Leadership	31	69
Change Management	33	67
Service Delivery Innovation	26	74
Average	**31**	**69**

A detailed understanding of the findings is gained through a more detailed presentation of the findings on the 14 competencies and each of their four performance indicators

People Management and Empowering Environment

The *People management* competency showed an overall significant change of p=0.000 (Figure 4.7), with significant changes in each of the four performance indicators (Table P1).

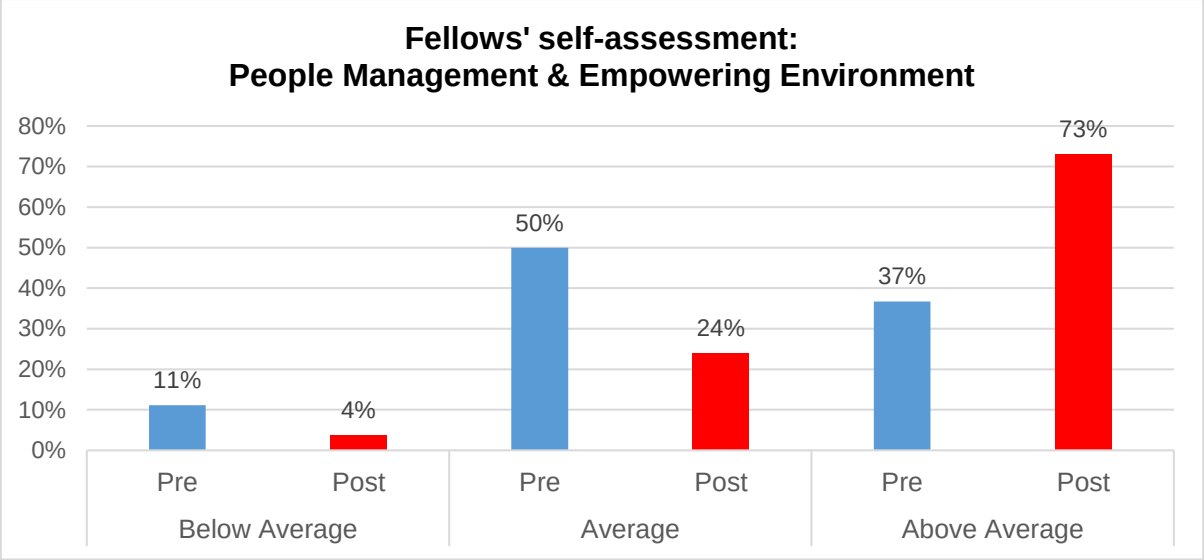

Figure 4.7: Fellows' Self-Assessment for People Management and Empowering Environment

The 73% of Fellows above-average is in line with the 74% of assessors who scored Fellows above-average for *People Management and Empowering Environment* (Table Q1).

The enhancement of competence in *People Management and Empowering Environment* was confirmed by Fellows and assessors in response to the reflective-question (*Why give yourself that score*). Six Fellows commented on the performance indicator, *Maintain good morale in the team*; this performance indicator showed significant change (p=0.001). For Pre-training, 59% of the Fellows scored themselves below-average (including non-competent, below-average and average) and 81% above-average post-training. One fellow's post-training response to this competence was, *"I am a complete leader after attending the ASELPH Fellowship training and I have developed in areas that I was not competent, and my staff is benefiting, and many want to come and attend the programme"* (S17). Another stated, *"I may try to maintain good morale, but currently it's difficult to be fully competent. Absenteeism can be maintained to a certain degree but the employee has a role to play which can be positive and negative"* (S26).

Post-training, seven Fellows responded to the performance indicator, *Optimal management of absenteeism.* This performance indicator showed the least significant change in this competency (p=0.029), since 74% of Fellows scored themselves below-average pre-training, 59% above-average post-training and 64% of assessors scored Fellows above-average. One Fellow stated, "*I think my team is working well, considering that absenteeism is not a challenge to us. Performance Management and Development System (PMDS) is on track, only keeping with timelines that is a challenge because Human Resource (HR) tells us to wait for a circular. I believe team spirit is on top" (*S23). Another said, *"I still find it difficult to discipline an employee according to rules and regulations for absenting her/himself from work, especially those who keep on citing family challenges. I really still need support in this area*" (S24).

Twelve percent of the assessors felt that there were areas that could be improved. One assessor stated, "*The official maintains a good spirit and highly encourages teamwork. He however would perform tasks himself in order to meet due dates if team efforts fail. His tendency to always making excuses for subordinates' failure has created some tight positions at times*" (S21A2). Another assessor felt that, "*Other issues pertaining to staff in general are beyond her control, for example she might advocate for adequate staffing but that depends on budget and the department priorities which will impact negatively on her if not supported" (S20A3).*

The performance indicators, *Optimal overall job performance as agreed in the PMDS (performance management development system) and Embrace diversity in the team*, both showed significant change of p=0.001.

Self-management

The *Self-management* competency showed an overall significant change of p = 0.000, with significant changes in all performance indicators (Table P2). The Fellows showed improvement from 40% above-average pre-training to 78% post-

training (Figure 4.8). This was confirmed by assessors where 71% scored Fellows above-average for *Self-management* (Table Q2).

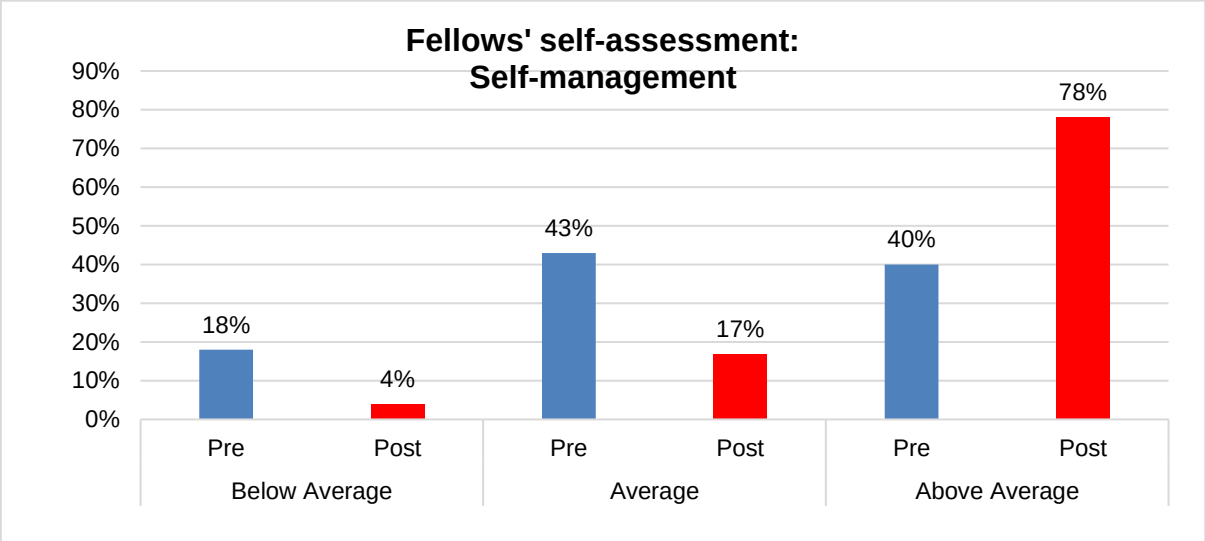

Figure 4.8: Fellows' Self-Assessment for Self-management

This improvement in *Self-management* was confirmed by Fellows in the reflective-question, where one fellow stated post-training, *"The Strength Deployment Inventory (SDI) model has enabled me to study and understand how to deal with individual team members and how to effectively communicate priorities and expectations with each of them. This has enabled me to put systems in place to track progress on activities/tasks and to meet deadlines"* (S22).

The assessors' reflective-question also confirmed this competency as stated by the following assessor, "*The official has a clear understanding of the strengths and weakness of his subordinates. He can be trusted to meet all deadlines even if an assignment is given to him at the eleventh hour*" (S21A2).

Most of the comments (41%) of these reflective-question responses, were related to the performance indicator *Excellent time management and meeting deadlines* pre-training, as well as 37% post-training. This performance indicator showed a significant change (p=008) with 37% of the Fellows scoring themselves above-average pre-

training, which increased to 63% post-training. The performance indicator *Excellent time management and meeting deadlines*, was scored above-average by 64% of assessors. Post-training, even though 78% of fellows scored themselves above average for *excellent time management and meeting deadlines*. one Fellow acknowledged, "*I know my abilities and work according to my strengths. I am struggling with effective time management due to my open-door policy. I must learn to ask employees to see me at particular times since that does cause distractions and lead to time wastage" (S21).*

The performance indicators*, understand own strengths and weaknesses and have a self-development plan in place* (p=0.002), *understand the team's strengths and weaknesses and have development plans in place (*p=0.005),
clear about own philosophy of leadership (p=0.001) showed significant changes.

Honesty and integrity

The *Honesty and Integrity* competency showed an overall significant change (p=0.000) and significant changes in all performance indicators (Table P3). For this competency, 64% and 88% of Fellows scored themselves above-average pre-training and post-training respectively (Figure 4.9) and 80% of assessors scored Fellows above-average (Table Q3).

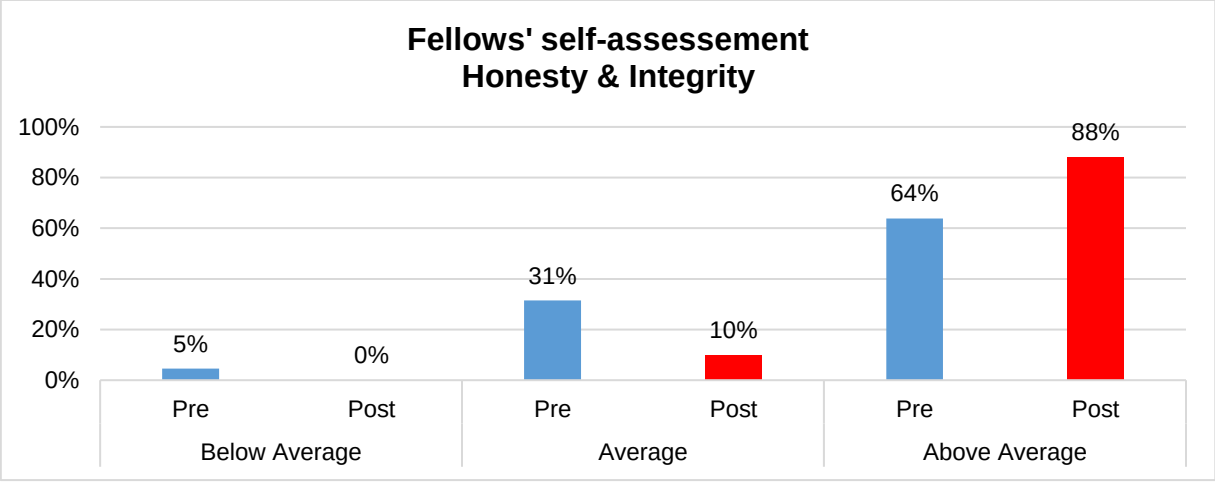

Figure 4.9: Fellows' Self-Assessment for Honesty and Integrity

The Fellows' competence was confirmed by assessors in the reflective-question and one assessor shared the following "*The fellow is committed to honesty and integrity, builds and displays high standards of ethical and moral conduct and is reliable and accountable as a leader. She is also able to hold others accountable for their work. Most of all she treats others with dignity and respect"* (S7A1).

The performance indicator, *Treats others with dignity and respect* (p = 0.000), received the most responses (30%) post-training in response to the reflective-question. One Fellow post-training stated, *"I believe in honesty and try very hard to maintain high integrity and expect everyone in the team to deliver their work as expected"* (S23).

The performance indicator *Hold others (subordinates and managers) accountable for their work* (p=0.011), was seen by 30% of Fellows as a challenge as indicated in response to the reflective-question. Fifty-two percent of Fellows scored themselves above-average pre-training and scores increased to 81% post-training.

The performance indicators*, Emphasise ethical standards and moral management in all aspects of work* (p=0.020) and *Being reliable and accountable* (p=0.008), showed significant changes. Although the subscale *Emphasise ethical standards and moral management in all aspects of work,* only received 1 response pre-training and 2 responses post-training, the following post-training comment from a Fellow was quite profound, *"Although ethical standards are emphasised at the workplace, one is still faced with resistance to change to good behaviour and observe corrupt practices observed in public institutions" (*S9).

Thirteen percent of assessors felt that there were still areas that needed improvement, *"The official is the most honest person I have come across. His integrity is above reproach. His only weakness is that he is slow to hold his subordinates accountable for*

their work. He has the tendency to complete the tasks himself if he would notice that a deadline will be compromised" (S21A2).

Client Orientation and Customer Focus

Client Orientation and Customer Focus showed no significant change (p=0.449) (Table P4). However, significant changes were seen in two performance indicators of the *Client Orientation and Customer Focus* competency, e.g. *Open door policy for customer complaints or compliments* (p=0.014) and *Clients have the opportunity to give feedback re the service (anonymously and in a safe environment)* (p=0.020). The performance indicator, *Suggestion boxes for clients to assess service daily* (p=0.414) showed no significant change with the performance indicator, and *Suggestions are used for improvement of the service*, marginally showed no significant change (p=0.058). For this competency, 60% and 62% scored themselves above-average pre- and post-training respectively (Figure 4.10).

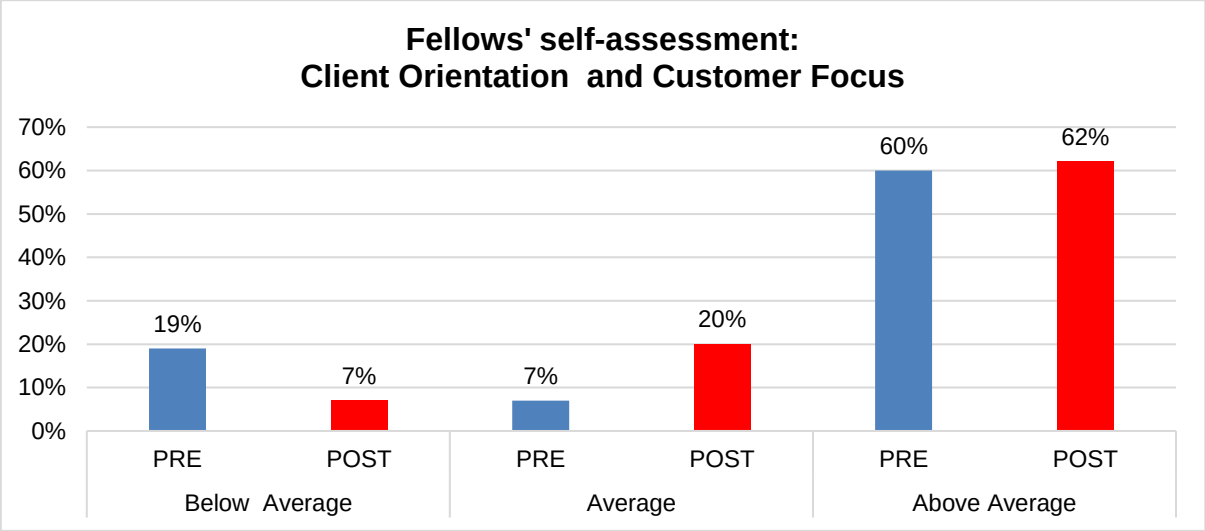

Figure 4.10: Fellows' Self-Assessment for Client Orientation and Customer Focus

Seventy-three percent of assessors scored Fellows higher than the Fellows' self-assessment, which was above-average for this competency (Table Q4). The responses

from the reflective-question by assessors also confirmed these results with one assessor stating "*The fellow acknowledges customer rights and is committed to a client-orientated approach to service delivery according to Batho-Pele principles. This is reflected in her open-door policy management style for management of complaints and compliments. The clients' feedback generated through suggestion boxes is used for service delivery improvement"* (S7A1).

The performance indicator, *Suggestion boxes for clients to assess service daily,* showed no significant change (p=0.414). Pre-training, 63% of Fellows scored themselves above-average, while this reduced to 59% above-average post-training. In the reflective-question, this performance indicator, *Suggestion boxes for clients to assess service daily,* including *Clients have the opportunity to give feedback re the service (anonymously and in a safe environment)*, received the most comments (52%) of the Fellows pre-training and 33% post-training. One fellow post-training confirmed "*I am available telephonically and via email at all times for queries/complaints. We have not implemented the suggestions boxes yet but are in progress of creating a newsletter with a section for others to comment on the service delivery offered"* (S9). Some Fellows also confirmed that the suggestion boxes are not in place, or if in place, these complaints are dealt with at a different level than the facility level.

The performance indicators, *Clients have the opportunity to give feedback re the service (anonymously and in a safe environment*) (p=0.020) and *Open door policy for customer complaints or compliments* (p=0.014) showed significant changes. The performance indicator*, Suggestions are used for improvement of the service, marginally* showed no significant change (p=0.058).

Communication

The *Communication* competency showed a significant overall change (p=0.008) and showed significant changes in three performance indicators (Table P5). The performance indicator, *Use the media and all forums to communicate health issues to*

the public, showed no significant change (p=0.317). *Communication* was scored by 44% of Fellows as above-average pre-training, 69% scored themselves above-average post-training (Figure 4.11), and these above-average results were confirmed by 71% of assessors (Table Q5). The reflective-question responses validated these results as one fellow stated, "*After going through the ASELPH course, I appreciate the importance of effective communication more*" (S19). Another admitted, *"I have to realise that people who are well informed perform better at the workplace. This is promoted widely through regular scheduled meetings, notice board and electronically"* (S9).

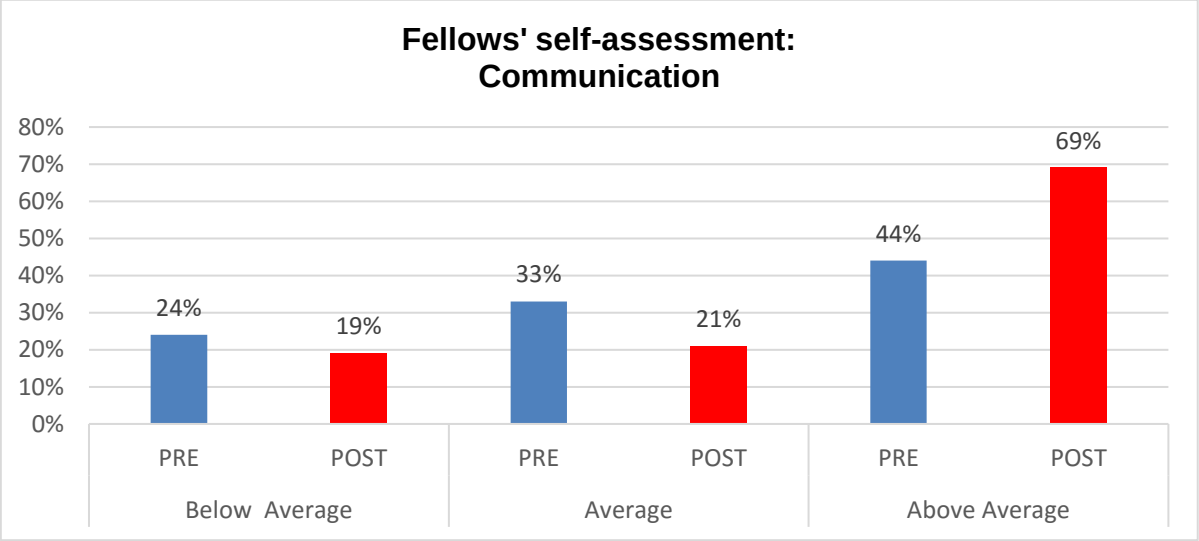

Figure 4.11: Fellows' Self-Assessment for Communication

The performance indicator, *Use the media and all forums to communicate health issues to the public*, had no significant change (p=0.317). The Fellows scored themselves 37% above-average pre-training and only 48% post-training. Some Fellows stated in the reflective-question pre-and post-training that they were not directly responsible for this performance indicator, as confirmed by this fellow post-training *"One has limited access to media as the policies of the hospital don't allow us to talk to media"* (S23). The assessors also confirmed in their reflective-question responses that this performance indicator was a function at a different level and therefore 56% of assessors scored Fellows above-average.

The performance indicators *Timeously and accurately communicate information to the team* (p=0.012), *Timeously and accurately communicate information to all external stakeholders,* (p=0.007) and *Regular feedback and monitoring meetings* (p=0.035), showed significant changes.

Resource Management and Allocation

The *Resource Management and Allocation* competency showed an overall significant change (p=0.018) and showed significant changes in all performance indicators (Table P6). *Resource Management and Allocation* competency showed an improvement from 34% pre-training to 65% above-average post-training (Figure 4.12). This result is in line with that of the assessors, as 66% scored Fellows above-average (Table Q6).

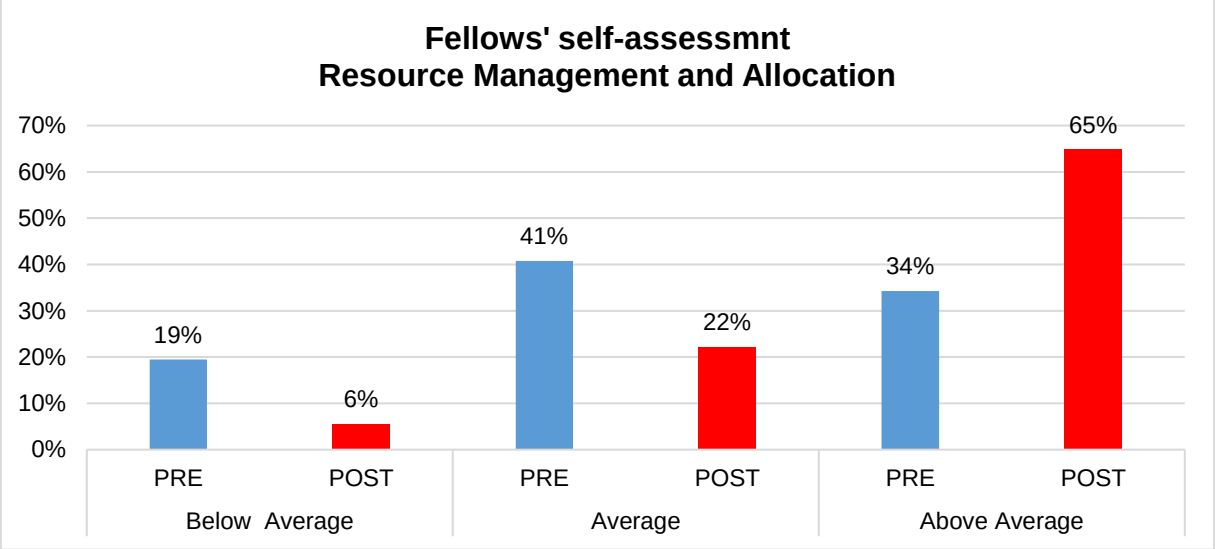

Figure 4.12: Fellows' Self-Assessment for Resource Management and Allocation

The reflective-question by assessors revealed that external factors, such as limited resources and limited authority, were contributors to this challenge of managing and allocating resources: "*Staff shortage makes it impossible to match personnel to tasks. Drug availability is mainly dependent on the central medical store that supplies the entire province"* (S6A4). Most comments by Fellows post-training were about

Appropriate allocation of resources to deliver effective and efficient service (seven responses) and No drug or material outages/shortages (six responses). Both performance indicators showed significant changes at p=0.021 and p=0.012 respectively. Fellows confirmed that sometimes these challenges were beyond their control, "*Sometimes we face shortage of material because companies refuse to deliver due to non-payment by the department. Community resources are sometimes a challenge themselves"* (S23). Another fellow, post-training, stated, *"ASELPH empowered me to link resources to plans and priorities accordingly. Systems are in place to prevent and monitor outages of drugs and supplies as this would hamper service delivery. The early warning systems enable management to act promptly to mitigate service delivery breakdowns"* (S22).

The performance indicators, *Systematise community resources to improve health service access* (p=0.021) and *Match the available personnel with the tasks at hand* (p=0.008), showed significant changes.

Financial Management

The competency *Financial Management* showed no significant change (p=0.118). Only one performance indicator of the *Financial Management* competency, *Draw up financial reports and communicate to all the relevant stakeholders*, showed significant change (p=0.034) (Table P7). Pre- and post-training, 34% and 51% of Fellows scored themselves above-average, respectively, for this competency (Figure 4.13). More assessors (61%) scored Fellows above-average for Financial Management (Table Q7)**.**

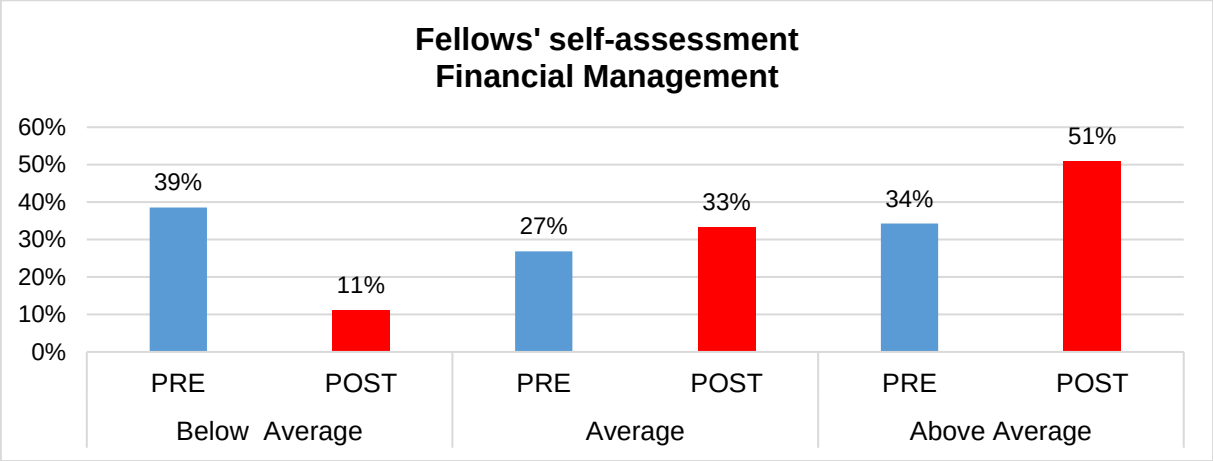

Figure 4.13: Fellows' Self-Assessment for Financial Management

In the reflective-question, 24% of the assessors' comments specified factors that played a role in the Fellows' financial management competency, such as a dedicated financial person responsible for this function and not the Fellows themselves and it being a centralised function, *"The depot has a financial director that oversees the budget and spending of the districts medicine budget and advice the depot operations accordingly. All tenders are done centrally by national department of health"* (S21A3).

The performance indictor, Draw up financial reports and communicate to all the relevant stakeholders (p=0.034) was the only one that showed significant change for this competency. Thirty-three percent of Fellows scored themselves above-average pre-training and 60% post-training. In the reflective-question, this performance indicator also received most of the comments, twelve and eight respondents pre-training and post-training respectively. Sixty percent of assessors scored this performance indicator above-average.

The performance indicators, *Compile and manage budgets,* (p=0.317), *Aware of the overall expenses and cost per patient/treatment* (p=0.248) and *Manage fair tender procurement processes* (p=0.248), did not show significant changes.

Problem Solving and Analysis

The *Problem Solving and Analysis competency* showed a significant change (p=0.002) and showed significant changes in three performance indicators. The performance indicator, *Report on these problems and solutions for this to form part of knowledge sharing and management,* marginally showed no significant change (p=0.052) (Table P8). For this competency, *Problem Solving and Analysis,* 32% of Fellows scored themselves above-average pre-training, 70% post-training (Figure 4.14), confirmed by 71% of assessors (Table Q8).

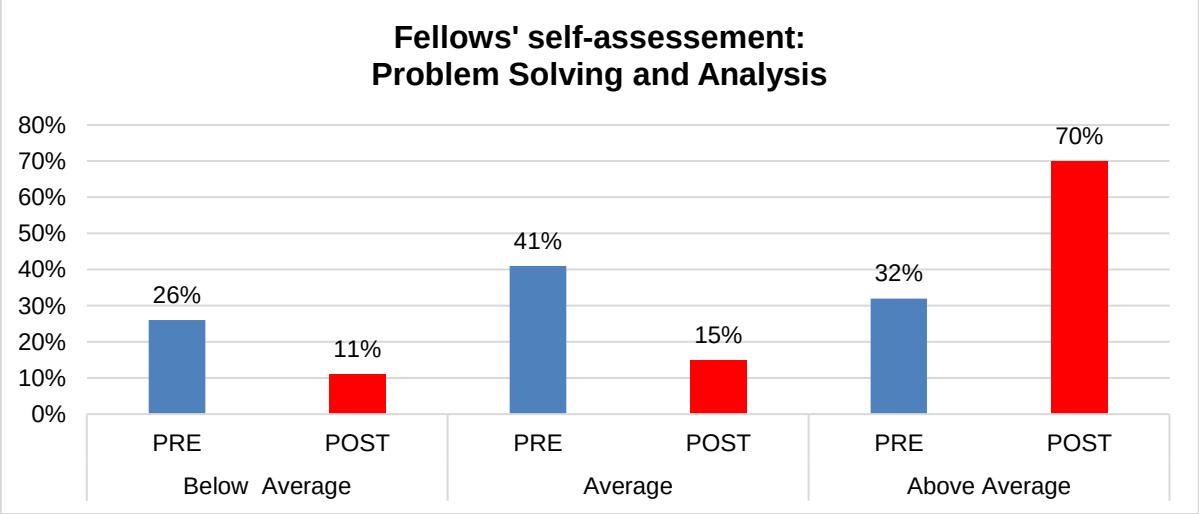

Figure 4.14: Fellows' Self-Assessment for Problem Solving and Analysis

In the reflective-question one fellow confirmed, "*I see myself portraying these qualities more easily after going through the ASELPH course especially, the complex problem-solving module*" (S19). The performance indicator, *Process in place of identifying problems in the team,* received 37% of the comments and showed the most significant change (p= 0.000). This performance indicator was scored by 70% of Fellows below-average pre-training and 85% above-average post-training. Post-training, one Fellows stated, *"All managers are responsible to communicate challenges identified at their stations and this escalated speedily to the CEO through SMSes (text messages) and distributed accordingly"* (S9). This performance indicator was also scored above-average by 73% of assessors.

The performance indicators, *Policy in place for risk management* (p=0.035) and *Process in place of identifying problems in service delivery and community* (p=0.0013) showed significant changes.

Programme and Project Management

Significant change was shown for the *Programme and Project Management* competency (p=0.006), with significant changes in all performance indicators as well (Table P9). Figure 4.15 reveals that 36% of Fellows scored themselves above-average pre-training and improved to 68% above-average post-training for *Programme and Project Management.* The majority of the assessors (64%) also scored this competency above-average (Table Q9). One assessor stated, "*She has gone out of her way to ask for sponsors for her programme. Reports are submitted every month by her which indicated challenges she has experienced and how she intends solving them"* (S11A4), while another assessor felt, "*Projects can be planned and implemented, but the outcomes are hardly evaluated"* (S23A1).

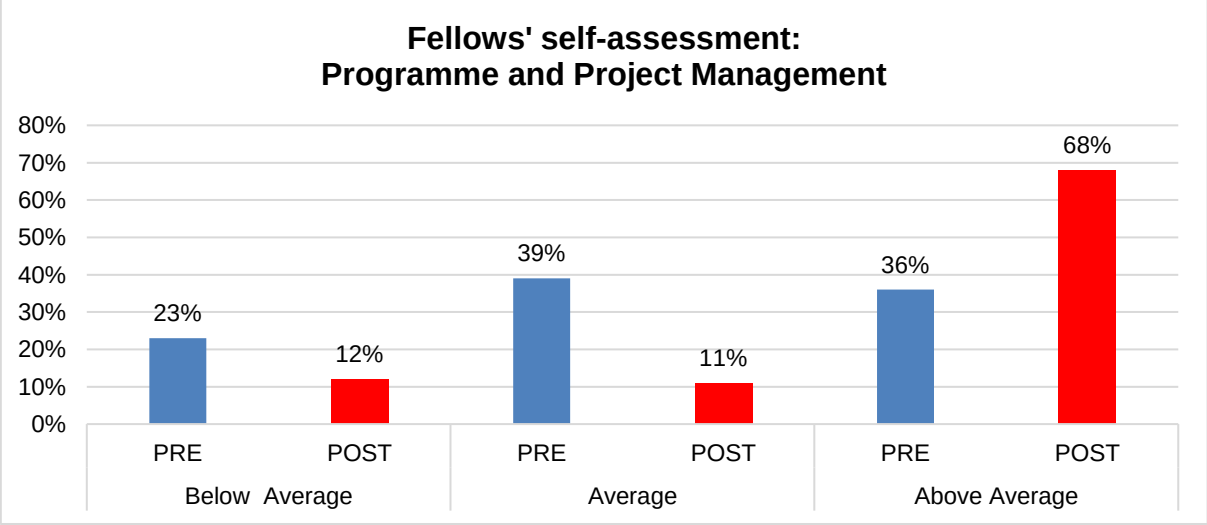

Figure 4.15: Fellows' Self-Assessment for Programme and Project Management

The reflective-question answered by Fellows showed that the performance indicator, *Actively involved in identifying and developing programmes in the community* received

most (33%) of the comments. This performance indicator showed the most significant change for this competency (p=0.003). Pre-training, 37% of Fellows scored themselves above-average, while 70% scored themselves above-average post-training, although one Fellow felt that, "*The reports to stakeholders still need to be strengthened to reach a bigger fraction of the community" (*S17). This performance indicator, was scored lower (60%) than the rest by assessors. Some challenging factors that were mentioned included scarce resources and lack of monitoring and evaluation of programmes and projects.

The performance indicators*, Monitor and evaluate the programmes to meet objectives set* (p=0.021), *Advocate for resources to ensure the success of these programmes and projects (p=0.007) and Submit reports to keep stakeholders informed of progress and new developments of the project* (p=0.020), showed significant changes.

Community/Partnership Collaboration

The overall competency**,** *Community/Partnership Collaboration,* showed no significant change (p=0.156), with no significant changes in all performance indicators (Table P10). For this competency of *Community/Partnership Collaboration*, 40% of Fellows scored themselves above-average pre-training and improved to 55% post-training (Figure 4.16), 63% of assessors scored Fellows above-average (Table Q10). One assessor indicated, "*She has worked with community structures and on radio. She is good in conveying the message and she does hold partnerships dear".* (S24A2). *The critical challenge is the buy in and commitment from stakeholders to cooperate and collaborate"* (S12A1).

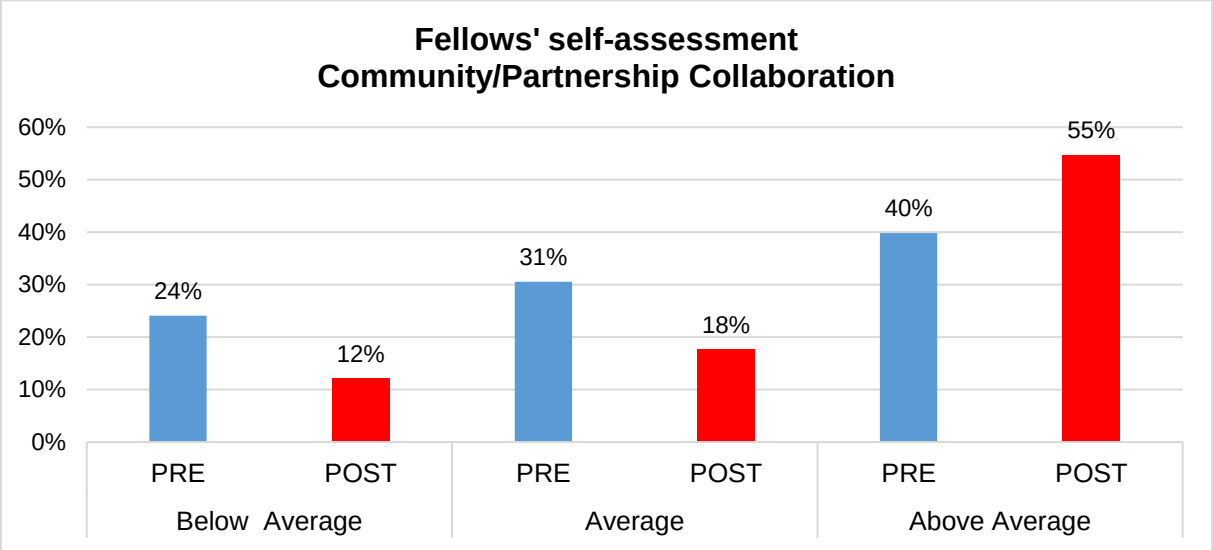

Figure 4.16: Fellows' Self-Assessment for Community/Partnership Collaboration

In the reflective-question, the performance indicator, *Coordinate and lead community efforts to address public health problems,* received most of the responses (30%). This performance indicator, showed no significant change (p=0.317). Pre-training, 52% of Fellows scored themselves below-average, whilst only 59% scored themselves above-average post-training. Fellows confirmed their lack of involvement in community projects and one stated, "*My experience as a manager and the training I obtained through several programmes including ASELPH have contributed immensely to this strength in my leadership capabilities"* (S24). Another Fellow was excited about being, *"Involved in the development of by-laws for initiation schools. Traditional healers are educated on communicable and non-communicable diseases to reduce any health hazards*" (S18). Sixty-four percent of assessors scored this performance indicator above-average.

The performance indicators *Build and maintain strong relationships with the community* (p=0.317), *Strong community participation in all projects* (p=0.206) and *Community representatives form part of strategic planning* (p=0.206). showed no significant changes.

Knowledge Management

The competency, *Knowledge Management,* showed significant change (p-0.001) and significant changes in all performance indicators (Table P11). For Knowledge Management, Fellows' proportion changed from 25% pre-training to 57% above-average post-training (Figure 4.17). Pre-training, one Fellow's expectation was that, "*Research is a central office mandate however with ASELPH one will be able to do a research that is institutional though it will still be the property of the University of Pretoria"* (S5). Another Fellow, post-training admitted, "*Knowledge is shared through departmental meetings, although this is not strong as one would like it to be due to burden of work and staff shortages"* (S9). The majority (62%) of assessors also scored Fellows above-average (Table Q11). One assessor confirmed, "*Used her project module during the course to make improvements in service deliver"* (S9A1).

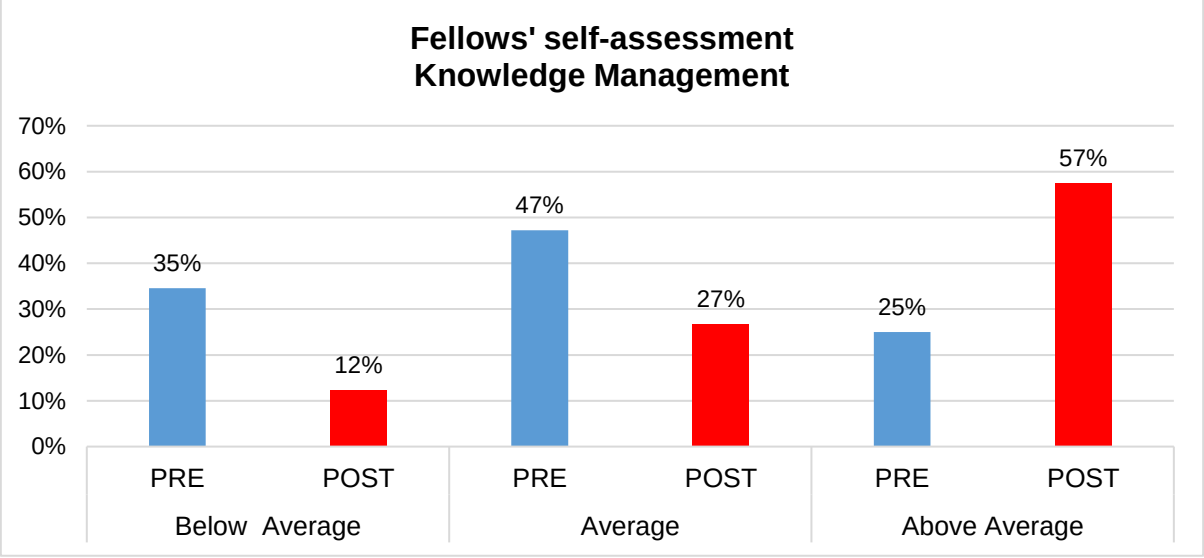

Figure 4.17: Fellows' self-assessment for Knowledge Management

In the reflective-question, the performance indicator, *Infrastructure (IT system) supports the knowledge management process,* received most of the comments, 22% pre-training and 33% post-training. Fellows perceived this as a challenge and mentioned old infrastructure and lack of IT personnel as important factors. This performance indicator, showed the least significant change (p=0.034) of this competency. Pre-training, 78% of

Fellows scored themselves below-average, while 44% scored themselves above-average post-training. Of the assessors, 60% scored this performance indicator above-average.

The performance indicators, *System in place for knowledge sharing* (p=0.001), *Policies in place for knowledge management* (p=0.020) and *Research used for service delivery improvement* (p=0.020), showed a significant change

The reflective-question confirmed that most Fellows shared the information from the ASELPH Fellowship training at work. One Fellow identified the following challenge of information sharing, "*To a certain extent one can do this but in a complex environment where there is a lot of rules and regulations and protocols and also competing priorities, it is difficult to prioritise"* (S24).

Strategic Leadership

The competency *Strategic Leadership* showed significant change (p=0.002). with no significant change in the performance indicators *Awards and rewards system in place for people's performance (p=0.109)* (Table P12). Pre-training, 44% of Fellows scored themselves above-average, 81% post-training (Figure 4.18) and 69% by assessors (Table Q12).

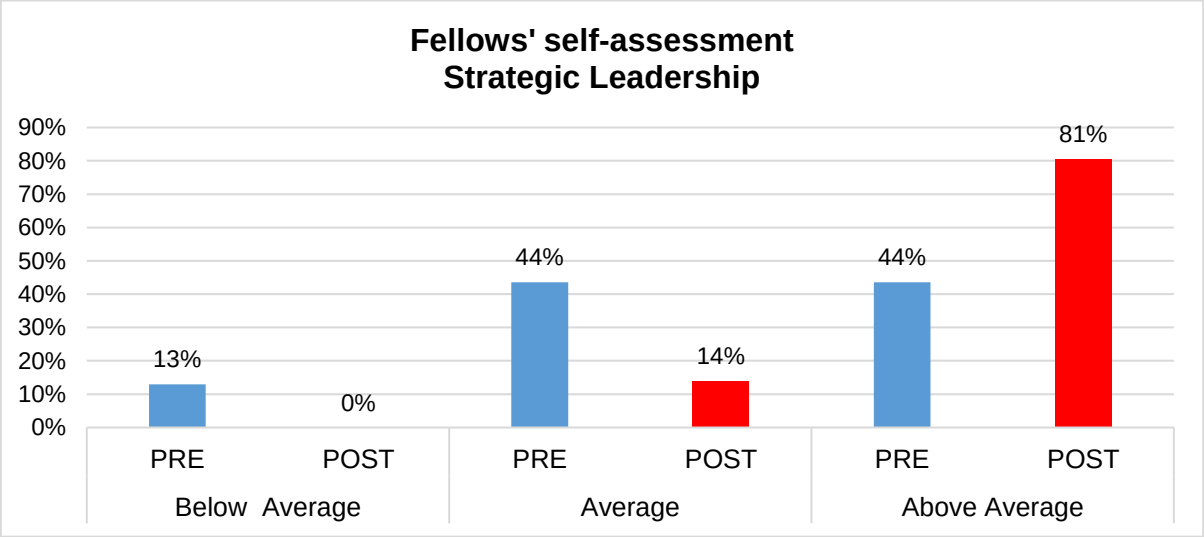

Figure 4.18: Fellows' self-assessment for Strategic Leadership

In the reflective-question, Fellows mainly commented on the performance indicator *Awards and rewards system in place for people's performance*, 22% pre-training and 30% post-training. This performance indicator, showed no significant change (p=0.109). Pre-training, 56% of Fellows scored themselves below-average, while 67% scored themselves above-average post-training. One Fellow indicated, "*I have difficulty in matching awards to performance. In government this follows a lengthy procedure and sometimes awarding a subordinate appropriately may not be possible. You don't have rewards at your disposal as a manager"* (S24). Fifty-six percent of assessors scored it above-average. Three Fellows commented on the fact that the system was not fully functional, that it was a lengthy process to motivate for awards and that the only system in place was the PMDS, which leaves staff demotivated. (S2, S24, S27). The Reflective-question indicated that assessors felt that Fellows were competent in this competency in general and confirmed that the reward system in most cases is a function at a different level. "*She is able to provide vision and give direction. She inspires others to deliver. The awards and rewards systems are prescribed and regulated by the Department"* (S12A2).

The performance indicators *Models a personal example of what is expected of others* (p=000), *Share the "big picture" of what needs to be accomplished* (p=0.008) and *Empower people to make decisions* (p=0.013), showed significant changes.

Change Management

The *Change Management* competency showed significant change (p=0.001) with significant changes in all performance indicators (Table P13). *Change Management* was scored by 37% of Fellows above-average pre-training and improved to 76% post-training (Figure 4.19). One Fellow proudly stated, "*The workshop on change management has been conducted and improvement has been observed. In some facilities where management is weak we initiated the change management strategies.*

The NGOs have been involved to train the facility managers on change management. The Ideal Clinic Realization and Maintenance Model has brought a challenge to all to ensure there is an improvement in our facilities. All have been encouraged and supported to perform" (S25). Another realised that, "*Change management can be very difficult in our environment since we have low level workers that have been at the organisation for a very long time. However, the incentive of increasing the employees level has enabled management to take people out of their comfort zone which made it easier to effect the changes"* (S21). This competency was also scored above-average by 67% of assessors (Table Q13).

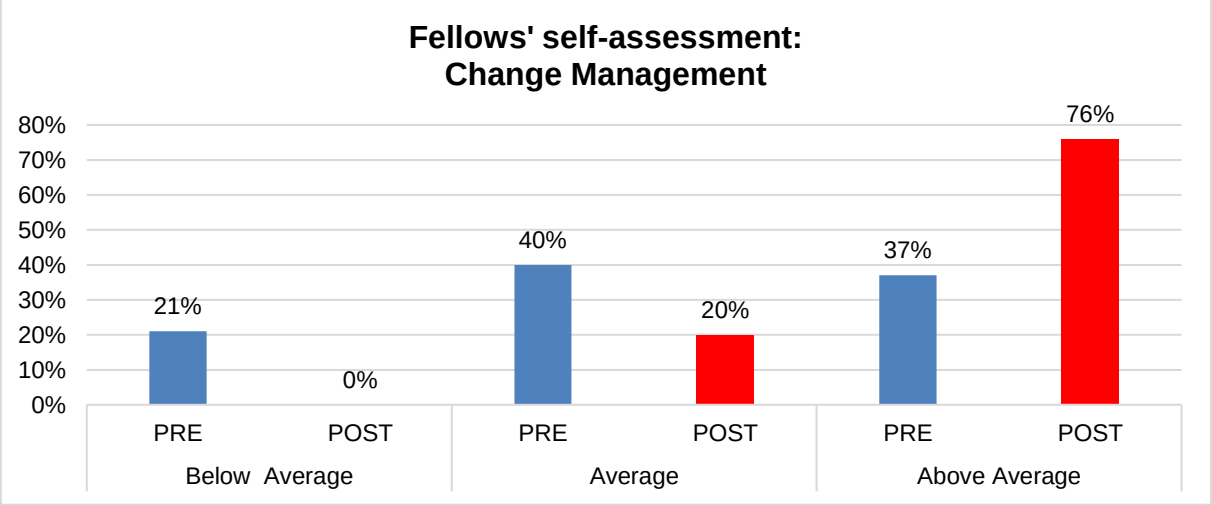

Figure 4.19: Fellows' Self-Assessment for Change Management

The reflective-question comments by assessors showed that Fellows were competent in this competency of *Change Management*, with one assessor confirming "*Fellows implemented the diagnostic tree from the ASELPH Fellowship training." (S25A3).* Further comments included projects that were introduced in the workplace post-training (S17, S25), resistance to change as well as the bureaucratic environment as a huge challenge for this competency of *Change Management* for some Fellows (S21, S24).

The performance indicators *Initiate and embrace change to improve the working environment* (p=0.002), *Explore outside the organisation for innovative ways to improve the workplace and service delivery* (p=0.004), *Encourage all to embrace challenging*

opportunities that test their skills and abilities (p=0.020), and *Advocate for policies to be reviewed regularly* (p=0.011) showed significant changes.

Service Delivery Innovation

Significant change (p=0.003) in the overall *Service Delivery Innovation* competency was shown with significant changes in all performance indicators (Table P14). Pre-training, 28% scored themselves above-average for this competency, 67% post-training (Figure 4.20) and 74% by assessors. (Table Q14).

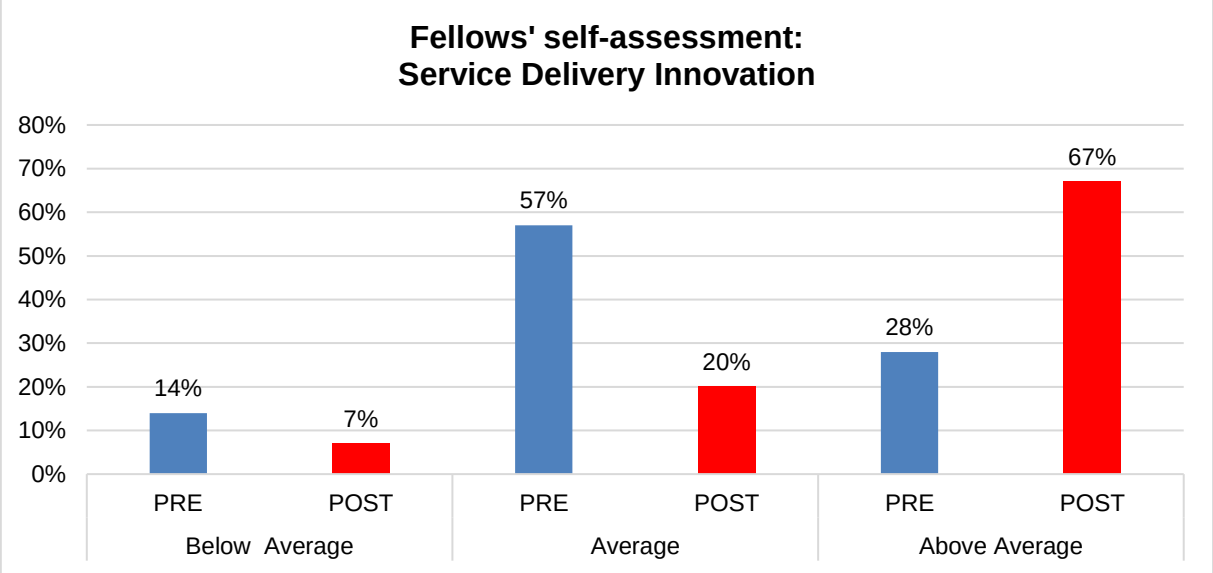

Figure 4.20: Fellows' Self-Assessment for Service Delivery Innovation

In the reflective-question, most Fellows commented on policies and systems they have in place, e.g. Balanced Score Card, regular feedback meetings and workshops and monitoring and evaluation processes to improve this competency of Service Delivery Innovation. One fellow confirmed, "*After every ASELPH contact session I would share the learnings with my executive team and apply to plan, organise lead and control organisational activities"* (S22). An assessor asserted, "*The participant is competent in process integration, policies and structures across the organization to achieve improved efficiency and effectiveness on Service Delivery Innovation and implement*

new ways of performing tasks and developing the organisation as a whole. She provides regular feedback to staff" (S7A1).

The performance indicators *Manage personal and staff development to ensure a competent team* (p=0.021) of this competency, *Ensure that the team adhere to the principles and standards of efficiency and effectiveness* (p=0.004), *Runs the organisation on a common set of values that will encourage innovation* (p=0.001) and *Regular feedback on how the organisation is performing and how to develop further* (p=0.004)*,* showed significant changes.

The fact that the sample size was proven adequate by the Kaiser-Meyer-Olkin (KMO) Test[204], the questionnaires reliable as confirmed by Cronbach Alpha test[202-], and the training intervention suitable and the self-assessments by the fellows consistent as was confirmed by their assessors, with significant differences in the before and after training performance of the cohort, the statistically significant improvement in competence or performance can be perceived as valid.

Qualitative findings of the expectations and outcomes of the ASELPH Fellowship

Fellows were asked before the training what their expectations were, and after the training whether these were met. Assessors were also asked whether their expectations regarding the Fellows' training were met. These findings will be discussed in this section.

In response to an open-ended question: ***In which area will the ASELPH Fellowship develop you the best*****,** the Fellows anticipated that it would be in *Strategic Leadership (52%), Self-management (33%), People Management (22%) and Change Management (22%),* as shown in Figure 4.21. One Fellow shared before embarking on the ASELPH Fellowship: "*I think on the area of leadership because this module says to me how do I apply the competencies, skills, knowledge, shared experiences and attitudes as a leader to improve the efficiency and effectiveness of the health system*

at my workplace. The ASELPH is about transforming the managers into future visionary leaders with the purpose of implementing the policy directives" (S25).

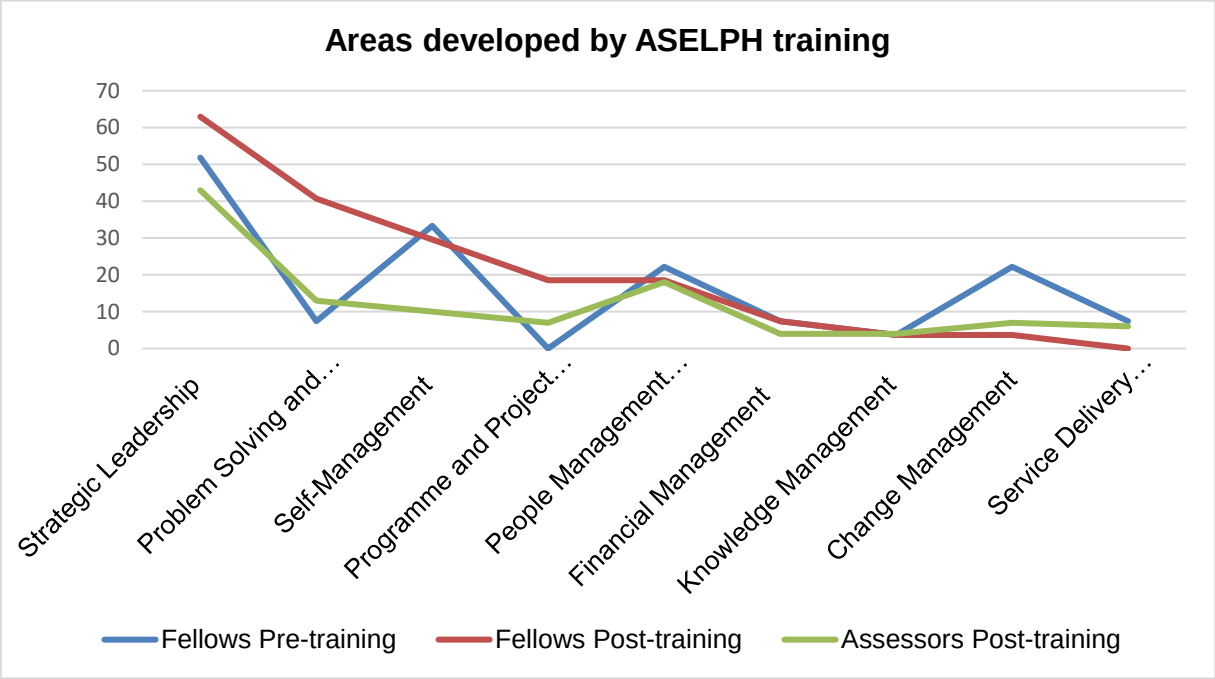

Figure 4.21: Areas developed by the ASELPH Fellowship

Post-training, *Strategic Leadership* at 63% was the competency most identified as developed, as one fellow said, *"Understanding the competencies of managers at different levels of government and decentralisation to achieve more but ensuring accountability. Developing as an individual, understanding my strengths and weaknesses and ability to work on them"* (S26). The other areas most developed were *Problem-solving (41%*) and *Self-management (30%).*

Assessors also recognised *Strategic Leadership as the* competency most developed (43%), followed by *People Management (18%).* One assessor stated: *"The fellow has greatly grown on various levels of his work. Whereas in the past he would have accepted what he was told, he (now) analyses his work and implements what he knows is best practice for the organisation. His interaction with staff on all levels has vastly improved. He is an active fellow in all spheres of the management of the organisation and takes a leadership role. He was instrumental in the changes that were implemented*

to improve service delivery" (S3A2). Another assessor reflected, *"Before, she used to complain a lot. It changed her thinking of problem-solving. She is now a manager in her own right. Huge improvement after the ASELPH Fellowship training. Different approach - she used to be angry about things now she understands that she is accountable for her job* (S8A2).

Considering the workplace environment, Fellows were asked ***How much better they thought the course would make them capable of managing effectively in their current work responsibilities.*** All Fellows pre-training had the expectation that the ASELPH Fellowship training would make them capable of managing more effectively. As one fellow shared*, "As the course deals with specifically Leadership in health, I think it is going to equip me remarkably in my workplace to be able to deal with complex issues, especially managing people and finances and resource allocation and monitoring"* (S24). This expectation was met by the course as all the Fellows post-training felt that the ASELPH Fellowship training made them more effective managers in their workplace, as one Fellow expressed, "*With the knowledge I gathered during training, I'm now a better manager. The course taught me a lot including change management and embracing the diversity of the staff members"* (S2).

Ninety-three percent of assessors felt the Fellows were capable of managing effectively in the workplace, especially in *Strategic Leadership* (28%) and *Self-management* (16%), "*She has managed to pick up the service standards to highly acceptable and competitive levels. To-date the District which she manages ranks top compared with others. The quality of health service provision and data management have improved tremendously. She is working with a highly motivated management team and programme managers which she has put together and constantly monitoring to check for their efficiency and effectiveness"* (S7A1). Those assessors who disagreed, indicated that the fellows did not have the opportunity yet of showing the change**.**

4.7.1 Reflective Essays

The findings of the statistically significant differences of the Fellows' pre-post-training scores, were supported by the insights from the reflective essays. Fellows emphasised their shortcomings as manager/leader before the ASELPH Fellowshipand the theme that came out strongly was the S*elf-management* competency. Words/phrases that were mentioned as challenges were team and organisation trust, lack of confidence, public speaking, short-tempered, impatience, anger management problem, time management, poor listening skills, fear of conflict, non-accountability, and computer literacy.

The following themes were prominent in the Fellows' reflective expression of their journey showing the difference that ASELPH made. The importance of strategic planning, quality control to improve services and outcomes empowered them to initiate change in organisational culture and personal and professional development, and gave them the education and training needed by managers. One Fellow shared, "*ASELPH has built my confidence, skills and competencies necessary for a manager like myself. I am empowered and also empowering others to continue to build a pool of cadres in trying to respond to the leadership challenges at the workplace"* (S25). Another declared, "*After enrolling with ASELPH in 2015, I have noticed a change when being provoked or angry, applying Lewin's three step model (unfreezing, movement and freezing the change). Being selected to be part of the second ASELPH cohort was a very good move for me as my leadership and management skills have improved, which will in turn improve service delivery to the Department of Health. The modules being taught at ASELPH are relevant to my workplace"* (S2).

The particular factors mentioned by Fellows in their reflective essays, that played a role in the success of the training, were the round-table set-up together with group discussions, the ASELPH facilitators, networking, mentor-mentee programme and case studies. The Fellows also felt that the intensity of the programme improved their management discipline.

In the reflective essays, the Fellows also had to reflect on the learnings from the different modules and the implementation of these at their workplaces. The responses to these modules follow below.

Learning in Public Health module

Fellows identified better group work and knowledge about health and their clients as shown by this Fellow "*By the end of that week I felt a little bit more comfortable with the other members of the groups. This might be due to the fact that we spent late hours working on our group assignment. I had a better understanding of what public health was. My perception and the actuality vastly differed. I simply thought it was a term used to describe people who used government clinics, not realising that it was bigger than that"* (S12). Fellows' technology and research skills also improved, "*One good achievement I grasped was to learn how to use the technology especially the use of the ClickUP (University of Pretoria e-Learning platform) as a means of communication and going green. The referencing part, I learned to master quickly because I had to conduct my research within the prescribed ethics and standards especially the use of Vancouver style. It was difficult at the start but once I got used to it, it made my work easier*" (S7).

Executive leadership for health (to include responsible leadership) module

Fellows recognised how the SDI (Strength Deployment Inventory)[195] and EQ (Emotional Intelligence), that relate to self-awareness and conflict handling, made a difference in their relationship with their team. The new knowledge and skills also contributed to their leadership styles. Most of the Fellows appreciated the meta-leadership[28] (leading up, down and laterally), which assisted them in approaching and understanding, especially their senior managers. "Walk in the Woods"[207] is a conflict tool that many Fellows applied to deal with problem situations with stakeholders, i.e. team, seniors and patients. One fellow stated, "*Leadership was the core module for the programme. One was capacitated with new leadership approaches, i.e. walk in the woods, meta-leadership (how to lead up, lead down and lead sideways), and more*

leadership styles and management approaches. One learned more about new ideas and leadership behaviours. Embracing diversity as a leader you must respect others' ideas and perspectives different to one's own. Time management and creative skills to talk with confidence in public were developed, as well as negotiation and journaling skills to be aware of one's actions all the time. I realised reflection to be an ongoing process at work to monitor and evaluate my programme and appreciation and importance of good work, assessment and feedback. I honestly acknowledge my strength and weakness as a true leader" (S8). Another fellow added, *"The new concept that I learned also was the Strength Deployment Inventory which explained the relationship between a leader and a follower and walk in the woods*" w*herein we need to know what kind of people we are and how we relate with our peers - that is relationship awareness. Example: I told them about challenges that I faced in my career as an upcoming manager in dealing with subordinates and other peers form other departments. I advised them that as much as nobody wants to be in a position of disciplining subordinates, there is a need sometimes to instil discipline. In that way I felt like I walked in the woods with them and we discussed issues and now understood each other better"* (S6).

Health System and Transformation policy

This module is linked to the *Change Management* competency. Fellows appreciated the learning on the Diagnostic Decision Tree which reminded them about getting to the bottom of the root cause of a problem by asking the five whys, until the root cause was determined. One fellow stated, "*For some reason I find the "Diagnostic tree" made so much perfect sense to me to underpin the core of the problem rather than assuming or picking the first reason that is at my disposal. You need to ask why five times. It is an essential tool for health reform as we are moving forward to NHI implementation. The control knobs that one can put in place to address the challenges, although it took a lot of time for me to understand them, but eventually understood them"* (S23).

The concept on the control knobs was also very valuable to the Fellows, and constitutes: (1) Financing; (2) Payment; (3) Regulation; (4) Persuasion; (5) Organisational. The following Fellow confirmed the application of the persuasion control knob, "*I learned to be more interactive with hospitals' CEO and advocate for the pharmacies in their hospital. In my work environment I had to use the persuasion control knob where I had to persuade two hospitals to buy tablet packing machines for the pharmacies to make work efficient"* (S6).

Strategic Financial Management in Health

Fellows found this module very challenging but realised the benefits eventually as one fellow said, "*I had a bit of challenge in this module as I was not hands on with hospital budgets. Getting all the information empowered me to be able to make valuable inputs during budget planning meeting and shared what I learnt from ASELPH. I applied the decision-making planning and control processes"* (S11). They realised the value for leaders to be aware of budgets, expenditure and cost drivers, even if they are not responsible for drafting financial documents. Leaders must be able to speak the financial language and know what is happening financially in their section, as stressed by this fellow, "*Before this module I had basic knowledge about budget, expenditures and allocations but technical knowledge was lacking. After the module I learned that there are issues that leaders must consider in budget proposals. One most outstanding feature of a budget is that it must strive to create cost awareness to all staff members for cost effective use of resources. Leaders must, in planning, take into account business analysis in terms of cost behaviour so that activities are monitored against the set targets. After this module, I introduced monthly budget meetings, where budget is monitored against the set targets and deficiencies corrected"* (S7).

(District) Health Systems (and Hospital) Re-engineering

This module is linked to the *Knowledge Management* competency but has a thread through most of the other competencies as well. Fellows affirmed the benefits and

challenges of decentralisation. A few Fellows admitted they were initially unsure what decentralisation really meant and appreciated how their knowledge increased after the training. "*I have learned about how the authorities are working with regard to the centralisation and decentralisation. I have learned that province have decentralised some of its functions to the district in the form of decongesting. Therefore, I still have narrow decision space when coming to exercise of authority. The authority to hire and fire is still in the province. The financial delegations that are given are to a certain limit, and at my level I am only given authority to approve a limited amount. The course also empowered me on the management of other managers. All these achievements I have been mentioning is because I managed to have the power of influence and been able to persuade the subordinates to perform to their best abilities"* (S25). A few expressed their frustration with the narrow decision space, especially around recruitment and selection and some financial decisions. However, they realised how important it was to have the skills to competently deal with wider decision space: "*During the Decentralisation module, my view now is that whether the health system centralised or decentralised a particular programme, it doesn't necessarily result in better outcomes in the health system. I have learned that within a programme, I might need to centralise a particular process and decentralise another part. However, there is a view that we decentralise health system or programmes in order for efficacy, improved quality of care, allowing innovation and improved local accountability. It was also indicated that decentralisation can be unequal. During the decentralisation module, I learned that once the powers are decentralised it gives the local managers a better position on how to use those powers and resources and that gives them control on their range of "decision space," as demonstrated in the Bossert Decision Space Approach"* (S15).

Ethics and Values in healthcare, organisational behaviour change and strategy in health

This module strengthened the Fellows' critical thinking ability and improved their knowledge on the Porter's five forces, strategic planning and management. One fellow commented, "*During this module I learned how to develop the vision of an organisation,*

that I should also develop value proposition and related activities to support the vision. What stood out for me was that analysis of external opportunities and threat is important, using the concept called the "five forces." The five forces can also help strategy or knock it down" (S15). Another fellow realised the importance of strategic planning, *"In my career, I have attended various strategic planning workshops of which were like a routine every year. In this module I have learnt that it's about doing things differently so as to be able to achieve your objectives. As a manager I need to do prior arrangements, brainstorming, plan for the future and involve the stakeholders. It is my role to change the mind-set of the staff to being positive. I have realised that planning is not taken seriously because staff feels it's a routine with no results. I, as a manager must ensure that the document to be produced will have a meaning to me and I must own it so that the staff can own it"* (S26).

Health informatics, monitoring and evaluation

Fellows confirmed how this module made them realise how important the monitoring and evaluation (M & E) of projects were, as acknowledged by this Fellow, "*Designing a monitoring tool to tract progress was extremely insightful. I must admit it kept me thinking as to how I should go about to ensure that there is common understanding across the institution"* (S1). They realised that projects and programmes without monitoring and evaluation and the necessary information, are of no value since the actual objectives and performance of the programmes cannot be measured and improvements not introduced. One fellow shared, "*It is important for a leader to know and understand the different concepts such as monitoring and evaluation. For an organisation to perform, information management is very key. The information consists of raw data, refined data and can be used to make informed decisions with the resource utilisation" (*S20).

Implementation of quality improvement modalities (strategies) in health system

Fellows became aware of the role quality plays in service delivery and how quality improvements are linked to preventing adverse events and litigation. "*Since attending the ASELPH classes, I have become acutely aware of the need to prevent treatment related adverse events by putting systems in place and monitoring for better outcomes. I now appreciate the value of detailed patient records*" (S17). Some Fellows noted that leaders should apply the patient-centred care rather than the provider-care in the strategic planning for improving quality of care, which would lead to more satisfied clients. Many of the Fellows agreed to establish or to review the current quality team and policies in place, as one fellow said, "*I now emphasise patient involvement in whatever the mentees are doing, and this works because they are even able to correct others who are not yet trained in quality. As a leader it is very important to get root causes of quality. Problems which can be done using the diagnostic tree (5 WHY's) and correct the situation. This helps me a lot because I even apply it to my patients when they miss appointment dates, to get to the real cause and help or refer to relevant authorities in cases where I cannot help*" (S4).

Policy Practice Seminar

This module is linked to the *Community/Partnership Collaboration*. Fellows were pleased that this module clarified much of the uncertainties around the NHI, as one fellow stated, "*The NHI module was presented very well from explanation in class to conducting the NHI seminar at workplace. For me it has made me to have a deeper understanding of the NHI policy link within national core standards and Office of Healthcare Standards. The module has instilled in me the embracing of the NHI"* (S23). It also made Fellows excited about planning such seminars themselves to have productive discussions that could lead to policy implementations. "*I developed a plan on induction and implementations on reviewed policies. There is a planned Scheduled Policy Seminar meeting that I developed on a quarterly basis with people appointed. There is a database developed for all policies*" (S14).

Complex problem-solving and negotiating, coherence and coordination

Fellows appreciated how crucial all their skills, acquired during the ASELPH Fellowship training, were in problem-solving, i.e. EQ, walk in the woods. communication, negotiation and listening skills. One fellow shared, "*The ASELPH programme has enabled me to use the tools in my tool kit to analyse a situation, to identify when to use human persuasion but most of all to apply emotional intelligence. I have applied the skills I learned from the module and created win-win situations. I am learning how to apply active listening and slowly seeing a progress in solving problems. At first I would be the one that lead the talks and failed to listen to the other party. This is certainly work in progress, which I made one of my goals to achieve by the end of the year. I am practicing "walk in the woods" and getting more comfortable with the process, which has assisted with my leadership skills and to solve problems"* (S21).

Some Fellows also realised that problems are sometimes more complex to have simple solutions and that leaders do not always have all the solutions. They appreciated the importance of common ground for problem-solving meetings. "*I have learned this week that one needs to use power of persuasion when communicating, listen and be prepared to see other people's viewpoint. It is important to listen when others complain because usually people will not come through with the real issues. I am actually drilled to learn the rule that as a manager, one must avoid meeting with unions in the office as this is where the manager power is based. Meetings should be in a neutral place"* (S4).

Strategic Marketing (and communication) in health

This module is inked to both competencies of *Client Orientation and Customer focus* as well as *Communication.* Fellows realised the value of marketing the public health services as well and that it was not just for private organisations. "*We were taught on how we can improve our market and concepts that were introduced are product, place, price and promotions. This assisted a lot because I got to understand that public health services should also be marketed. When going back to my workplace, I had to make*

sure that all the indicators, which talked about campaigns and health talks were addressed" (S3).

The importance of getting the right message to clients was emphasised as well, as one fellow stated, "*So in completing my SMH 770 (Strategic Marketing) course, I decided to use practical information from my department. I wrote a communication plan that included: Vision for our communication; objectives: mediums of communication, people responsible for communication, messages (different messages for the different audiences depending on disease type) and evaluation (feedback plan). We decided to have an evaluation questionnaire at the end of each communication, short with only three yes or no questions. Based on the assessment we will be able to make corrective measures. We found that our previous communication had failed since the clients reported that difficult medical terms were used that they did not understand and the talks were sometimes irrelevant and too long. So, we are now able to correct these challenges" (S13).*

Strategic Human Resources and Management Performance

Fellows confirmed that the course reminded them, as leaders, of the importance of human resource management, as one fellow declared, "*The course demonstrated that employees were the backbone of the organisation and of value in service delivery. By not taking care of our employees, we could not expect them to reciprocate and do well for us"* (S9).

The importance of providing resources for people to work efficiently were emphasised. Motivation of staff and accountability were mentioned as important aspects to keep staff happy and therefore work optimally. One fellow stated, "*This week I realised that my workplace is not understaffed or underpaid, we have enough staff members but bad managers. I believe that good managers are able to bring out the best in people. Ours have failed dismally at doing this but have actually made some people hate their jobs, hate the needy patient and just hate the government system"* (S13).

Concluding statements from the reflective essays about the ASELPH Fellowship training

Fellows expressed gratitude that they were selected to attend the ASELPH Fellowship training and how the training positively affected them personally and professionally. Some felt that the reflection was both challenging and therapeutic. Fellows appreciated the reflective essay that kept them aware of the classroom and workplace environment and the implementation of the learnings at their workplaces, throughout the training and beyond. One fellow recalled, "*Reflecting on this leadership journey, I can confidently say that I have benefited from this priceless opportunity. The opportunity to learn from the interactive sessions, from peers, to the in-depth lectures from esteemed personalities, have made the learning stimulating. I have become more confident in my daily job and can associate better with senior management at provincial level. My personal life has benefited exponentially. The ASELPH programme has provided me with a tool kit to contribute to the development of services and to be an agent for change management in the public sector. All I have to do now is to identify what tool to use for what situation. The journey started with mixed emotions and I was overwhelmed by the senior leaders in the class, but it certainly ended on a level where I am able to have a conversation with anyone in the class about leadership matters. Thank you ASELPH Management and staff for this experience and the support, but I have to pursue this journey further by myself*" (S21). Another fellow concluded their essay by saying, *"I believe the systematic organisation of the course was very good because it opened my eyes instantly as to what would be expected of me as a student, and I was taken through the transition of getting into the gear of being a student. I feel wiser now than when I started this course and can now apply my mind extensively when I'm making decisions. I've attended other short courses before, but I never felt this transformed. For me, ASELPH is a quality leadership course, I wish my seniors/leadership could attend this course as well"* (S23).

4.7.2 Retrospective assessment by assessors

Insights from the retrospective look at the Fellows' evolution by their assessors, further supported the findings of the statistically significant difference in the Fellows' performance. The retrospective analysis enquiring from the assessors, if and how the fellow improved from before attending the ASELPH Fellowship training to post-training, had 74 assessors' responses (89%). Eleven (13%) of these assessors, did not see the need for additional comments since they confirmed the Fellows' improvement after the ASELPH Fellowship training in the survey questionnaire.

The retrospective results were categorised by the researcher into three broad themes: (1) Improvement in specific competencies; (2) Yes, the fellow improved and ASELPH developed the fellow; (3) No overall improvement/not demonstrated/unknown.

Most (41%) of the comments by assessors could be categorised into the Strategic *Leadership* competency. In response to the question on ***"How ASELPH developed the Fellow,"*** most assessors stated that the ASELPH Fellowship training made the Fellows better and confident leaders, "*The fellow has greatly grown on various levels of his work. Whereas in the past he/she would have accepted what he/she was told, he/she analyses his/her work and implements what he/she knows is best practice for the organisation. His/her interaction with staff on all levels has vastly improved. He/she is an active Fellow in all spheres of the management of the organisation and takes a leadership role. He/she was instrumental in the changes that were implemented to improve service delivery"* (*S21A2).* Another assessor shared, *"It was the best thing that could have happened to her/him. Morale is high, she/he is a happy person and feels valued"* (*S24A2).*

In response to the question ***"How much better the fellow is managing after the ASELPH Fellowship training",*** all assessors scored the Fellows between four (a lot of improvement) and five (exceptional improvement) with an average score of 4.5.
Other relevant competencies that also improved included:

- People Management (20%) i.e. became a team player; discipline staff easier.

- Service Delivery (20%)
- Self-Management (19%) i.e. Emotional Intelligence and confidence improved.

The findings showed that 14% of these assessors confirmed that ASELPH improved the Fellows in general (without specific reference to a competency) and only 9% commented that the change had not been demonstrated/implemented yet and that the fellow still needed further improvement, *"Can't tell so far – many areas need to be developed still*
Not demonstrated yet" (S24A1).

4.8 Factors influencing the effectiveness of the ASELPH Fellowship

In response to *an open-ended question* about ***the biggest challenges that leaders in healthcare in SA face today,*** three themes emerged from the responses of both Fellows and assessors: lack of leadership skills and knowledge, human and financial resource shortage including brain drain and political pressure, poor governance and policy implementation.

More than half of the Fellows (52%) felt that the lack of leadership skills and knowledge were one of the biggest challenges for leaders in SA, a view shared by 28% of assessors: "*The biggest challenges to leaders is attitude of subordinates. These days it is a demanding task to keep subordinates motivated and focused. The lack of equipment and in some instances skills can be very demoralising. The decline in work ethics have a devastating effect on service delivery which are mainly felt by the community at large*" (S3A1).

The Fellows and assessors, 37% and 34% respectively, acknowledged the shortage of resources including brain drain, contributing to these healthcare challenges. "*Shortage of material resources, shortage of staff, limited budgets, staff negative attitudes, lack of capacity, nepotism, corruption, and lack of work commitment by staff"* (S7A1).

Political pressure (33%) was more real to Fellows than to assessors (19%), as stated by one fellow, "*Political interference, burden of diseases and brain drain are some of*

the challenges. People are leaving for private practices others are despondent and resort to early retirement depleting professionally skilled human resources" (S11).

When asked, prior to pre-training, if they felt they would ***be able to take learning from the*** **classroom back to the workplace,** 74% of Fellows were positive that they would be able to implement the ASELPH learnings in their workplace: "*I will develop a plan to implement learning before coming for the contact session, execute it and review monthly"* (S22). Another fellow also expressed, "*The ASELPH Fellowship was developed by different partners in association with the Minister of Health to improve health outcomes in the country. The focus was to empower managers of the Department to lead their facilities in the same direction as the Ministers' vision. What is taught in the programme has to be practiced by myself at the workplace*" (S9). Pre-training, 15% of Fellows were a little unsure whether it would be possible to take the learning back to the workplace, as this Fellows stated, "*At first it will be a bit difficult because a lot needs to be changed and people do not react positively to "CHANGE," but I will try and apply the relevant strategies where possible and to get positive results"* (S3). The rest did not respond to this question. This expectation was matched after training as the same percentage of Fellows (74%) confirmed post-training that they did take the learning from the classroom back into the workplace, "*Taking examples in class and implementing them at workplace, e.g. the process to change ("Walk in the Woods") as a manager is important because I need to identify my interest and others and align them*" (S15).

The majority of the assessors (81%) said the Fellows shared and implemented, where possible, the ASELPH learnings at the workplace. *"The impact of the classroom learning is huge to the Fellow. The way he leads the team, you can see that the Fellow has been sharpened, the way he gives direction, supportive, stewardship, the way he*

sees the vision in the big picture, and the way he is taking decisions. The learning contributed a lot" (S10A4).

Responses to the question**, *What were some of the challenges that influenced implementing the learning from the classroom in the workplace,*** resulted in two broad themes: (*1) Workplace factors including bureaucracy and lack of authority, increased workload, being overwhelmed with challenges, time constraints, diminishing resources; (2) Poor leadership and culture including resistance to change*. Most of the Fellows (70%), pre-training indicated that resistance to change would be the biggest challenge that would prevent them from implementing the learnings at the workplace. "*In our environment people have old ways of doing things and are very uncomfortable with change. Also conflict needs to be addressed where I work*" (S21). Another fellow said, "*As I am not a senior manager where I work, I may not be able to apply some of the knowledge and skills at work as my decision-making capacity is limited by the fact there are more senior people who have more authority than me"* (S24).

Post-training, 51% of the Fellows and 49% of assessors mentioned workplace factors as the biggest challenge that would prevent them from implementing the ASELPH learnings. One fellow stated, "*The bureaucratic red tapes and the system that is used to implement new ideas, with mandatory submissions, takes ages before they could be approved or disapproved"* (S4). This challenge was scored by 63% pre-training.

It was also important to determine the Fellows and assessors' perceptions about the importance of leadership and leadership training. One Fellow stated, "*It (leadership) is extremely important as a result of the service transformation plan that is spearheaded by the government. Competent leaders are required to take health to the next level"* (S9). Another fellow affirmed, "*Leadership is important for channelling, championing and delivering the national dream of National Health Insurance for a quality responsive health system"* (S17). Assessors shared the same sentiment as Fellows. *"Leadership in any circumstance is the single most important function. The leader is responsible to steer the organisation in the right direction and to ensure that the goals of organisation are achieved. The leader must foster teamwork and ensure harmony in the workplace*

prevails. Without a leader you will experience officials chasing after personal goals without it being co-ordinated" (S3A2). Another assessor stated, *"It is extremely important. Leadership in hospitals cannot be over-emphasised in that health facilities deal with precious cargos and one cannot afford to gamble with people's lives. You mismanage it once, you might be too late to reverse your damage and you may find that you have lost a patient. So, this cannot just be left unattended to any person as there is abundance of accountability required for anything that goes wrong with the patient. The other thing is also to ensure that the management functions (such as planning, leading, organising and coordinating) happens as seamlessly as possible. Guidance and evaluation for the team is another critical cog in the whole equation. The concept of leaderless groups can better function where there is little at stake. You are faced with law suits for the slightest mistakes made by medical practitioners in public hospitals and the presence of leaders mitigate these problems*" (S23A1). Most of the statements from Fellows and assessors indicated how well they thought about their responses and how they value leadership. The researcher selected these specific reflective quotes.

When Fellows and assessors were asked if they thought ***Leaders are born or could be trained***, 48% of Fellows felt leaders could be trained and 48% felt that leaders were born, but also needed the training (both). As stated by one Fellow, "*To some extent it is true that some leaders were born with the leadership skills. However, I feel that even though they are born leaders, they must still be nourished to be perfect*" (S7). Another said, "*From what I learnt through ASELPH, I can say without fear that leaders can be made"* (S8). Only one fellow felt that leaders are simply born and don't need training (S21).

Forty-seven percent of assessors acknowledged that leaders can acquire skills through training. "*Stewart Friedman believes that good leaders are made not born. Friedman in his book, Leading the Life You Want, explores the skills one needs in order to become an effective leader, how to develop them, and how to devote one's life to the work without losing everything that's important to yourself. In arguing this in his research, he*

concludes that people are not born to be great leaders. Leadership is the most critical characteristic of the organisation because it gives the organisation its unique character and it determines the success or failure of the organisation" (S15A2). Forty-six percent of assessors proclaimed that leaders were born but need skills development. "*To a large extent I believe in the Great Man Theory that certain leadership qualities and traits are inherited, whilst the society and environment also contribute to what we become and what we are. As much as skills are acquired, the trait and qualities realise these skills"* (S27A3). Only five (7%) assessors felt that leaders were born.

In response to ***How important they thought Leadership training was for health managers in SA***, Fellows and assessors saw it as crucial for the success of healthcare in SA. One fellow shared, "*In light of the current NHI implementation, as a priority of the Minister, it is imperative for managers to be equipped with necessary skills to lead all members of his team towards the goals of DoH to have an optimum impact on the patients"* (S12). This assessor agreed, "*Leadership training is extremely important as it guides, reinforces and enhance abilities to direct efforts for better outcomes"* (S4A1).

In response to what the ***Golden thread should be that flows through the ASELPH Executive Fellowship Programme***, most Fellows, pre-training (56%) and post-training (41%), proposed *Leadership* as the golden thread that should run through the ASELPH Fellowship training. Assessors concurred with Fellows as 40% proposed *Leadership.* Post-training, 26% of Fellows cited specific competencies including self-management, financial management, research, strategic management, decentralisation, human resource management, team building and quality improvement. Although the responses regarding Leadership as the golden thread states the obvious expected from leadership training, the responses were confirmation of the expectation of the ASELPH leadership programme to equip Fellows with leadership skills.

4.9 Perceptions about the ASELPH Fellowship

The existing balance of the ASELPH Fellowship training comprises one week of classroom time, preparation time, 50 hours pre-and post-reading and assignment time. In response to ***What do you think is the right balance between class time and self-directed and online learning***, 67% of Fellows pre-training, 93% of Fellows post-training and 71% of assessors felt the balance of the programme was fine as was. One fellow said, "*Honestly, being a tortoise when it comes to technology, my inclination will be biased to class time as opposed to online learning. All the same, one will learn*" (S16). Nine (13%) assessors felt more class and three (4%) felt that more online would work better for Fellows. One assessor suggested, "*Increase both contact and online. Contact creates a platform for knowledge management and best practices. Online, need to be supported by group-work to enhance networking"* (S7A2). Five (18%) Fellows had different opinions about the balance and submitted suggestions such as, "*Reduce classroom time to weekends to accommodate independent candidates"* (S4). Another said, "*Online could be better; class is still the best though the work is too much for one week in such a way that it becomes difficult to grab and conceptualise the days' work. Working under pressure"* (S11).

Comments about *traditional lectures* were that these were necessary to impart knowledge about a specific topic, but were occasionally seen by Fellows as tedious. Fellows were keen about more interaction and peer-learning, but recognised that their listening skills, critical thinking skills and presentation skills (learning from the lecturer) were strengthened through the lectures. Some Fellows also acknowledged that certain lectures increased their knowledge on a topic (from an expert) to the extent they could confidently share in the workplace, e.g. the NHI and decentralisation were two specific topics mentioned in their assessments.

Fellows found the *case-based method* of the ASELPH Fellowship training extremely valuable. The ASELPH case studies used, made it easier for Fellows to relate to their workplace set-up; one shortcoming mentioned was that more SA case-studies should be used.

The *e-Learning* approach is a new development that forms part of the hybrid learning environment at UP. Most Fellows admitted the IT environment was quite challenging for them when they started the ASELPH Fellowship training and this was one of the areas in which they became extremely comfortable. The online teaching and collaboration were new concepts for the Fellows as well, but they realised how teaching changed over the years. Fellows acknowledged that this was a learning curve for them in itself and a realisation of how important continuous development and training were. They appreciated the convenience of eLearning, i.e. immediate feedback and ease of communication, conferencing and collaboration, but also experienced the challenges of the IT world, e.g. no access, loss of information (with lack of backups) and uncertainties about confidentiality.

Other teaching approaches/pedagogies used during the ASELPH Fellowship training, were also seen by Fellows as quite valuable. Fellows were consistently made aware of the contribution of each of the ASELPH teaching approaches towards preparing them for better performance in their workplace. The value of these were recognised by Fellows in their assessments after the course as well as through informal daily reflections:

- Fellows realised the preparation of the *pre-readings* beforehand related to preparing for meetings in their workplace.
- All Fellows were excited about the value of the round-table classroom set-up that enabled *peer learning/group discussions* and continuous interaction in class. They felt that a safe environment was created for sharing ideas, testing assumptions, trying out new leadership behaviours and served as sessions where solutions could be discovered as a group. Fellows appreciated this value of collective problem solving and networking. They also appreciated this group-work approach for them to duplicate at their workplace.
- Assignments/group projects and presentations were seen by a few Fellows as laborious, but in retrospect they appreciated the benefits of these contributing to their leadership skills. The preparation of assignments and the PPT presentations of these assignments, brought out group/team dynamics similar to those in the team

at the workplace with which Fellows could identify. Fellows learned to embrace the differences in people and their opinions and respect these (diversity), they appreciated the different roles in a group, i.e. leaders and followers, and they strengthened their conflict resolution and facilitation skills to manage the group. The *Reflective Leadership essay* taught Fellows journaling and reflection skills, being aware of one's actions all the time (self-awareness) and persistence (journaling for a year). Fellows confirmed that the *group presentations also improved* their PowerPoint *(*PPT) presentation skills, time management, creative skills, increased confidence in public-speaking and to get one's message across in a set time (as is expected at certain meetings in the workplace).

- Some Fellows acknowledged they were not initially keen to participate in the *role playing/interviewing* approach. They eventually realised the benefits of getting the feel of the real situation, literally putting themselves in the other person's shoes (empathy) and how this approach improved their negotiation skills.
- The final stage of the ASELPH Fellowship training requires Fellows to complete a *research study.* The Fellows (100%) affirmed that although the research was quite overwhelming initially, their new research knowledge and skills made them more curious about finding solutions for their workplace problems. They also had to do literature research, which strengthened their computer literacy and made them more confident in finding information on the Internet. Their writing and time management skills also improved. Fellows stated the research taught them to analyse data/information and make recommendations that would assist them in their workplace. Finally, the Fellows realised that they developed a better understanding of the role and uses of research within the community and health sector for service delivery innovation and improvement.

When Fellows and assessors were asked to rate ***The faculty/lecturer for teaching, on a scale of 1 to 10, where 10 is "very important" and 1 is "not important at all,"*** Fellows gave an average rating of 8.9 (pre-training) and 9.4 (post-training) and assessors' rating was 8.8; the scores ranged between 4 and 10 for Fellows and assessors. This question was posed to determine Fellows and assessors' perception

about the factors influencing teaching in general. Pre-training, most Fellows (56%) felt the lecturer should be knowledgeable to share information, as one fellow said, "*The lecturer is the source and integrator of knowledge. The lecturer customises the knowledge to our situation and thus stimulates student interest in what is being taught"* (S17). Post-training, 59% of Fellows and 32% of assessors favoured clarification of issues as the most important factor for the lecturer*. "Created a platform to share my experiences and knowledge with others and also to learn best practices from others. The lecturers were facilitating a session and persuading us for full participation"* (S25). The assessor, S4A1, who scored the importance of the lecturer the lowest, i.e. four out of ten, suggested "*More practical application of the learning areas in the field to assist one to develop skills".*

When asked about the ***Importance of facility/venue for teaching and why,*** Fellows' average pre-training score was 8.8, post-training 9.4 and assessors scored the importance 8.6. on the scale of 1 to 10. All the Fellows (100%) agreed that the facility was important for teaching, and a comfortable and conducive environment to facilitate learning and interaction was favoured. *"The environment shapes behaviour and stimulates positivity/negativity. Once I entered into the university gate I just saw the busyness and eagerness to learn from other students on campus and I realised how ignorant we can be at our own workplaces and think we know everything whilst it's untrue. So, the environment encourages you to participate and learn better"* (S3). Assessors (65%) felt the facility was important since it needs to be conducive for learning and networking. One assessor quoted, "*As the house is for living so is the facility for learning"* (S17A1), and another agreed, "*If the venue does not have all the necessary equipment to make training easy, it is not nice for the lecturer or the students. The temperature must be not too cold or too hot, and it must be in a "safe" environment"* (S22A1). A different view about the importance of the facility was recognised by 31% of assessors, which stated that learning could happen anywhere and should ideally be closer to the workplace. The view of the assessors about the lectures and facility was important to establish an independent view about this aspect.

Assessments

Assessments are an important aspect of the ASELPH Fellowship training, as they are necessary for the evaluation of skills, knowledge or programmes as well as to determine whether the objectives were met. Other than this specific assessment done by the researcher, assessments were done during the ASELPH Fellowship as part of the monitoring and evaluation process of ASELPH.

When asked about their opinions about assessments of themselves, the programme and throughout the course, 93% of Fellows and 87% of assessors felt that assessments were important to monitor the development of the Fellows, how the knowledge and skills were applied post-training and to be used as a tool to determine whether the training was effective. One fellow professed, "*Learning without feedback will be useless. One must test the understanding of the theory, but implementation of the theory is rather critical as this is a practical course"* (S21). As stated by an assessor, *"ASELPH needs to be convinced that the fellow is able to use learnt skills thus assessment is important"* (S14A2), and another agreed, *"ASELPH can make time to follow the fellow in the workplace to see if they are implementing what they have acquired during the training"* (S17A3).

In response to the question about the ***Challenges with assessments of the skills and knowledge throughout the course or even in the workplace after the module,*** 59% of Fellows and 63% of assessors did not foresee any challenges. They felt the assessments would be good to follow-up if the training made a real difference to Fellows, if any changes were implemented at the workplace and if the training actually was effective. The 33% of Fellows and 37% of assessors that did foresee challenges, mentioned factors such as time constraints, no commitment, timing of assessments and workload, as well as supervisor involvement from commencement of training. Fellows and assessors felt senior management and supervisors should attend certain aspects of the ASELPH Fellowship training to have a better idea of the objectives; this would assist the assessor in doing a fair assessment of Fellows.

In response to the question about ***Assessment methods to assess whether the ASELPH Fellowship had improved the Fellows' effectiveness in the workplace***, 96% of Fellows and 81% of assessors suggested the following methods: progress charts, self-assessments, 360-degree assessments, assessment on the duties within the organisation, work case-based problems, PMDS, discussions with supervisors and mentors, work projects, observation and individual interviews, suggestion boxes, submission of portfolio of evidence of implementing learned modules, annual reports of provinces to assess pre-and post-training results and submission of research articles. One assessor suggested, *"It is important to use the Fellow's direct supervisor as a mentor and assessor, perhaps these supervisors must be subjected to one-week orientation and induction programme so that they have a full understanding of the programme and programme outcomes. By so doing, they will be in a position to provide an enabling environment that allows translation of academic learning into the workplace*" (S15A2).

Fellows and assessors were asked to specify ***The five main competencies that should be assessed in the workplace.*** Most of the responses were expressed in words/phrases (included below) and then categorised by the researcher according to the 14 ASELPH competencies:

- Financial Management (48%): budgeting.
- People Management and Empowering Environment (48%): staff development, accountability.
- Strategic Leadership (44%): leadership, transformation, decision-making.
- Self-Management (37%): good interpersonal relationship, innovation, emotional intelligence, self-awareness.
- Problem Solving and Analysis (33%): negotiation, conflict management.
- Communication (30%): interaction with the stakeholders internally and externally.

Assessors independently cited similar competencies expressed in similar words/phrases as well: People Management and Empowering Environment (49%); Strategic Leadership (44%); Financial Management (38%); Self-Management (37%);

Problem Solving and Analysis (37%); Communication (41%). Assessors also recognised Programme and Project Management (26%) as important.

Mentoring programmes

When asked about the ***Actual value of mentoring programmes***, 85% of Fellows, pre- and post-training, acknowledged the crucial role of mentoring in leadership and gave the following important roles of mentors: motivator, guide, transferring knowledge and skills in the actual workplace, sharing of experience, providing support, giving the mentee different perspectives of the same problem, coaching and improving confidence. One Fellow stated, *"Mentoring is ideal for the course because it gives us the opportunity to engage with someone at another level. The mentor is able to assist in areas that need improvement, thus completing me as a leader who can manage the complex environment"* (S7). Only two Fellows did not see the value of mentoring, while two were never mentored and did not want to give an opinion.

The assessors' responses showed that 88% found mentoring very valuable and supported the Fellows' reasons. "*Mentoring programmes are important for practical experience and learning. Through mentoring, a fellow acquires on-the-job training and is guided and directed through work processes, systems and procedures every day. The fellow is mentored to learn how problems are solved"* (S7A1). Six assessors (9%) gave practical suggestions to the mentoring debate, such as supervisors should be involved, the process should be time-effective and mentors should get training first before they become mentors. Only one assessor did not see the value of mentoring but did not give a reason.

CHAPTER 5 DISCUSSION OF FINDINGS

The findings of how the competencies of Fellows changed before and after the ASELPH Fellowship training, the factors that influenced the effectiveness of the Fellowship as well as the Fellows' perception about the ASELPH Fellowship training, are discussed in this chapter.

5.1 Introduction

The question that this mixed method research study tried to answer was *"Does the part-time ASELPH Fellowship training based on competencies, using case studies as a core methodology, successfully enhance the leadership performance of health managers in South Africa?"* The main objectives and questions of this study were (1) *Did the competencies and performance of the Fellows change after the ASELPH Fellowship training? (2) What factors influenced the effectiveness of the ASELPH Fellowship training? (3) What were the perceptions of the Fellows and assessors about the ASELPH Fellowship training?* Based on these objectives and questions, it was hypothesised that the ASELPH Fellowship would improve Fellows' leadership competencies. Few studies have done thorough assessments of leadership training[17-20] and the King's Fund (UK) report[21] on healthcare leadership stated: *"there is very little evidence for the effectiveness of leadership development programmes and evidence-based approaches are needed to ensure a return of huge investments made*".[21] The main aim of this study therefore was to assess the effectiveness of the ASELPH Fellowship in enhancing leadership competencies of public health service managers in South Africa.

Data were obtained from a 360°assessment that was completed pre- and post-training by Fellows (n=27) and post-training by their assessors (n=83), who also did a retrospective review of the Fellows' change. The qualitative data was collected from the reflective questions in the survey, as well as the module assessments and the reflective essays of the Fellows. Thematic analysis was used for the analysis of the

qualitative data. A discussion of the research findings is presented in the section that follows.

5.2 The demographics of the Fellows

Seventy percent of Fellows were females and 81% were older than 40 years of age. All the Fellows had a Bachelor's degree or higher. Research has shown that qualification is important to determine the type of job you can manage[17,19-20,57,150] and qualifications can also be linked to cognitive ability, which has been shown to be a positive factor for leadership training and development.[170] All Fellows were at managerial level with a little more than half (59%) confirming they had previously received management training. Literature showed the importance of management and leadership training and development to improve individual knowledge and skills,[156-157] organisational performance and change, which supports succession planning and ensures accountability and alignment.[31,158-159] Healthcare professionals often are expected to undertake leadership roles when they start their careers, but most receive almost no leadership training other than through their work experience.[160] Hsiang[161], in their study, quoted a study that proved two-thirds of medical students at 18 medical schools perceived leadership skills as important in their career and wanted to attend formal leadership training courses in the future.[161-162] The purpose of the SELPH Fellowship training was to equip public sector managers with leadership skills.

5.3 Changes in the performance competence of Fellows before and after the ASELPH Fellowship and factors affecting this performance

The first objective of the study was to determine whether the performance competence of Fellows changed before and after the ASELPH Fellowship, from the perspectives of the Fellows and the assessors.

The first step was the validation of the sample adequacy and the reliability of the questionnaires and data. The KMO was used to assess the sample adequacy. For Fellows the results showed an average of 0.82 for pre-training, which is meritorious and post-training was 0.77, which is middling. The internal consistency measured by the

Cronbach Alpha showed a pre-training consistency of 0.94, and post-training average of 0.88, indicating it as excellent and good respectively. The results for the assessors showed a KMO of 0.81, which is meritorious and a Cronbach Alpha of 0.92 indicating excellent. The sample for this study was proven to be adequate and the questionnaires and the data reliable for both Fellows and assessors.

Subsequent to the validation of the reliability of the data and sample adequacy, the next step was to provide evidence of the quality of the intervention as well as the consistency of the Fellows' self-assessments. The findings from the module assessments, completed by Fellows, confirmed that the ASELPH Fellowship was of good quality. This was proven by the fact the majority of Fellows asserted the objectives of the modules were met, the modules were well-organised and their knowledge and competencies were enhanced after the ASELPH Fellowship. Most Fellows also committed to sharing and implementing the learnings from the ASELPH Fellowship at their workplaces. This is in line with the literature that has shown the importance of a thorough needs assessment and setting clear objectives for leadership training programmes. Setting clear objectives form part of a successful programme design that will contribute to developing the employee, improving the team and contributing to an effective and learning organisation.[35,188] The ASELPH Fellowship performed a needs assessment and these results directed the objectives of the programme and the modules.

The consistency of the Fellows' self-assessment was comparable to those of the assessors who confidentially assessed the same competencies post-training through a 360º assessment.[36,196] The 360° assessment method was specifically used since this tool has proved to be one of the best to assess the effectiveness of the leader, organisation's performance and engagement, and employee overall satisfaction. This process involves the assessment of the participant by people who work with them to give a more complete picture of their performance, compared to self-perception.[21,36,196] The study found no significant difference between the scores of Fellows and assessors. No significant difference ($p=0.358$) in the scores amongst the assessors was proved. This is an indication that Fellows' self-assessments were consistent.

The study proved that the post-training scores differed significantly from the pre-training scores for 11 of 14 competencies and 44 of 56 performance indicators. A few Fellows and assessors commented on ongoing challenges, areas of further improvement of Fellows as well as limited changes seen post-training. Despite these, the study verified the improvement of Fellows' competencies and performance, as confirmed by their assessors through the 360° assessment. This is in line with studies that have shown that leadership training and development was a combined process of individuals and organisations to produce and advance leaders to achieve the organisation's goals.[30] and it increases the organisations capacity.[31] This was the purpose of the ASELPH Fellowship training, to enhance the SA public health sector managers' competencies, performance and leadership capacity.

Although the Fellows' performance improved, they identified factors that were constraining them from performing even better, but also detailed how the ASELPH Fellowship had equipped them to successfully respond to these inhibitors. Fellows and assessors confirmed lack of leadership skills and knowledge, human and financial resource shortage and political pressure, poor governance and policy implementation, as the biggest challenges that leaders in healthcare in SA face today. These inhibiting factors were proven to have an influence on the effectiveness of the ASELPH Fellowship, but despite these factors, Fellows still showed performance improvement. This relates to the second objective of the factors influencing the effectiveness of the ASELPH Fellowship in relation to the health system, the workplace and the individual.

Following is a discussion of the performance change for each of the 14 competencies and the performance indicators. This section also explores from various perspectives the factors that could have influenced the effectiveness of the ASELPH Fellowship training in changing performance.

Performance in People Management and Empowering Environment

The competency *People Management and Empowering Environment* showed significant change (p=0.000) as did all its performance indicators. This competency is

about team morale, absenteeism, job performance (PMDS) and diversity. Fellows and assessors mentioned a few factors that contribute to low morale in general, including being overburdened and overworked, resource constraints and diversity issues. The healthcare quadruple burden of disease remains a challenge mentioned by the Fellows. Coovadia[64] stated that SA has gone through many changes since democracy in 1994, and with this came the challenges of redressing health inequities. Notwithstanding a healthcare expenditure of 8.5% of the gross domestic product (GDP),[12] which is higher than the 5% of GDP recommended by the World Health Organization (WHO),[44] the SA public sector remains under pressure. The SA health system constitutes the public sector together with a smaller parallel private sector.

To overcome the healthcare dilemma in SA, the NHI Scheme was announced as part of the transformation to secure universal access to healthcare for all South Africans. The NHI will ensure all SA citizens have access to good-quality health services in both the public and private sectors, regardless of socioeconomic status, thereby eliminating financial barriers to healthcare access.[68,95,97-98] Despite the concerns still remaining around the successful implementation of the NHI, many positives can result from this system, including potential for more funding into the public sector through taxes from the private medical schemes, better use of money resulting in better performance due to service standards that need to be met, redressing of the inequality in healthcare and reducing the burden of disease, improvement of the quality of healthcare due to more motivated staffing in an underfunded public sector, and better governance including decentralisation that will potentially get rid of corruption.[99] These are the potential areas that the NHI will provide for, and although a lot of detail is not yet finalised, what is clear, is that there will be new demands and expectations on leaders and managers.

Fellows and assessors in this study confirmed the challenge of an overburdened public healthcare system with the same or even less capacity than before due to budget constraints. They link the burden of disease directly to human and financial resource shortages. Despite a high human resources expenditure in South African healthcare, shortages result in lower capacity to meet the increasing healthcare demand in SA

especially at a doctor-patient ratio of 0.8 per 1,000 people (2016).[78] Community Health Workers (CHWs), i.e. ward-based outreach teams (WBOTs), have been introduced as part of increasing capacity. WBOT programmes have been proven successful in countries such as Brazil, to increase healthcare access and improve health outcomes[79] and hence its adoption in the South African healthcare system. Staff shortages contribute to overworked staff, low morale and eventually further absenteeism. Accountability and capacity were common themes of this study, mentioned by Fellows and assessors. Literature has stressed the positive impact of a healthy workplace on individuals.[80-81] A study by George and Gow[82], comparing public, private and non-governmental organisations (NGOs) in SA, highlighted the importance of good working conditions as well as non-financial incentives for staff to feel valued and be retained.[80-82] Fellows found dealing with employees with low morale, due to conditions out of their control, the most challenging.

As part of managing staff in SA with its “rainbow nation,” leaders need to embrace diversity. Fellows asserted that while they had embraced diversity in their teams freely, they became much more aware of this philosophy through the group-work during the ASELPH Fellowship training. The Social Change Model of Leadership Development[163-164] emphasises the interdependence of the individual, group and community values that bring about change. Civilian diversity is one of the values since this plays an important role in change.[163-164] Diversity was a topic that was covered by the ASELPH Fellowship training.

Despite these challenges of the burden of disease with staff shortages and diversity that may affect other competencies as well, Fellows confirmed improvements after the ASELPH Fellowship training in the ***People Management and Empowering Environment*** competency. This is an indication of how the ASELPH Fellowship training made the Fellows more confident in dealing with staff matters especially around low morale, absenteeism, performance management and diversity. The development of this competency is of utmost importance, since people are the most important resource in the health sector and remain a major challenge for leaders to manage. As

Aalateeg[25] said, people are no longer seen as only being available to provide goods and services, but as playing a critical role in providing quality care.[25] Fellows felt confident that they have the necessary skills after the ASELPH Fellowship training to be more solution-orientated to address this enormous challenge that floods the SA healthcare system.

Performance in Self-management

A significant change was shown for ***Self-management*** (p=0.000) and all its performance indicators, which included self and team-awareness, time management and own leadership philosophy. Fellows confirmed that the ASELPH Fellowship training improved how they dealt with their own and their team's emotions. Self-management is an important competency to develop since leaders that understand their own and their team's strengths and weaknesses are better and happier leaders and have happier teams. Goleman[58] emphasised that focused leaders affect their work environment positively.[58] Emotional Intelligence (EQ) has also been proven to be a very important competency for leaders to stay motivated and to have better relationships with others.[36] Research has shown that leaders with high EQ are happier and more optimistic and this influences the team positively.[58] EQ consists of many of the core competencies that curricula wish to teach their health professionals,[148] indicating the importance of EQ in effective leaders. The ASELPH Fellowship teaches EQ as part of the Leadership module. Fellows have proven these benefits through the significant change in the performance indicators of self and team-awareness, as well as the self-management competency overall.

This self-management competency has a direct link to the competency of People management, since the Fellow has to first be able to manage themselves before they can deal with the team. The Medical Leadership Competency Framework (MLCF's) dimensions[54,167] gives an explanation of these different dimensions starting with personal qualities and then moving to the next level of working with others. Further levels that follow these, include managing services, improving services and setting

direction as the last level.[54,167] This is an indication of how important self-management is as the basis for all other functions or dimensions of a leader.

As part of looking at the strengths of the Fellows, the SDI (Strength Deployment Inventory) model[195] was used in the ASELPH Fellowship training. This tool gave the Fellows a good idea of why they behave in a certain manner when things go well and in conflict situations. Most Fellows found this extremely valuable since they realised they need to be aware of the diversity of their teams in their workplace. Instruments like these, as part of a leadership training programme such as the ASELPH Fellowship training, create a long-lasting awareness and possibly changed attitudes.

Fellows particularly improved on their *time management* skills, as was confirmed in their reflective responses. This was an area most of the Fellows had struggled with, and some linked it to resource shortages. The significance of their improved performance in time management is supported by literature, which illustrates that many leaders have challenges with meeting deadlines and managing their time effectively.[150] This is an essential skill to master since it affects many aspects of being an effective leader such as punctuality, meeting deadlines and keeping time for appointments. Poor time management gives an impression of unprofessionalism of leaders and since they need to set the example, poor time management will affect the team and service delivery negatively. This improved competency of *Self-management* with performance indicators, positively affects the Fellows in their workplace.

Performance in Honesty and integrity

Competence in ***Honesty and integrity*** showed an overall significant change (p=0.000) and significant changes in all four performance indicators. This competency assessed respect, ethical standards, reliability and accountability. Even though 64% Fellows scored themselves above-average pre-training, this competency improved to 88% post-training, giving the significant result. This is an encouraging result, because despite the fact healthcare professionals are expected to have this competency of *honesty and integrity* pre-training and post-training, the ASELPH Fellowship still

improved this competency. Yukl[208] emphasised this competency as an important aspect of ethical leaders, a leadership style that has been supported more in these challenging unethical healthcare environments. These leaders act with honesty and integrity, fairness, trust and generalised ethical behaviour. Ethical leaders do the right thing and act ethically in all aspects of their lives.[122] The ASELPH Fellowship accentuates Ethical Leadership in the training.

This *honesty and integrity* competency is closely related to medico-legal claims and corruption that have become a real financial burden for the SA healthcare system and may even bankrupt the department. Claims amounted to R56.1billion (if all were successful) at the end of 2016/17, amounting to one-third of the consolidated health budget for 2016/17.[86] Corruption in SA, especially the health sector, has proved to amplify poverty, increase income inequalities, and diminish resources resulting in reduced healthcare access and increased costs.[87] Rispel et al.[90] in their study on corruption, concluded there should be political will to rid healthcare services from corruption, with better law enforcement and involvement from the public to hold corruptive individuals accountable. The article emphasised the importance of ethical, competent public servants in the healthcare system.[90] The Health Professions Council of South Africa (HPCSA) is a statutory body responsible for regulating ethical behaviour amongst healthcare professionals.[71] Unfortunately, with the increase in medico-legal claims, which is directly linked to unethical behaviour, it has become a matter of urgency for this competency of *honesty and integrity* to be reinforced. Fellows and assessors showed that Fellows are doing well in this area and they should set an example at leadership level to create an ethical culture in the SA health system once again.

The performance indicator that was a challenge for Fellows was *Hold others (subordinates and managers) accountable for their work* (p=0.011). This performance indicator improved from 52% above-average pre-training to 82% post-training Fellows mentioned reasons for the non-accountability such as not being assertive, not committed to addressing issues with the team, doing team's work to avoid delays, not

getting senior management support and no authority to hire and fire. The challenge of hire and fire, boils down to decentralisation of functions.[91] A challenge that is closely related to this performance indicator is political pressure. Some Fellows found the political pressure to be real, and sometimes an unmanageable and intimidating situation. This flows down to all levels in the healthcare system and unfortunately sometimes has been linked to corruption, since this goes with irregular demands such as nepotism and unethical procurement processes.[90] Some Fellows confirmed in this study that political interference in staff recruitment and selection (nepotism), has been a real challenge in their workplaces and has resulted in non-accountably and hence poor performance without consequences. This is in line with studies that proved that nepotism is a toxic situation that results in non-performance and poor productivity.[89] Although some Fellows felt more confident after the ASELPH Fellowship training, i.e. through the meta-leadership tool (leading upwards) to deal with this pressure, the fear of losing their jobs was still mentioned as a reality for them. Fellows are therefore sometimes stuck with non-performing staff members that affect service delivery, but confirmed in their reflections that they were more confident in holding their team accountable. This performance indicator, as part of the *Honesty and Integrity c*ompetency, showed a significant change, indicating how the Fellows' performance improved post-training.

The main issue with this non-accountability is that it creates a culture where staff know there are no consequences for under-performance. The vision and objectives set for proper healthcare delivery can therefore not be met, resulting in frustration for the rest of the team as well as the clients. Firstly, this boils down to the leader not being equipped with the necessary skills to deal with these complex issues. This once again involves EQ leaders who are comfortable managing themselves and others.[140] Drath et al.[140] came up with an alternative approach to overcome this accountability challenge. They specifically criticised the tripod by Bennis that consisted of three interdependent legs namely the leader, follower and the common goal. The researchers felt the tripod was limited as it depends on a leader-follower interaction. They introduced the DAC (Direction, Alignment and Commitment) framework where personal

responsibility and commitment form part of the commitment leg. The model supports an integrative approach of distributed or shared leadership where the whole team is responsible and accountable to achieve a common goal.[140] Benefits of these shared or distributed leadership approaches include synergy, expertise, diverse decision-making, collaboration, motivated towards achievement and less stress due to shared responsibility.[71,128-130,135] The ASELPH Fellowship training covers these specific aspects in most of the modules, but to emphasise a few concepts, i.e. *Meta-leadership* (comfortable to holding staff and seniors accountable), *Negotiation skills* (that improve the confidence of the Fellows to deal with difficult situations such as accountability challenges) and S*trategic Leadership* (emphasising common vision for the whole team to work together). Despite this challenge of non-accountability, the Fellows improved in this performance indicator after the ASELPH Fellowship training.

The ***honesty and integrity*** competency for the Fellows was of vital importance to ensure a culture at their workplace of high ethical standards that will result in an overall ethical healthcare environment. This competency is also a vital thread that needs to flow through all of the other competencies, since a manager who does not possess honesty and integrity, will not be able to perform successfully.

Performance in Client Orientation and Customer focus

Client Orientation and Customer focus showed no significant change (p= 0.449). This competency encompasses customer complaints and feedback for service improvement. Fellows scored themselves 60% above-average pre-training and increased by only 2% to 62% post-training. A clarification for all non-significant results in this study, could be that the Fellows were ignorant before the training and therefore overestimated their competence. This is an indication that sometimes students may not have insight into the gaps of their knowledge pre-training and then over-score themselves. The effectiveness of the training is proved through this concept since the Fellows' insight into their weaknesses improved post-training and then accurate scoring was given. Although the post-training score is average, the pre-training score, should probably have been lower, which would then have resulted in a significant result.

This competency, with its performance indicators, is encompassed by the Batho-Pele Principles and the Patients' Rights Charter. These are important policies to improve public service delivery and access, as well as accountability of public health workers to deliver a high standard of healthcare service.[72] The performance indicator, *Suggestion boxes for clients to assess service daily* showed no significant change (p=0.414), with Fellows scoring themselves 63% above-average pre-training, which dropped to 59% post-training. This clearly is an indication of where Fellows over-scored themselves and obtained improved insight from the ASELPH Fellowship training to score themselves correctly. The Fellows confirmed that suggestion boxes are an area that need to be improved and confirm the lack of involving client suggestions for service improvement. This competency fits in well with the community engagement approach since communities who feel part of the planning, tend to feel heard, complain less and collaborate better.[94] The importance of client and community involvement were covered in many of the ASELPH modules, but the module that specifically addressed this competency was *Implementation of quality improvement modalities (strategies) in health system.*

Performance in Communication

The *Communication* competency showed significant overall change (p=0.008) This competency covered areas on communicating information to all internal and external stakeholders including clients and the team through meetings and media. Communication forms an important competency of all leadership theories and styles[152] and literature shows how effective leaders communicate openly and honestly.[80-81] Wong and Laschinger[209] proved the positive relationship between leaders with excellent communication skills and patient and staff outcomes. Paquet et al.[210] further proved the role of communication as part of transformational and resonant leadership in reducing patient mortality, patient falls and drug errors. Research therefore has proven that this is quite an essential competency for a leader to possess.

Three of the performance indicators all showed significant change, except for *Use the media and all forums to communicate health issues to the public* (p=0.317). Fellows

and assessors confirmed that the use of media is not always a function of theirs as the department has a media policy and a spokesperson to handle the media. It is for this reason that Fellows scored themselves 37% above-average pre-training and 48% post-training. This is a function they have no control over but despite this, a slight improvement happened after the ASELPH Fellowship training. This is an indication that the Fellows realised the role they still could play in this performance indicator.

Fellows and assessors both confirmed that the ASELPH Fellowship improved the *Communication* competency in Fellows. The sharing from the ASELPH teachings with the team, as was confirmed in the qualitative sections, was an indication of how comfortable the Fellows became in reporting back to the team. The communication competency was emphasised in all modules through the group work, presentations, the assessments and then the feedback at the workplace.

Performance in Resource Management and Allocation

The ***Resource Management and Allocation*** competency showed an overall significant change (p=0.018) and in all four performance indicators. This competency included resource allocation, including personnel, drugs or materials. Fellows mentioned various factors that challenged this competency, such as certain staff recruitment and selection processes being a central function, budget constraints, procurement processes together with monitoring of supplies, absence of feedback systems and non-payment of suppliers by DoH. Policies and the bureaucracy in the National Department of Health were mentioned by some Fellows as a restriction to effective service delivery. Procurement together with tender processes have been a frustration and a major concern for corruption.[90] Many of these functions unfortunately are still central and decentralisation has been recommended for more effective service delivery. The major advantage of decentralisation is that employees feel more empowered due to rapid decision-making and this results in improved efficiency and quality.[91] The disadvantages of decentralisation are many to consider, since it may result in increased expenditure because of duplication of functions and equipment, and local variation compared to standardisation that may affect quality. Some of the

functions that were recommended for decentralisation were certain human resource recruitment and selection and budgetary functions.

Fellows confirmed that they felt more confident to deal with the resource management challenge after the ASELPH Fellowship training. They realised that although many are central functions, the improvement of their other ASELPH competencies as mentioned, could be used to find a solution for this challenge, which they recognised. Their self-management skills together with their people management skills would enable them to lead upwards, downwards and lateral to motivate for resources; their financial management skills would assist them to manage their resources effectively on a limited budget. This competency of *Resource Management and Allocation* is extremely important for Fellows since resources including people form the backbone of the healthcare system.

Performance in Financial Management

The competency of Financial Management showed no significant overall change. (p=0.118) with significant change in one of the performance indicators, *Draw up financial reports and communicate to all the relevant stakeholders* (p=0.034). This competency encompassed budgeting, costing, procurement processes and financial reports and was covered in the *Strategic Financial Management in Health module. Manage fair tender procurement processes* (p= 0.248) also showed no significant change. The non-significant changes can be explained by the fact that Fellows felt they were not responsible and had no control over some of the financial functions. Financial management is a highly centralised function in health departments in SA and it has been recommended that some functions need to be decentralised for better service delivery.[91] Fellows mentioned this centralised function as a challenge due to the frustrations of delays in payment and consequential delayed delivery of materials and medicine.

Financial management skills have been shown to be an essential competency for leaders to be successful.[47] This is a competency where the ASELPH Fellowship

training did not make a statistically significant change, but despite this, improvement has still been shown in the Fellows' reflections. The training made Fellows realise that even though financial management is not always their direct function, and will mainly remain centralised for some time, as healthcare leaders they should have an idea of how their budgets are allocated, the cost of services and how to manage these expenditures to manage resources appropriately. Fellows confirmed they are making a difference in their workplaces since they are more confident in dealing with finances.

Performance in Problem Solving and Analysis

The *Problem Solving and Analysis* competency (p=0.002) and three of the performance indicators showed significant changes. The performance indicator, *Report on these problems and solutions for this (form part of knowledge sharing and management)* (p= 0.052), marginally showed no significant change. This competency covered critical areas such as identifying problems in the team and community, finding solutions, problem-solving policy in place and reporting on these problems as part of sharing best practices. Research has shown that leaders need this competency to optimally deal with difficulties on all levels. Problem-solving is closely related to analytical or critical thinking skills and leaders must have these skills to collaborate and build partnerships.[36,211-212] Although problem-solving has been seen as a managerial skill, leaders need some managerial competencies to perform optimally at all levels.[25] This competency was specifically trained through the case studies that were used during the ASELPH Fellowship training and Fellows had to find solutions in the group. The open discussions in the class also encouraged critical thinking and thinking on their feet. Case-based method has proved to increase student interest through the interactive approach and improvement of their analytical skills.[171-172]

Fellows found the *Decision Tree* tool extremely valuable to solve problems and many confirmed that they implemented this at their workplaces. Two other tools, "*Walk in the woods"* and "*Meta-leadership*", which formed part of the Leadership module, were also aspects that Fellows found very valuable in improving their problem solving skills. These tools assisted the Fellows in dealing with problems systematically and equipped

them with skills and confidence to manage their seniors as well. The ability to manage "up" (top management) is such an important skill to have, since Fellows mentioned political interference in SA as a real challenge for them. Being able to manage this challenge, would result in less interference and frustration and allow Fellows to manage and lead their facilities and team in a manner they perceive as being efficient and effective to improve service delivery. The perception of political interference together with limited senior management support, relates to the fact that some leaders could be appointed to levels and positions unsuitable to them. Maxwell[56] stressed that each leader who wants to lead others, needs to start at the bottom with another person, and has to work their way up through the ranks[56]. The challenge in SA healthcare is that appointment of people is sometimes done irregularly.[90] These unsuitable appointments also result in resistance from followers, no accountability and resultant poor performance due to some leaders who are not ready to lead in a higher position than them. Leaders therefore should be equipped with the necessary skills and competencies, through training and development, to lead at a senior level.[56]

When this competency of problem solving and analysis is not properly developed, it affects almost all the competencies, including:

- *People management*: leaders not able to hold staff accountable leading to low morale and absenteeism in the team.
- *Self-management*: affects the leader due to unresolved matters and then spills over to the team.
- *Change management*: if leaders cannot resolve current problems in the organisation, then stakeholders are not open for change.
- *Client Orientation and Customer Focus:* clients will feel discouraged that their problems are not heard.
- *Service delivery*: all these unresolved matters will affect the delivery of quality healthcare to the clients.

Fellows, together with their assessors, confirmed a noticeable improvement in dealing more confidently with complex problems after the ASELPH training, showing an improvement in this competency of *Problem Solving and Analysis.*

Performance in Programme and Project Management

Programme and Project Management competency showed a significant change (p=0.006) together with all four performance indicators. The performance indicators involved community programmes identification, development, monitoring and evaluation (M&E) and reporting. The realisation of Fellows after the training was that it does not matter how many projects they are involved with, monitoring and evaluation of projects are of utmost importance for it to be of value to any stakeholder. Fellows mentioned that they became involved after the training in the development of M&E tools in their workplaces. The challenges of programme and project management include resource shortages, infrastructure including technology for proper M&E and motivated staff. This once again boils down to effective leadership. In SA, with resource shortages, many times the cost vs benefits of projects are not always weighed up and these may result in irregular expenditures.[90]

Fellows disclosed the projects they became involved with after the training, which also formed part of their ASELPH assignments and their overall ASELPH research. This is an indication of the development of these skills after the ASELPH Fellowship training. The assignments and research were aspects of the ASELPH Fellowship training that made them more comfortable in report writing and hence reporting on their projects and programmes, as was confirmed by Fellows. The M&E module gave them the confidence to critically look at the successes and failures of the projects that they were involved with already, and make the necessary improvements, and made them confident in undertaking new projects. The DHIS[85] should also play an important role in the M&E process.

The competency of ***Programme and Project Management*** showed significant change and the Fellows (and assessors) confirmed their improvements. Fellows started looking

at project and programme management in a different light and made the necessary changes after the ASELPH Fellowship, especially M&E of these projects. This competency is linked to Community/ Partnership Collaboration and Knowledge Management competencies.

Performance in Community/Partnership Collaboration

Community/Partnership Collaboration competency showed no significant change (p=0.156) and no significant changes in all four performance indicators. Despite the non-significant results, the ASELPH Fellowship training made Fellows realised the real meaning of community involvement. Fellows acknowledged they mainly lead the community efforts, which is the provider-approach and not the patient-centred approach. Community collaboration has been shown to be crucial in healthcare service delivery and communities need to form part of strategic planning.[94] The challenge of overburdened healthcare facilities and resultant medico-legal claims in SA, may be reduced, since research has shown how the involvement of communities in healthcare delivery, results in better health outcomes.[92,94] Communities in SA will have a better idea of the challenges that facilities and staff face and vice versa and may result in a more harmonious working environment and relationships.

This competency *Community/Partnership Collaboration* was also strengthened through the interaction in class in the group, meta-leadership (for leading down and sideways) and problem-solving skills as well. Even though this competency did not show significant change, the Fellows vowed to involve the community more and especially in the strategic planning process, which is a step in the right direction for improved service delivery.

Performance in Knowledge Management

The *Knowledge Management* competency (p=0.001), with all four performance indicators, showed significant change. This competency included performance indicators on knowledge sharing, IT infrastructure, policies and research. The major challenge mentioned by Fellows remains the IT infrastructure that is old and in some

facilities not up and running. IT illiterate or shortage of IT personnel and lack of interfaces of various systems, are challenging as well. The purpose of the District Health Information System (DHIS) is for information and knowledge management.[85] The DHIS forms part of the Ideal Clinic framework that was introduced to assess facilities' infrastructure, staff and various processes[84] An effective DHIS is important for quality service delivery since it is important to monitor and evaluate systems that will indicate where improvements are needed in the healthcare system. The DHIS is operated at a central level and Fellows shared their frustration of not instantaneously having information at hand for effective decision-making.

Research also formed part of this competency. Although research is a national department priority, Fellows agreed that the ASELPH course changed their mind-set about researching their work areas. Some of their ASELPH research projects formed the basis of future research. This is encouraging since even the World Health Assembly in 2013 commanded the World Health Organization (WHO) to launch a Global Observatory on Health Research and Development (R&D) for innovation, capacity building, and access and resources improvement.[214] This endorsement was especially for disease acknowledgement in poor countries. The World Health Report 2013 presented the benefits of research and the report stated *"adding impetus to do more research is a growing body of evidence on the returns on investments … there is mounting quantitative proof of the benefits of research to health, society and the economy"*[214]

Knowledge transfer is an important aspect of this competency. Assessors confirmed that Fellows shared their ASELPH experiences and tools with the team at the workplace. Transfer of training knowledge and skills has been shown by research to be one of the main aspects in the effectiveness of leadership training.[215] Leaders attend training but do not necessarily take it back to the workplace. Transfer of training should happen before, during and after training and needs to be monitored continuously in the workplace to be effective.[170] Participants' motivation and a non-conducive environment have been seen as vital factors why participants do not share their training

knowledge.[21,208,215] Sharing knowledge from the training, encourages accountability on the Fellow's side as well as possible implementation of new ideas in the workplace. This knowledge sharing is linked to the competencies of *Change management (as part of innovation and implementation of new ideas)* and *Service Delivery Innovation.*

The knowledge management competency is quite important in the SA health system, especially in the light of the NHI. Fellows need to be strong on this competency to ensure effective and improved systems to provide information that will guide effective decision-making. Information is also necessary for monitoring and evaluation purposes to establish what systems and projects work well and which need improvements. The high IT system expense is a concern, but this is an expense that in the long run will lead to savings due to the monitoring of all systems including resource wastage. This competency was specifically reinforced through the e-Learning platform, the ClickUP system that made the Fellows more IT literate and confident as well as the research project that Fellows had to submit. Their reflective essays, that included continuous journaling, also made them aware of the importance of recording information and knowledge, for sharing purposes as well as for tracking successes and failures in their workplace.

Performance in Strategic Leadership

The *Strategic Leadership* competency (p=0.002) showed a significant change with no significant change in one of the performance indicators, *Awards and rewards system in place for people's performance* (p= 0.109). This competency included setting an example as leaders, vision sharing, people empowerment and awarding and rewarding good performance. It encompasses all the other ASELPH competencies mentioned already. When one keeps the MLCF[54,167] in mind, this competency refers to the last domain of the framework, setting direction. This domain speaks to the leader setting objectives for the future through implementing strategies. If you relate the MLCF framework to the ASELPH competencies, the framework starts at personal qualities, which relates to the ASELPH competencies of S*elf-management, Honesty and Integrity and Communication* which form the basis of management and leadership. The next

domain is working with others, which involves the ASELPH competencies of *People Management and Empowering Environment* and *Community/Partnership Collaboration.* Domain three is about managing services, which refers to the ASELPH competencies of *Client Orientation and Customer focus, Resource Management and Allocation* and *Financial Management*. Improving services is domain 4 and the ASELPH competencies that relate to this are *Problem-solving and analysis, Programme and Project Management, Knowledge Management and Change Management. Strategic Leadership* is linked to domain 5.

This Strategic Leadership competency is an area where Fellows showed remarkable improvement, from 44% above-average pre-training to 81% post-training (confirmed by 69% assessors as well). The majority of Fellows (63%) and assessors (43%) in their qualitative responses, agreed that Strategic Leadership was the area that ASELPH developed best in them. The retrospective results of assessors also confirmed Strategic Leadership to be the area that the ASELPH Fellowship developed the most. Fellows and assessors in the open-ended questions, quoted words such as *confident, decision-making, less emotional*, *problem-solvers* to describe how the ASELPH Fellowship training changed the Fellows. This is in line with studies that proved that Leadership development improves individual leadership knowledge and skills,[157] organisational performance and change and succession planning, and ensures accountability and alignment,[31,158-159] which all fit in with Strategic Leadership.

The performance indicator, *Awards and rewards system (p=0.109)* showed no significant change and remained a challenge for Fellows and assessors. Fellows confirmed this was also a central function, with many delays and frustrations. Fellows agreed that the PMDS is the only system used for rewards which is not the most effective system of assessing performance and does not serve as motivation for staff. Research has shown the positive correlation between non-financial rewards and staff retention.[82] Fellows therefore need to find other approaches than monetary rewards, to let staff feel valued in a SA challenging healthcare environment.

What is very encouraging of this *Strategic Leadership* competency, is that both Fellows and assessors agreed that the Fellows became confident and competent managers after the ASELPH Fellowship training. They confirmed that the various ASELPH Fellowship tools contributed to them becoming more capable of managing in their workplace. The thread for this competency of *Strategic Leadership* ran through the teachings of all the modules. This competency, together with the others, as addressed in this section under the MLCF framework, contribute to the last competency of *Service Delivery Innovation.*

Performance in Change Management

Change Management showed an overall significant change (p=001), as well as significant changes in all its performance indicators. This competency is about initiating and embracing change, innovation and transformation. Fellows were not positive about their ability to manage change before the training (37% above-average) and this improved to 76% above-average post-training. This shows that the ASELPH Fellows had become competent change agents in the SA healthcare system, as was confirmed by their assessors.

Some Fellows mentioned resistance to change as a real obstacle for them to implement their ASELPH learnings and they ascribed this to leadership and governance**.** A few Fellows felt that not all senior leaders at their workplaces supported their attendance of the ASELPH Fellowship, while most felt they were supported. This non-support and buy in from senior management has proven to have a negative effect on training.[35,170,188] Some Fellows confirmed resistance from certain seniors which resulted in the team not being open to the implementation of some competences developed in the ASELPH Fellowship training. This is in line with a study by Bermúdez-Tamayo,[190] who confirmed that the resistance to change may give an impression that the training was not effective due to non-implementation of learnings.[190]

Where it was recognised that leadership support was lacking, this was a frustration for these Fellows. Some Fellows even pointed out that seniors fall short of the necessary

leadership knowledge and skills. This study showed that only 75% of the Fellows' supervisors received management training meaning there are 25% of managers whose interaction with the Fellow may be influenced due to the lack of management training. Literature has proven that the right people, especially leaders, should be appointed at the right level to perform optimally. Maxwell, in his Five levels of Leadership, explains that leaders who move into a different leadership level, may sometimes not cope at that level if they do not have the necessary skills[56] and this may result in a feeling of incompetence from the particular individual. Leaders need the necessary competencies to enhance their performance in these positions, as was proved by this study.

Fortunately for ASELPH Fellows, some senior public-sector officials including the Minister of Health, the National Director General (DG), Deputy Director Generals (DDG's) and provincial Head of Departments (HODs) support ASELPH actively, even fulfilling teaching roles on the Fellowship. Fellows found it quite valuable to be able to engage with these officials on an informal academic level. Research has shown that participants have increased motivation for training when their management nominated them for the training[170] ensuring a sense of support, and the ASELPH joint selection process met this criterion. In spite of the challenge of lack of leadership support in some instances, Fellows confirmed that the ASELPH tools equipped them to deal with the resistance differently compared to how they would have handled before the ASELPH Fellowship training.

A positive outcome due to the ASELPH Fellowship training, as was confirmed by Fellows and assessors, was that a few Fellows were promoted into senior positions after the ASELPH Fellowship training. This is an indication of the performance change of these Fellows after the ASELPH training, as was confirmed by their assessors. It also meant that these Fellows could introduce and implement some of the ASELPH teachings from a more senior level, which would cause significant change in needed areas. Despite the challenge of some Fellows experiencing resistance to the

implementation of their ASELPH learning, Fellows' performance improved tremendously in this competency, as was confirmed by assessors as well.

Fellows also asserted that their narrow decision space did not allow them to implement change as freely as they wished to after the ASELPH Fellowship training. The environment, including available resources, decision space and resistance to change, are important factors that affect leadership training as well.[190] Good ideas, programmes and even research that they wished to initiate, usually have to go through a stringent process that may even end up at a dead-end due to the time lapse from application to approval. Hendricks et al.[91] recommended the decentralisation of certain functions to improve service delivery.

A specific service delivery change that some Fellows mentioned was change management measures that resulted in addressing the improvement of waiting times for patients. This is in line with a meta-analysis by Jeyaraman[142] that looked at what could be seen as Return on Investment (ROI) factors to assess whether training was effective, and improved waiting times was on the list.[142] Even small changes like these, as mentioned by some Fellows, would give an indication that Fellows took the learning to their workplaces to implement changes. This is an indication that the ASELPH Fellowship training made a difference to the fellow and in their workplace, indicating effectiveness of the competency.

Change management is a competency that threads through many of the other competencies since change is inevitable in a growing healthcare environment. In light of the NHI and all the changes,[95] the SA health system needs leaders to be change agents to sustain the vision for all South Africans. Vriesendorp et al.[59] confirmed that many healthcare performance problems, including low staff morale, are related to poor leadership. Effective leaders are crucial in improving healthcare systems, therefore they need key competencies before they take on these leadership roles.[141-142]

The themes mentioned by Fellows on several occasions as factors that suppress change in healthcare included resource shortages, poor infrastructure and poor working conditions. Poor infrastructure in SA has been acknowledged to be

problematic, with consequential poor quality of healthcare, which was planned to be sorted before the implementation of the NHI. The *Ideal Clinic* framework address all these challenges and the positive aspect of this framework is the collaboration with other government departments to ensure a holistic approach to healthcare and the community.[84] It was inspiring to hear from Fellows that some of their clinics achieved Platinum, Gold, Bronze and Silver Status (ranking of the facility according to the elements in place), meaning these Fellows are working towards change and improvement of their facilities.

Despite these SA healthcare challenges, Fellows were still positive as they confirmed that the ASELPH tools on conflict management and problem-solving contributed to them being more competent in how they dealt with the change in their workplaces; this confidence resulted in a higher score post-training and hence the significant change in their competence performance. Fellows, together with assessors, confirmed through the significant change that was shown for the *Change Management* competency, that the ASELPH Fellowship training equipped Fellows to be change agents at their workplaces and the community.

Performance in Service Delivery Innovation

The final competency, *Service Delivery Innovation* (p=0.003) and all four performance indicators showed significant changes. Healthcare service delivery are affected by various factors and research has shown that effective leaders are required to ensure a high standard of service delivery.[21] Service delivery is a broad aspect that involves all of the other 13 ASELPH competencies to be in place for this competency to be successful. All the modules of ASELPH contributed to this competency as well. The Fellows confirmed how each of the modules contributed to their leadership knowledge and skills and therefore improved their performance in service delivery. The following are some aspects taught in the modules that changed the Fellows into confident leaders who will improve this competency of service delivery innovation:

- *Learning in Public Health*, together with *Health informatics, monitoring and evaluation*: covered the importance of knowledge management, research and M&E, which contributed to the ongoing evaluation and innovation of service delivery.
- *Executive Leadership* for health equipped the Fellows with self-management skills (EQ, Strength Deployment Inventory, "Walk in the Woods") and Meta-leadership that will assist them to deal with people and change as part of efficiency and effectiveness of the service delivery.
- The Diagnostic tree as part of the *Health System and Transformation policy* module, together with the *Complex problem-solving and negotiating, coherence and coordination* module*,* taught Fellows how to deal with problems to ensure solutions and improvements to service delivery.
- Their financial and strategic thinking skills as part of the modules *Strategic Financial Management in Health* and *Ethics and Values in healthcare, organisational behaviour change and strategy in health,* allowed Fellows to critically look at budgets and costings, and plan better for cost-effective service delivery in an ethical environment.
- *The (District) Health Systems (and Hospital) Re-engineering module* informed Fellows of what functions they would want decentralised for enhanced service delivery.
- Fellows learned about the importance of community involvement for service delivery strategic planning through the Policy *Practice Seminar* module and *Strategic Marketing (and communication) in health*.
- The module *Implementation of quality improvement modalities (strategies) in health system* is directly linked to this *service delivery innovation competency*, since quality and improvement is what service delivery should be about.
- Then finally, the module *Strategic Human Resources and Management Performance* reminded Fellows that service delivery and the healthcare system is not possible without resources, especially human resources.

Service Delivery Innovation is an area that the DoH needs much improvement. Good quality service delivery is vital and a right for the SA community, according to the Batho-

Pele principles[72] The Office of Health Standards Compliance (OHSC) is responsible for ensuring compliance of facilities as part of promoting health and safety of clients.[72] which is a positive move of SA towards high quality service delivery in a high standard environment.

Strong healthcare leadership with the right skills and competencies are needed for the changing environment to ensure good relationships amongst all stakeholders. Leaders therefore need particular skills to create productivity, increase capacity and tackle these challenges[1-2,48,56] to deliver quality service to all South Africans.

Additional factors affecting leadership training

This research study confirmed that 59% of Fellows received management training before the ASELPH Fellowship training. Despite this, 100% of these Fellows who received training confirmed they lacked certain of the ASELPH competencies and that there was always room for improvement. Competencies such as *Financial Management, Client Orientation and Customer focus, Programme and Project Management* and *Community/Partnership Collaboration* were scored lower than other competencies by these managers who received management training previously. Even those competencies they perceived themselves as being competent in, their reflective response confirmed the improvements in performance after the ASELPH Fellowship training. ASELPH created a purpose-specific programme that was designed to provide the particular competencies for the SA public healthcare managers. The ASELPH Fellowship training was preceded by a needs assessment and designed specifically to meet the needs that were identified in the managers and leaders of the SA healthcare system[13] Not all leadership training programmes are designed following a needs assessment as was done by ASELPH. McAlearney[35] confirmed in their study that leadership training programmes should be designed according to the organisation's needs. Many researchers have shown that most times, leadership development is directed towards the individual development and this is not related to what the organisation wants and results in failure.[1-2,35,48,56,134] All Fellows (together with their assessors) confirmed that the ASELPH Fellowship made all the Fellows, even those

with previous management training, more confident leaders in their workplace.
Some Fellows also confirmed that after the ASELPH Fellowship training, commitment and dedication is key to keep on being change agents and effect change. Research has shown that the psychological status of participants affects training outcomes directly. Motivation of the participant plays a significant role in their training outcome.[191] Fellows confirmed this commitment through their reflections when confirming that despite the inhibiting factors, they still showed improvement in performance. This is an indication of the commitment and motivation of Fellows to affect change after the ASELPH Fellowship training.

Another factor that should be considered for leadership training, is that suitable students are selected for training. If not suitable, students will attend leadership training just for fun and will not be motivated and committed to affect any change at their workplaces. As shown in this study, many factors affect training and development, but Punia's[170] study revealed that it starts with the participant's motivation, attitude and EQ. It was explained that motivated employees will learn better, their attitude together with their emotional intelligence will affect them sharing the learning as well as inspire others. This is in line with studies that proved that suitably selected participants should attend leadership training, otherwise it is a fruitless expense.[170] Many organisations sometimes motivate people for training to tick the skills development box. Research has shown that organisations tend to go for convenience of training and lose the purpose of skills development and behavioural change.[35] ASELPH, in conjunction with their seniors, went through a stringent recruitment and selection process of selecting the correct Fellows for the training. The ASELPH process involves placing an advert, short-listing and then an interview for final selection. The Fellows, confirmed by their assessors, have proved to have been selected suitably to attend the ASELPH Fellowship training. This study has shown that all Fellows benefitted from the ASELPH Fellowship training and remained motivated and committed to be change agents at their workplaces and in the community.

Finally, leadership development is important to equip leaders with the necessary skills for the changing environment and the ASELPH Fellowship training has proven to have done this for the Fellows. The findings of the adequate sample size, reliability of the data, quality of the intervention, consistency of the Fellows' assessments as well as the significant change in 11 of 14 competencies and 44 of the 56 performance indicators, is an indication that the ASELPH Fellowship was effective in enhancing the competencies of the Fellows. The factors and challenges, mentioned above, are real and have a direct and sometimes indirect effect on the sharing and implementation of training learnings as was shown in this study. Fellows have proven in this study that despite these challenging and inhibiting factors, they were doing better than before attending the ASELPH Fellowship training.

5.4 Fellows' perceptions of the ASELPH Fellowship

The ASELPH Fellowship was designed to equip Fellows, as leaders, with competencies to perform at optimal level in the ever-changing SA healthcare system. The training attempted to incorporate many more experiential learning and practical scenarios. Other than the traditional didactic lectures in most of the modules, the ASELPH Fellowship has introduced blended learning, including case studies, eLearning, case vignettes, problem-solving exercises, interactive classroom, mentoring, practical workplace assignments and exposure to experts in the healthcare environment.

This section will give an overview of the perceptions of the Fellows about the ASELPH Fellowship and general perceptions from their assessors as well. To get the perception of Fellows about the ASELPH Fellowship, it was important to firstly determine the Fellows and assessors' perceptions about the importance of leadership and leadership training.

The importance of leadership and leadership training

Fellows (100%) were of the view that leadership and leadership training was of utmost importance. The literature suggests that this importance is not always observed but

recognition of the central role of leadership and leadership training is growing. Leadership is not an area that all industries really emphasise, but even the health sector now realises how important leadership skills are for the success of the healthcare system,[50] especially in SA. The King's Fund report[21] talks about the key role that leaders play as individuals, their role in teams and their role in the organisation. The CanMEDS framework[52-53] and the Medical Leadership Competency Framework (MLCF)[23,54] emphasise the importance of leadership skills for healthcare professionals. Leadership training is therefore gradually being incorporated into the curriculums of health professional training due to the growing need for competent healthcare leaders.[53-55]The Fellows and assessors' views are in line with the literature emphasising the important roles of leaders in healthcare.

Leadership has been researched for years and there are many different theories reflecting on various leadership styles. These theories started with the Great Man Theory by Thomas Carlyle, which was a male-dominated theory.[106-108] and many studies were undertaken and more leadership theories and styles evolved. The Trait Theory was established and critiqued for its's limitation of traits not being sufficient for effective leaders[5] and the Behavioural and Situational Theories[25,107] as well as the Human Nature Elements Theory,[110] were introduced. These theories emphasised the role of the leader's behaviour, situation and basic human nature elements, affecting their followers. The responsible leadership theory that emphasise a shared responsibility of leaders and all stakeholders to contribute to significant change in the society[137-138] is a theory that has become a thought-provoking theory in an evolving challenging environment. Each of these various theories and leadership styles had a role to play in different leaders and different situations. Taking these into account, many researchers deliberated about the competencies needed for these leaders to perform in different situations.[141-142] Keeping the theories and competencies in mind, the 14 competencies of the ASELPH Fellowship were carefully researched and the 56 performance indicators generated by the researcher to be assessed. These were confirmed as appropriate by the participants in this study.

Leadership training and development is critical to equip leaders with essential leadership competencies. Some believe leaders are born, but research has shown that leadership competencies can be taught.[154-155] Leadership training programmes therefore need to be designed according to the needs of the individual, team, situation, organisation and the society.[163] McAlearney[35] recommended that the type of leadership required for an organisation should determine the type of training programme, and the content of leadership training programmes needs to be thought through carefully. The ASELPH Fellowship met most of the requirements as suggested by the literature starting with a needs assessment; proper recruitment and selection process; lecturing staff being experts in their field; using the case-based method that related to action learning, conference classroom set-up; assessments done throughout the training and mentoring (Appendix A). The ASELPH Fellowship was specifically designed to be real development and not just an education event, to strive to equip Fellows with the necessary competencies to perform optimally in their workplaces. The results suggest that this was successful.

Curriculum content and teaching approaches/ pedagogies used

The ASELPH Fellowship was made up of 10 modules, which comprise one week of classroom time, the hours' preparation time and 50 hours pre-and post-reading and assignment time, over an 18-month period. The 14 competencies and 56 performance indicators were taught and linked to the 10 modules. The objectives of each module were indicated in the study guides as well as the narrative programme distributed to the Fellows for each module. These module objectives were assessed in daily assessments and at the end of the module. It is crucial to set clear learning objectives[35] and students need to be fully aware of the objectives and outcomes of a module in order for them to know whether these were achieved successfully. ASELPH achieved this successfully as was confirmed by Fellows, since they were aware of the module objectives and assess these objectives after each module, as well as through their reflective essays.

The majority agreed that the current balance of ASELPH modules was suitable, with only a few favouring alternatives to reduce time away from work. The reasons for most of the Fellows favouring classroom face-to-face (F2F) time was mainly for interactive teaching, group work and networking with other Fellows. This was in line with authors who argued that there is a place for traditional classroom set-ups, especially if it's used in a conference (group work) style, [168-169] as was implemented by the ASELPH Fellowship. Research has shown that students in classrooms had better exam results due to the close relationships with their peers and lecturers, and the resultant immediate problem-solving.[168] The appreciation shown for the case-based method of the ASELPH Fellowship training endorses the use of case based learning and supports the "case" for case-based learning in the literature. This method uses real-world organisational problems that were proven to enhance the transfer of training and shown to be superior to the traditional lecturing method.[170] It has improved student interest through the interactive approach and their analytical skills, learning skills, communication and cooperation have improved;[171-172] the Fellows affirmed this. Facilitators benefit as well, since they have to stay informed and act as facilitators and not lecturers [173] since it allows for constructive feedback,[174] it strengthens long-term relationships and improves networking and makes the curriculum relevant.[175] Web-based/e-Learning, conversely, has shown to be quite beneficial since students can study anywhere, it is cost-effective, less time from the workplace and convenient.[176] The e-Learning has also shown to create excellent student engagement and enhance student learning.[169] The ASELPH Fellowship training incorporated blended learning that is a combination of F2F and e-Learning. This blended learning of ASELPH, with case-studies, e-learning, assignments and research creates a learning atmosphere that sustains motivation and promotes self-learning and has been successful in enhancing student engagement and learning outcomes.[169,181-183] The value of the different teaching approaches has been proven through the ASELPH Fellowship training as recognised by Fellows. The ASELPH Fellowship training, together with the lecturing staff, created an environment that motivated Fellows to learn from their peers and stay motivated. A few Fellows also acknowledged the technology to still be a challenge and offered reasons such as being technologically challenged, poor

reception in areas and time constraints to get to electronic correspondence. There was a small group that felt that classroom time should move to weekends with more self-directing learning. The self-directed learning can involve informal training such as mentoring, executive coaching, on-the-job training and assignments.[21] This contributes to the independency that forms part of the EQ of leaders, which the ASELPH Fellowship training embraces.

The teaching approaches/pedagogies used, contributed to the strengths of the ASELPH Fellowship training. Despite some areas mentioned that needed improvement, Fellows recognised the values of the ASELPH Fellowship strengths in their performance. The areas of improvement that the ASELPH Fellowship should consider include the right balance between class time, self-directed and online learning; including increasing online and changing class-time to weekends to reduce time away from the workplace. Even though more online learning was recommended, IT challenges such as no access, loss of information (with lack of backups) and uncertainties about confidentiality, were recognised as real challenges to this.

Importance of the lecturer and the facilities to learning

Fellows concurred that the lecturer and the facility made a difference to the presentation and teaching of the ASELPH Fellowship. Initially Fellows felt that lecturers' roles should be to share knowledge, but post-training, they agreed that the lecturer was seen to clarify issues and facilitate interaction, showing how they came to value the different teaching styles. Research confirmed that training success depends on how the training was given, what the content was and who the trainer was.[170] The trainer fulfils an important role to ensure a lively and interesting teaching and learning environment.[187] Fellows stated that the ASELPH lecturing staff were knowledgeable of their subject, had tremendous experience in healthcare and leadership and that they created a conducive teaching environment through their voice tone, approach and body language. ASELPH acknowledged the importance of the lecturing staff in leadership training, and therefore invested in the development of the lecturers' development. Staff need to draft development plans and attended Harvard courses as part of developing

their teaching skills (Appendix A). One interesting view from an assessor that did not rate lecturers as important, was that there should be more practical application of the learning areas in the field for skills development. This is important for the ASELPH Fellowship to consider

The facility or teaching environment also plays an important role in teaching.[190] Fellows found that the round-table, conference-style, set-up encouraged discussions and hence networking and peer-learning. A different, interesting response from one Fellow was that learning could be done through a virtual environment and not necessarily in a classroom set-up. This response is appreciated since it supports the notion of learning in the workplace and may include 360° feedbacks, mentoring, coaching, and networks, job rotation and action learning.[21] In contrast, the benefits of F2F, group-work and the classroom set-up have already been highlighted and been endorsed by the majority of the Fellows.

Assessments

Fellows agreed in this research that assessments were another strength of the ASELPH Fellowship training and that it formed part of the uniqueness of the training. Assessment is crucial to evaluate the effectiveness of leadership training and development as this gives an idea of the current strengths of the programme, the areas that need to be improved as well as the effect on the student[24] Assessment criteria and plans should be decided on even before the programme is offered.[24]

These assessments by Fellows were done at different levels, i.e. modules and competencies as well as regular reporting to all stakeholders. This resulted in the Fellowship being reviewed regularly and improved as required. Assessments are an enormous plus of the ASELPH Fellowship since not all training goes through such a stringent process of monitoring and evaluation. A monitoring and evaluation partner was appointed to be responsible for this part of the ASELPH Fellowship training, which is an indication of how important this aspect was for ASELPH. This sits well with the literature that emphasises that assessments should look at whether the programme

objectives, leadership characteristics and competencies and the desired outcomes were achieved. Feedback is key to assessment success, since this will determine whether there are areas that need further improvement.[16] Assessment of leadership training effectiveness is not easy due to the fact it does not always measure what should be measured, such as leadership skill and impact.[192]

The ASELPH Fellowship used these assessments after each presentation, module and cohort to make the necessary improvements to ensure ongoing effectiveness and relevance of the ASELPH Fellowship training. Fellows acknowledged the following challenges with assessments: time constraints, assessors not fully aware of the ASELPH Fellowship and what needed to be assessed and no commitment to complete the assessments. This is in line with the literature, which states that organisations neglect to assess training because it takes a lot of energy post-training, tend to measure only one aspect, measurement criteria are quite subjective and may not give a true reflection of the change since it is not linked to the workplace.[18]. Some organisations also feel that assessments are too complicated, expensive and time-consuming, therefore they treat them casually and some are just not equipped to do proper assessments.[18] Organisations acknowledged that they neglect to assess training because it takes a lot of post-training energy. This has proved undesirable to the organisation, since huge expenditure goes into training, and results in leaders and trainees perceiving this as just another “box to tick” without any consequences.[18]

For assessments to be done accurately, all stakeholders need to be aware of the objectives and expectations of the training. Despite these challenges mentioned by Fellows, the ASELPH Fellowship and the researcher ensured that the assessments were completed.

Mentoring

The mentoring aspect of the ASELPH Fellowship is another unique feature to ensure ongoing support and guidance to Fellows. Fellows recognised the value of mentors which is in line with studies that confirm that mentorship is one of the most successful

methods in leadership development.[37-38] Mentoring enhances job and organisational commitment, retention and satisfaction, ensure job promotions, improves self-esteem and reduces work stress and conflict[184-185] Fellows emphasised that the ASELPH mentoring could be strengthened in the workplace and should be a much more formal process of involving supervisors and training of mentors before they become mentors. Regular feedback and mentors and mentees reporting to ASELPH.

Additional strengths of the ASELPH Fellowship training

Initial needs assessment

One of the unique features of the ASELPH Fellowship training was that a needs assessment was done, and the competencies were agreed on according to the needs of the public health sector. The modules for the programme were then specifically designed to cover the 14 competencies. The 56 performance indicators were then designed by the researcher according to the 14 competencies. Literature has shown that leadership training is only valuable and successful if it is designed according to the organisation's needs.[35,134]

An unequivocal strength of the ASELPH Fellowship training is the partnership of the three universities, Harvard T.H. Chan School of Public Health, University of Fort Hare (UFH) and UP, which were responsible for the development and implementation of this training. This means the curriculum and the presentations of the training, have been well thought through. This partnership (as with any), creates a sense of accountability on each of the universities' parts. It creates healthy competition amongst the universities to be the best at what they do. Specific guidelines for all aspects of the ASELPH Fellowship training have also been decided on, and combined report-back meetings, created an environment where these guidelines could be monitored to ensure the high standard that was initially intended for the ASELPH Fellowship training. The ASELPH Steering Committee fulfils this monitoring role. Harvard T.H. Chan School of Public Health was initially involved in teaching and the SA lecturing staff were guided on how to take this same quality forward to sustain this for the future ASELPH cohorts. SA lecturers also continued to share teaching at the two SA universities (UFH and UP),

to ensure the same quality at the SA institutions. This resulted in further strengthening the partnership.

Weaknesses or areas needing improvement

As with any leadership training programme, the ASELPH Fellowship has its weaknesses and challenges. As mentioned before, the Fellows felt they would have benefited from more SA case studies, especially representing their own environments. Another challenge recognised by Fellows and assessors, was the fact that their supervisors and senior management were not more involved from the commencement of the ASELPH Fellowship training. Fellows suggested that managers attended some aspects of the training, or an orientation on the ASELPH Fellowship training in order for them to understand the objectives of the training, which would assist in the post-training assessments of Fellows.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

This chapter portrays a summary of the key findings and explains the significance of the study. Conclusions are derived from the findings to support the recommendations advocated in this chapter.

6.1 Summary of the findings

In Chapter 5, the discussion of the results together with the literature review, proved the effectiveness of the ASELPH Fellowship in enhancing the leadership competencies of this cohort, which was the main aim of this study. There is no evidence in the study that suggests these findings are not generalisable to other cohorts.

The purpose of the study was to determine the extent to which the ASELPH Fellowship has changed the leadership competencies and performance of the managers after attending the training. The SA Minister of Health on various occasions has expressed his concerns about leadership in healthcare in South Africa. To achieve the DoH vision, taking cogisance of the health situation in SA, it is evident that exceptional leadership is necessary. The study supports the literature on the importance of strong healthcare leadership, with the right skills and competencies, needed for the changing healthcare environment.[48-49] Healthcare professionals are often expected to undertake leadership roles when they start their careers, but most receive almost no leadership training other than through their work experiences.[160] The study also emphasised the significance of leadership development to improve individual knowledge and skills[156-157] organisational performance and change, supports succession planning and ensures accountability and alignment.[31,158-159] The 14 ASELPH Fellowship competencies and 56 performance indicators are based on the transformational behavioural leadership theory. Transformational leaders have positive effects on the team to inspire them to embrace organisational need rather than self-need.[25,33,112-113,118-119] The Ethical Leadership theory as part of the transformational theory, also runs as a thread through the ASELPH Fellowship competencies, as well as Distributed Leadership, that is a collective approach involving all stakeholders instead of an individual leader.[128] The ASELPH

Fellowship competencies embrace the final theory of responsible leadership[137] that emphasise accountability and responsibility towards the individual, team, organisation and society. The literature therefore has shown the importance of leadership training such as the ASELPH training in improving the public sector managers' competencies and performance in their teams, the public sector and eventually the impact that it will have on the society. How well this programme was successful, was determined by the Fellows and their assessors through the 360º assessment that proved the effectiveness of the ASELPH Fellowship training. The research study, through the findings and the literature therefore proved the importance of leadership and leadership training.

The question that this research tried to answer was: 'does a part-time executive leadership programme based on competencies, using case studies as core methodology successfully enhance the leadership performance in district health managers in South Africa?' Leadership training is common in organisations and receives wide endorsement but the benefits which are repeatedly mentioned and acknowledged in the workplace need to be steadfastly established.[14-17] It is due to this lack of leadership training assessment, that this study assessed the effectiveness of the ASELPH Fellowship in enhancing the leadership competencies of public health service managers in a South African context. Few studies have done thorough assessments of leadership training[17-20] and the King's Fund (UK) report[21] on healthcare leadership stated: *"there is very little evidence for the effectiveness of leadership development programmes and evidence-based approaches are needed to ensure a return of huge investments made*".[21] This indicates there is a great need to assess the effectiveness and impact of leadership training on healthcare organisations. This study therefore recognised the great need to assess the effectiveness of leadership training on healthcare organisations as was done with the ASELPH Fellowship. Assessments of the effectiveness of leadership training development is essential as this gives an idea of the current strengths of the programme, the areas that need to be improved as well as the effect on the student.[24] Kirkpatrick's[24] four-level evaluation model has been used extensively to assess training, and Phillip's model added a fifth level to this.[193-194] The study has proven the similarities of the ASELPH Fellowship to the Kirkpatrick

assessment model. The 360° assessment is another method of assessing the effectiveness of leadership training and development [35,196] and this study confirmed the value of this method.

The literature also proved that various factors influence the effectiveness of leadership training. Important ones highlighted, included programme design, facilitators knowledge and skills, participants' motivation, workplace support and an environment conducive for sharing of training knowledge and skills.[21] The findings of the research study show that the ASELPH Fellowship incorporated most of these factors in the training.

The study findings endorsed the literature on the importance of leadership and leadership training, illustrating that the ASELPH Fellowship improved the public sector managers' competencies and performances as team-leaders in the public sector, and the impact this would eventually have on society.

This study also proved the ASELPH Fellowship training met most of the requirements of successful leadership training. The literature suggested that training should be designed according to an organisation's needs and the correct participants need be selected.[35] The ASELPH Fellowship training was designed after a needs assessment was conducted in the public sector, and the 14 competencies evolved from frameworks that already existed for public sector managers and leaders. The 14 ASELPH competencies were then further defined, and the researcher developed measurements for each competency - performance indicators (56) - to give more meaning to the evaluation of the change in the competencies. Furthermore, the Fellows were carefully selected through a formal interview process with some Fellows' nominations put forward by their seniors.

The first Objective was realised by the confirmation that the competencies of Fellows changed significantly from before to after the ASELPH Fellowship training, from the perspectives of the Fellows and their assessors. In determining if any statistically

significant improvement in competence or performance was valid, it was necessary to confirm that the methodology was sound; this was achieved by confirming the sample size was sufficient for the analysis, the questionnaires were reliable and the training intervention was suitable. The findings also showed no significant difference in the assessments the Fellows made of their own competence and that made by their 360° assessors; the latter meant the Fellows self-assessments were accurate. This allowed their before-after assessments to be tested to see if there were statistically significant improvements in their competencies and performance. In spite of the small sample, statistically significant improvements were found in 11 of the 14 competencies and 44 of the 56 performance indicators. This improvement was further validated by the retrospective assessments of their 360° assessors.

The three competencies that did not show significant difference were Financial Management (p=0.118), Community/Partnership Collaboration (p=0.156) and Client Orientation and Customer focus (p=0.449). Furthermore, a statistical difference between the pre and post-training scores in 44 of the 56 performance indicators of the Fellows was proved in the study. This improvement in the Fellows' performance was confirmed by their assessors. Given the realisation of Objective 1, the hypothesis *The ASELPH Fellowship will improve fellow's leadership competencies,* was verified.

The second Objective was also achieved by determining the factors influencing the effectiveness of the ASELPH Fellowship training. The key factors mentioned by Fellows, which played a role in the effectiveness of the training, were equivalent to the main factors faced by SA public health, and included lack of leadership skills and knowledge, human resource and financial shortage and poor governance such as political pressure and policy implementation. Importantly, the Fellows performed significantly better after the ASELPH Fellowship training, regardless of these challenges. Other than these factors that were emphasised by the Fellows, the study also showed, in line with the literature, additional factors influencing the effectiveness of leadership training. These factors included an initial needs assessment to determine objectives for the training, psychological status of participants comprising commitment

and motivation, and selection of suitable candidates. These factors were recognised in the design of the ASELPH Fellowship training, proving that the ASELPH design was according to what literature recommended. The findings of the research study showed that the ASELPH Fellowship training attempted to incorporate most of these factors in the training, i.e. clear objectives set for each module, clear curriculum content, appropriate mix of training methods and Fellows to take learning back to the workplace through their assignments and research.

Objective 3 sought to determine the Fellows' perception of the ASELPH Fellowship, which was essential to establish whether the curriculum content, teaching approaches and any other factors, such as lecturers and venue/facility, may have played a role in reducing or increasing the effectiveness of the training. The first step was to prove the suitability of the intervention. This was achieved through confirmation from all Fellows, in the module assessments and reflective essay, that objectives for modules were attained and learning was taken from the classroom back to their workplaces. The Fellows agreed that the current balance of the ASELPH Fellowship between class time, self-directed and online learning were seen as appropriate.

The factors that played a role in the success of the training, as perceived by the Fellows, were the round-table set-up together with group discussions, case studies, eLearning, the ASELPH facilitators, networking, mentor-mentee programme, and the intensity of the programme that related to disciplining the Fellows. Literature endorsed blended learning with case-studies and eLearning to be the best formal method of training, while mentoring was proven to be the best informal method. The ASELPH Fellowship training met these requirements by using blended learning, including case studies and eLearning as well as mentoring.

The lecturers and the lecture room, where Fellows were seated at round tables, were seen as important factors to facilitate teaching and learning. The round table group setup was specifically selected to enhance interactive discussions and group work and the value of this was borne out by the Fellows. In addition, the lecturers were selected

carefully by the ASELPH Fellowship. Staff development plans were agreed on as an investment in the core academic lecturing staff to ensure excellence. The value of the ASELPH lecturing staff was highlighted by Fellows.

The literature also showed the importance of assessments in the evaluation of the effectiveness of leadership training and development, as this gives an idea of the current strengths, the performance and the areas that need to be improved.[24] Assessments of the Fellows and the programme, were seen as extremely important by Fellows and assessors and the majority did not foresee any challenges in continuing with these assessments beyond the training and into the workplace. Various assessments methods, including the 360º method, were recommended by Fellows and their assessors. Another assessment method, mentoring, was seen as an important aspect of leadership especially after leadership. The ASELPH Fellowship achieved the training objective of assessments, by assessing the Fellows and the training.

The research question *"Does the part-time ASELPH Fellowship training based on competencies, using case studies as a core methodology, successfully enhance the leadership performance of health managers in South Africa?"* has been answered. This was proved through the significant improvement in 11 of the 14 ASELPH competencies and 44 of the 56 performance indicators by the Fellows as well as their assessors, through a 360° assessment. Even though the effect or impact on the community could not be measured, the study proved that the Fellows, with their improved competencies, successfully implemented various tools and changes at their workplaces and displayed significantly improved performance. Research has shown that effective leaders have a positive effect on their team, which in turn has a positive effect on patient outcomes.

This research study therefore provides some evidence that the part-time executive leadership programme based on competencies, using case studies as core methodology, successfully enhanced the leadership performance of public health service managers and leaders in South Africa. This was a confirmation of what the ASELPH Fellowship aspired to achieve, to equip public healthcare managers with

leadership skills to perform optimally in a challenging SA healthcare environment. As a result, it can be concluded, that The ASELPH Fellowship training was effective. The findings add to the limited body of literature about effectiveness of leadership training and development.

6.2 Significance of results

This study has shown that the ASELPH Fellowship training was effective in enhancing the competencies and performance of the executive leaders and managers drawn from the public healthcare sector in SA. The Fellows, together with their assessors, agreed that their competencies and performance improved after the ASELPH Fellowship training. They realised the importance of leadership in a challenging healthcare environment in SA and how important this development was to equip them with the necessary skills. The results of the current study provide some evidence of the role leadership training programmes such as ASELPH can play in equipping leaders with the necessary leadership skills, and that the government can continue to support and invest in such programmes.

It was evident from the study that the design and the implementation of the ASELPH Fellowship contributes to the success of leadership training. The strengths and effectiveness of the ASELPH Fellowship training lie in the blended learning with case studies and e-Learning, reflective essays, expert faculty with continuous development, group work in a conference style classroom setup, mentoring and continuous assessments. Much positive emphasis was placed on the case studies as well as the group work, which is another indication of the effect of the ASELPH Fellowship training on this aspect.

The call for more South African case studies is an indication of how important the Fellows regarded the case-based method to bring learning closer to the workplace. They clearly could relate the cases to their environment and hence the realisation that SA has its own examples and experience that can be used and shared. This in itself resulted in the ongoing training of the Fellows, since they were requested to be part of

the case study development. This group work enhancement, which was emphasised by the case study method, is a positive feature since teamwork in the workplace is what contributes to successful service delivery.

Together with these approaches, the reflective essay was another approach that comprised the Fellows' leadership journey from before they started the ASELPH Fellowship training to the end. This reflection on the training, tools and learning implemented, was received positively by all stakeholders, which indicates the importance of reflection in leadership. Reflection was emphasised in the literature and the ASELPH Fellowship training succeeded in teaching the Fellows this reflective skill. Reflection is a skill, together with the other tools the ASELPH Fellows were equipped with, that ensures effective performance following leadership training programmes. These competence-based, teaching and learning methods, such as the blended learning of case-studies and eLearning, reflection, assessments and mentoring of the ASELPH Fellowship, which contributed to its success, should be adopted by other leadership programmes to ensure effectiveness.

The Fellows recognised the importance of sharing their ASELPH learnings at the workplace to benefit their team, organisation and the society. Sharing of learnings after training was also emphasised in the literature. The study provided evidence of the importance of an enabling culture and environment, where individuals can apply their knowledge obtained in leadership training programmes, such as ASELPH. This enabling environment speaks to the support and commitment to leadership training and development by management and the team.

Finally, the overall significance of this study, was the assessment of the effectiveness of the ASELPH Fellowship training and leadership training in general. This study recommends the use of performance indicators based on competencies, as a way of measuring effectiveness. These indicators are particularly valuable in situations where accurate assessment is a challenge, where outcomes and impact are subject to confounders, contamination and co-interventions. The study also recognised the

importance of leadership training being linked to the individual development plan (like the PMDS in SA), for ongoing monitoring of the development. This study has confirmed that "*there is very little evidence for the effectiveness of leadership development programmes and evidence-based approaches are needed to ensure a return of huge investments made*".[21] This indicates a critical need to assess the effectiveness and impact of leadership training in healthcare organisations and hence the significance of this study. The study adds to the body of literature on whether leadership training is effective.

This study only assessed the effectiveness of the ASELPH Fellowship training on the public sector manager's performance and not the organisation and society, but inferences can be made that it had positive effects on the organisation and its clients (society).

6.3 Recommendations

The findings of this study assisted us not only in confirming the effectiveness of the ASELPH fellowship, but also in discovering and confirming the factors that contribute positively to leadership training and development of managers in the public healthcare sector in SA. Various stakeholders were involved in the research, including the ASELPH Fellowship (as part of the University of Pretoria) as the training provider, the Fellows (students) whom completed the Fellowship, their assessors (supervisors, peers and subordinates) who performed the 360º assessments and lastly, the National Department of Health as government's representative in the delivery of healthcare to all South Africans and the Fellows' overall employer.

6.3.1 Recommendations to ASELPH Fellowship, as the training unit at the University of Pretoria

The most important recommendation pertaining to the ASELPH Fellowship is to continue to strengthen what they do and use this leadership training design of blended learning with case-studies, e-Learning, reflective assignment, the conference style

classroom setup, committed lecturing staff, mentorship and ongoing assessments including 360° assessments, as a blueprint for leadership training in all organisations.

- Networking has been proven in this study to make an enormous difference post-training.
- The ASELPH Alumni meetings need to be continued since they have proven to be a successful method of leadership development.
- The ASELPH WhatsApp groups also make a difference, as the Fellows stay connected and have a lifelong learning and change agent attitude.

This will result in continuous behavioural change and accountability, as was described in the literature.

6.3.2 Recommendations to the Fellows

This study confirmed the Fellows' commitment through their performance change and implementation of learning at their workplaces, despite a challenging healthcare environment.

- The Fellows should continue as such, with inquisitive minds to keep learning and making a difference.
- Their knowledge, tools and skills that the ASELPH Fellowship training equipped them with, should be sharpened continuously through ongoing training, or by becoming ASELPH faculty or mentors.
- They should model the way, and set an example to inspire a shared healthcare vision in SA.
- The study showed the Fellows agreed on the benefits of ongoing assessments. This is positive since these ongoing assessments will keep them accountable and be part of the ASELPH Fellowship for life.

Fellows realised this training was a process and not just a once off training event.

6.3.3 Recommendations to the Assessors (supervisors, peers and subordinates)

The study showed that most assessors were positive about the Fellows' performance improvement after the ASELPH Fellowship training and support the innovative ideas.

- Assessors, especially the supervisors, should continue to create a learning culture and environment where Fellows and all employees can thrive.
- They should value assessments, as this will result in improvement of the Fellow's skills, affecting their teams and organisations. These assessments should not be rushed and should eventually form part of the Fellow's Performance Management Development System (PMDS).
- Subordinates as part of the assessors, should keep the Fellows accountable after the training and have the opportunity and openness to discuss poor performance.
- Assessors should also get involved in the assignments and research projects as part of the ASELPH Fellowship training and post-training.

This will strengthen teamwork and improves healthcare service delivery.

6.3.4 Recommendations to the Department of Health (DoH)

The study has shown the positive effect the ASELPH Fellowship training had on the Fellows' performance.

- The DoH should endorse the ASELPH Fellowship training and consider sending all their newly appointed leaders and managers on the ASELPH Fellowship or similar training to prepare them for their leadership role. The findings of this study combined with the evidence in the literature showed that leadership training and development, together with ongoing assessment post-training, are necessary for leaders to perform effectively in their workplaces. Effective leaders will affect their team and organisation positively.
- The view from this study was that the PMDS was not effective, and the DoH should review and strengthen this process. This system should form part of this follow-up assessment processes, starting at top management to assist leaders in their jobs ensuring accountability.
- The DoH should consider decentralisation of certain financial and recruitment and selection functions. The study's findings have proven the frustration of the Fellows regarding their narrow decision space and that certain central functions indeed delay effective service delivery.

- The study also showed that improvement of the District Health Management Information System (DHMIS) is crucial for effective service delivery. The DoH needs to ensure a functional system that will provide the necessary information for all leaders to do proper monitoring and evaluation and hence improvement where needed. Literature has shown the importance of reliable information for decision-making that form part of effective leadership.

6.4 Future research

This study opens up avenues for future research. The dearth of studies on the effectiveness of leadership training programmes, requires more evaluation on healthcare leadership development programmes in South Africa. The research has shown the ASELPH Fellowship training to be effective and therefore supports and contributes to the literature on the effectiveness of leadership training and development. In light of the research findings and the literature, the following research questions can be considered for future research:

- Further research should include all the ASELPH cohorts that have completed the training, together with their assessors, i.e. supervisors, peers and subordinates. This will expand the sample size and result in accurate generalisable results for the ASELPH Fellowship training.
- Further research can include a control group. The study can use leaders who received the ASELPH Fellowship training compared to a group who received no training. This study can even be extended to other departments in the public sector for general leadership comparison.
- A longitudinal study, to assess the extent of the effect of the ASELPH Fellowship training, should be considered. A study following the Fellows in their workplaces would be ideal, as their everyday behaviours would be recorded. Furthermore, it will determine the relationship between the leadership training and actual performance in the workplace.
- Further studies can also assess whether Fellows' leadership styles after completing the ASELPH Fellowship training, are linked to a specific leadership

style, i.e. transformational, authentic, shared leadership or ethical leadership or a combination. This will enable the ASELPH Fellowship training and the DoH to add to the literature of which leadership styles are more beneficial for healthcare leaders. These leadership styles may also be compared to their followers' relationship with the leader which will show whether a certain leadership style creates a more positive work environment.

- This study did not look at the influence of other variables such as gender, age and possibly personality style on leadership training and development. Although many research studies have been done on these variables and do not show significant influence by these variables, a study comparing these variables will be valuable for the ASELPH Fellowship training.
- Finally, the impact of the ASELPH Fellowship training on the broader healthcare community in South Africa needs to be measured. The study should be extended to include all stakeholders including clients' perceptions and to assess the ROI factors such as reduced waiting times, staff attitudes and other criteria that could be agreed on amongst Fellows, their team, clients and the DoH. A tool can also be developed that Fellows or all public sector leaders can use at facility level to quickly assess whether any of their interventions and implementations after the ASELPH leadership training and development, linked to the DoH's strategic objectives, are creating positive changes for their teams and clients. This will form part of impact studies.

6.5 Conclusion

This study revealed that the ASELPH leadership training was effective in achieving its goal of enhancing the performance of the public health sector managers in SA. The study also confirmed the benefits of effective leaders on their teams, as well as the importance of leadership training to equip leaders with the necessary skills to become effective leaders.

The reality of an increasingly challenging South African healthcare environment, especially in light of the National Health Insurance (NHI), will continue to require highly

skilled and effective leaders. The Department of Health therefore needs to position itself to ensure they have these effective leaders in positions to fulfill the vision of providing high quality healthcare to all South Africans. They have to invest in leadership training and development of these leaders and ensure they get return on this training investment. It is important that leadership training, such as the ASELPH Fellowship training, results in improved skills and performance that can be assessed in the workplace by their supervisors and teams. The leadership training should also be a combination of different methods, as was shown through the ASELPH Fellowship training, with blended learning, mentoring, research and assessments that can result in a lifelong journey and not just a once-off event. Finally, the DoH should establish a conducive environment where Fellows can be empowered to apply the knowledge and skills after the training in their workplace, and beyond, to improve healthcare service delivery to all South Africans.

The findings of this study add to the limited number of research studies on the effectiveness of leadership training. There is a view in literature that leadership training and development impacts organisations and patient outcomes, and even though this was not the purpose of this study to assess these, the findings already showed some effects. Fellows should strive to continuously enhance their performance, beyond the ASELPH Fellowship training, to ensure a positive impact on the lives they touch daily.

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Appendix A: The ASELPH Executive Fellowship Programme

The Albertina Sisulu Executive Leadership Programme in Health (ASELPH) Fellowship was designed in 2013 through a partnership of the University of Pretoria (UP), the University of Fort Hare (UFH), the Harvard School of Public Health (HSPH) and SA Partners in collaboration with the South African National Department of Health (NDOH). The Programme is funded through grants from Atlantic and Elma Philanthropies and USAID.

The main purpose of the programme is to equip Executive and Emerging Fellows with the necessary skills and competencies to address the health service needs of the people of South Africa. To improve the health system's capacity to deliver high-quality, cost-efficient services, and to strengthen and elevate executive level training for future generations of executive health leaders, the following three components are quoted by the ASELPH Fellows Programmes to be strengthened and transformed:

1. *Service Delivery* - targeted at the management and leadership capability of current and emerging district level leadership within the Public Health System and at provincial and national level managers responsible for district level services.
2. *Human Resource Capacity* – for the National Health Insurance Initiative transformation process through the selection and training of executive level management.
3. *Executive Level Training* – to build capacity at two leading South African universities to meet the long-term goal of a trained and effective pipeline for senior health managers ready to address key challenges at all levels of service delivery.

The competencies the programme is based on, drew from the work of McDonough,[79] who proposed three key areas of competence: transformation (including analytical thinking, community orientation, information seeking, innovative thinking and strategic orientation), execution (including accountability, leading change, collaboration, impact and influence, initiative, organisational awareness, public policy and advocacy, performance measurement, and project management), and lastly, people (including interpersonal understanding, community stewardship, conflict management, relationship building, self-development, team development and team leadership).

The ASELPH team also performed a needs assessment in the public sector, which revealed competencies (or lack thereof) to deal with the following: poor planning and management; political interference; poor leadership and management; poor management of financial and human resources; poor change management; inadequate strategic thinking; communication and project management; poor mentoring, training and performance management; poor support from supervisors and generally poor monitoring and evaluation. A list of core, managerial and leadership competencies for the ASELPH Fellowship was then identified, which are depicted in Table B1.

An advertisement was placed in the press for Fellows and candidates to apply, and Health Departments were invited to distribute the flyer and to encourage applications. The requirements for admission were a four (4) year degree plus three to five years' relevant health services experience. These candidates also had to have experience in managing health services or health policy and strategy or must have had a few years' experience in the health sector, demonstrating leadership potential (Emerging Leaders). The candidates had to submit their CV's and a motivation, and those short-listed were invited for an interview in their province. The interview panel consisted of the provincial Head of Department (HoD) or his/her representative, the Deputy Director General (DDG) responsible for District Health Services (DHS)/Primary Healthcare (PHC), the Deputy-Director General (DDG) NHI and Health Facilities Improvement, provincial HR Manager and the Core Leaders and Programme Manager of ASELPH or their alternative representatives. Fellows were then selected on grounds of their interview performance as well as on motivation from the seniors.

The programme includes core (C) and elective (E) modules. The compulsory core modules included Learning in Public Health (5 credits) and the 10 credit core modules: Executive Leadership for Health (to include Responsible Leadership); Ethics and values in healthcare, organisational behaviour change and strategy in health; District Health Systems (& Hospital) Re-engineering (including Public sector and Centralisation/Decentralisation); Complex Problem Solving and Negotiating,

Coherence and Coordination; Health system and transformation policy. The electives are Strategic Financial Management in Health; Implementation of quality improvement modalities (strategies) in health system Strategic Marketing (& Communication) in Health; Health Informatics, Monitoring and Evaluation; Strengthening Human Resources for Health; Policy Practice Seminar. Table B4 illustrates how each of the 14 ASELPH competencies were addressed in the 13 modules. Students did the six compulsory core modules and had a choice between six elective modules.

A minimum of 120 credits including 30 credits for a research project for the postgraduate DHSM (Executive Leadership) had to be achieved. The duration of the programme is part time over 18 months and candidates were expected to have 100% class attendance. Modules were presented once a month for a week (Monday to Friday).

Leadership' is a less formalised topic than management, and therefore, the ASELPH programme incorporates many more experiential learning and practical scenarios. Other than the traditional didactic lectures, the ASELPH programme has introduced e-Learningmentoring, practical 'real-time' assignments, case studies, and exposure to very experienced leaders and managers in real life work situations. The approach used is the case-based methods and the programme strives to use South African case studies (to be developed by ASELPH staff) in order for Fellows to easily relate to the situations, as well as find practical solutions. The e-Learningplatform used the clickUP system, an intranet of the University of Pretoria.

ASELPH faculty development also is an important aspect for the faculty to be equipped to teach on the programme. Staff attended training at Harvard School of Public Health for ongoing training and development. Feedback from peers was part of the teaching. Another aspect of the programme was the allocation of mentors to the Fellows. Fellows had to nominate their own mentors. Mentoring has proved to be a great method of leadership training as well as a method of assessment.[20,39,41] Fellows had to meet regularly with mentors and submit a mentee-mentor report six-monthly.

The final aspect of the ASELPH Fellowship training, were the assessments as part of the Monitoring and Evaluation process of ASELPH. The assessments involved daily module assessments, self-assessments and a 360º assessment. Fellows nominated their 360º assessors (supervisors, peers and subordinates) to assess their competencies.

Appendix B: ASELPH Competency Framework

Albertina Sisulu
Executive Leadership
Programme in Health
Excellence, Innovation, Transformation

ALBERTINA SISULU EXECUTIVE LEADERSHIP PROGRAMME IN HEALTH

ASELPH COMPETENCY FRAMEWORK FOR EXECUTIVE LEADERS IN HEALTH

2014

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Executive Summary

Leadership and management capacity and ability are central to a strong and viable health system in South Africa. Inadequate management and leadership abilities are often cited for the poor performance of health facilities in the public sector in South Africa, which results in poor health outputs and outcomes for the citizens of the country. There is an urgent need to improve and strengthen the public health system for the introduction of a National Health Insurance (NHI), through capacitating health managers to develop management and leadership abilities in the public health sector, which is also a priority for the National Department of Health.

The Albertina Sisulu Executive Leadership Programme in Health was conceived within this context and supported by the National Department of Health.

The main purpose of this report is to ensure the development and strengthening of a comprehensive competency framework for the Albertina Sisulu Executive Leadership Programme in Health (ASELPH) that is aligned to the requirements of the health sector, particularly the public health service and the country as a whole.

This strategic review considers three principal South African documents obtained from the Health Systems Trust reflecting the requirements for the national public health sector, the Department of Public Service and Administration, as well as the Department of Higher Education.

The report condenses the key competencies in the listed documents and attempts to align it to the Albertina Sisulu Executive Leadership Programme for Health (ASELPH) currently offered by the University of Pretoria and the University of Fort Hare.

It is anticipated that this will ensure that the three partnering universities in ASELPH, viz, the Harvard School of Public Health, University of Fort Hare and the University of Pretoria, have developed a competency framework for the programme that is aligned to what the country needs going forward, and within the context of the unfolding development of the National Health Insurance.

Introduction and Context

There are several examples of teaching and capacity building applied to management, but the debate continues about the effectiveness of 'teaching leadership.' Management practices often have universal appeal because such practices have developed within the confines of business. The mindset in business management is governed by strict rules – written or unwritten. Business has clear ownership, usually an individual or a group of individuals who have invested funds in the business.

Leadership poses different, even though related, sets of challenges. Whilst it can also be learnt (thus taught), it is less formalised than management practice theory. Leadership is very situational, thus requiring theory to be underpinned by practice within a particular environment.

The South African public health system poses serious challenges for leadership at most of the levels where this is required. The following framework of leadership and management competencies is work in progress that is designed to stimulate each leader (practicing or aspirant) to develop a set of competency goals that will assist her or him to become an excellent leader.[1] This covers leadership at all public health system levels that it manifests.

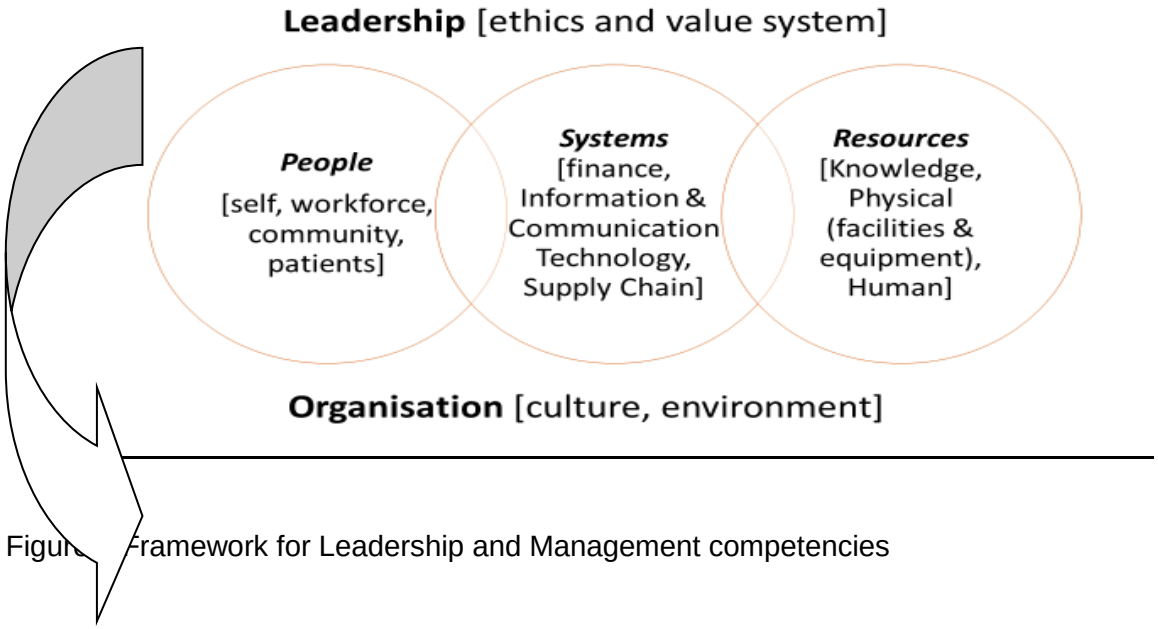

Figure 1: Framework for Leadership and Management competencies

[1] Developed by Dr Percy Mahlathi, University of Fort Hare

The illustration in Figure 1 provides an example of an overview of major elements that leadership has to be concerned with from a health sector organisational point of view.

Numerous articles have been published about the management abilities of managers in the public health sector in South Africa, and some are mentioned here. Earlier articles refer to the various training programmes available for managers in the health sector and also refer to the need for competencies per level of care in the health system, but do not actually state what these competencies are (Schaay & Heywood, 1998). Key competencies required by district managers were subsequently defined by the National Department of Health (Asia, 2002). As an example, district hospital managers need to be able to plan, utilise resources (including HR and finance) effectively, especially in a resource-challenged situation, and assess performance against pre-determined criteria. Other studies have been conducted more recently by the Health Systems Trust, on behalf of the National Department of Health, once more looking at the competencies required by district management in the context of the re-engineering of Primary Health (English, 2013). The Department of Public Service and Administration (DPSA) has also developed and reviewed competency frameworks for middle and senior managers in the health sector.

For the purpose of this ASELPH competency report, the DPSA senior management competency requirements are the most relevant (DPSA, 2003). Institutions of higher learning, such as universities, also have to align all course exit outcomes to the national qualifications levels as outlined by the Department of Higher Education within the South African qualifications framework (NQF-SAQA, Government Gazette, 2012).

It is within this context that the documents and reports from these sources are being reviewed with regard to the ASELPH competencies for both the Universities of Pretoria and Fort Hare.

Aim

To ensure the competency framework of the current the ASELPH Fellowship training programme responds to the needs of emerging, middle and executive leaders in the health sector in South Africa.

Areas for further strengthening will also be identified through this process.

Objectives

- To align ASELPH competencies to the requirements of the South African National Department of Health, the Department of Public Service and Administration (DPSA) and the Department of Higher Education.
- To ensure that ASELPH course modules have exit outcomes that respond to the competencies identified.

Legislative framework

The Public Service Act including its amendments and the National Health Act of 2003 frame the legislative context in which the managers for the public sector and for the health sector are to be developed and worked within. The roles of the Department of Public Service and Administration and the National Department of Health therefore become integral in this regard.

Discussion

A needs assessment was initially conducted by the ASELPH team through interviews with provincial and national public health sector executive managers, to determine the critical management and leadership challenges facing the sector. The results of this needs assessment revealed poor planning and management; political interference; poor leadership and management; poor management of financial and human resources; poor change management; inadequate strategic thinking; poor communication and project management; poor mentoring, training and performance management; poor support from supervisors and senior managers; generally poor monitoring and evaluation.

A list of ASELPH competencies was then identified from the Senior Management Competency framework of the Department of Public Service and Administration, and the work conducted by the Health Systems Trust on behalf of the National Department of Health.

Table 1 lists the ASELPH competencies agreed upon by the ASELPH team[2], and provides a definition and strategic intent for each competency. Table 2 indicates the results from the self-assessment conducted on the 2013 to 14 cohort of ASELPH students at the University of Pretoria, on perceptions of individual competencies. Table 3 indicates the competencies listed by the DPSA and National Health Department and illustrates how the ASELPH competencies are linked to them. Table 4 aligns the Higher Education SA Qualifications framework (NQF level descriptors) to the ASELPH competencies and from the latter to exit outcomes of the ASELPH modules. The UP ASELPH course is offered currently as a Postgraduate Diploma but taught at a Masters Level to ensure that should these students want to continue with a MPH degree, they can receive equivalent credits for Core or Selective modules completed during the Postgraduate Diploma programme.

The following are the ASELPH competencies identified by the ASELPH team:

Table 1: List of identified ASELPH competencies

	CORE COMPETENCIES
1	**People Management and Empowering Environment** (encourage and develop in a collaborative environment, advocates teamwork, effectively manage relationships, encourage personal development, delegating duty, maintain a positive attitude, decision making process, and good interpersonal relations)
	Definition: Relates to the manner in which the leader interacts and guides members of the organisation, by ensuring the environment is conducive for staff to develop **Strategic Intent:** To establish a 'values' mirror where one can regularly do a personal reflection on a broad level

[2] ASELPH Leadership and Management Competencies are based on those used in the District Management Study conducted by Health Systems Trust published in 2009

2	**Self-Management** (defines and practices personal values, recognises one's learning style, personal attributes, professional development needs, time management and initiative, emotional intelligence)
	Definition: Mechanism of ensuring continued self-development **Strategic Intent:** To establish a set of values for personal development bearing in mind that one has to lead by example
3	**Honesty and Integrity** (committed, builds and displays high standards of ethical and moral conduct, upholding good governance, applies self-corrective measures, reliable and accountable, professionalism and ethics,)
	Definition: List of fundamental values that guide one in exercising leadership **Strategic Intent:** To establish a set of values for personal development bearing in mind that one has to lead by example
4	**Client Orientation and Customer focus** (acknowledges customer rights, service delivery according to Batho Pele principles, quality improvement)
	Definition: Mechanism of ensuring focus on the core business of the organisation **Strategic Intent:** To establish a guide to ensure adherence to core business by valuing the needs of customers
5	**Communication** (verbal and written communication, exchange of ideas, sharing of ideas and practices, internal and external)
	Definition: To ensure consistency of delivering messages, sharing knowledge, etc. **Strategic Intent:** To establish a set of guidelines for adherence to a consistent approach to communicating within the organisation
	MANAGERIAL COMPETENCIES
6	**Resource Management and Allocation** (human resources, physical resources and materials)
	Definition: Set of attributes to always be aware of when managing the resource pool of an organisation **Strategic Intent:** To establish a set of attributes that will guide you as a leader in managing or overseeing the rationing and management of resources
7	**Financial Management** (managing budgets in line with the service delegations and recognised financial practices including costing and allocation of expenses)

	Definition: Attributes for management of financial resources in particular **Strategic Intent:** To establish a set of guidelines for appropriate control of financial resources
8	**Problem Solving and Analysis** (identification of issues, organising issues in systematic form, analysis and resolution of existing and anticipated problems on a timely basis, manage risk appropriately)
	Definition: Ability to identify and/or anticipate, analyse and allocate problems and challenges **Strategic Intent:** To establish a set of attributes that are necessary to resolve identified or anticipated challenges
9	**Programme and Project Management** (strategy, analysis, planning and implementation, monitoring and evaluation from a programme perspective, task allocation, task management)
	Definition: Attributes required for effective management of programmes and projects **Strategic Intent:** To establish a set of attributes required for effective management of projects and programmes
10	**Community/ Partnership Collaboration** (governance, stakeholder involvement and networking)
	Definition: Attributes required to develop, manage and sustain relationships with interested parties **Strategic Intent:** To establish a set of guidelines and values for advancing 'stakeholder ownership' and accountability in joint programmes or projects
11	**Knowledge Management** (translation of data to information and its transformation to knowledge, promoting and sharing of knowledge, information, and lessons learnt, applying theory of practice, understanding administrative law principles)
	Definition: Mechanism of ensuring a conducive learning environment **Strategic Intent:** To establish a set of attributes that are necessary to ensure that the organisation values, exploits its data, information and knowledge base
	LEADERSHIP COMPETENCIES
12	**Strategic Leadership** (vision, direction, delivery from an organisational perspective, time management, pursuit of core objectives, decision making ability)
	Definition: Attributes necessary for leading an organisation to success **Strategic Intent:** To establish a set of values and attributes for strategically leading an organisation

13	**Change Management** (organisational transformation, benchmarking, innovation)
	Definition: Processes and approaches to lead and manage change in an organisation **Strategic Intent:** To establish clear paths for ensuring smooth organisational transformation and growth
14	**Service Delivery Innovation (SDI)** (process integration, implement new ways of performing tasks, developing organisations, policy development, policy interpretation, policy analysis, policy implementation; innovation, implementation science, m health, e health,
	Definition: Approaches, mechanisms and applications to improve organisation's services **Strategic Intent:** To ensure continued improvement of services to the target population including internal organisational stakeholders

These competencies are largely derived from the documents indicated previously, the alignment of which will be illustrated in the following tables.

A self-assessment was also conducted on behalf of the Universities of Pretoria and Fort Hare respectively, based on the proposed competencies above. The self-assessment was done for the University of Pretoria before the intake of its first cohort of students and was based on students grading their perceptions of their own competence.

Table 2: Self-assessment at University of Pretoria

ASELPH competencies	Summary Analysis of 2013 UP self-assessment
People Management and Empowering Environment	More than half the students (51%) were just average or below-average in this area
Self-Management	Again, more than half the students (51%) were just average or below-average in this area
Honesty & Integrity	Only 17% felt they were just average in this area, these rest scored high in this area
Client orientation & customer focus	26% felt they were average or lower in this area, the majority scored higher
Communication	Majority scored average or higher in this regard

ASELPH competencies	Summary Analysis of 2013 UP self-assessment
Financial Management	Majority felt they were either average or lower
Resource Management & allocation	Majority felt they were either average or lower
Problem Solving & analysis	Majority scored average or higher
Programme and Project Management	Majority felt they were either average or lower
Community/Partnership Collaboration	Majority felt they were above-average in this area
Knowledge Management	Most of the students scored themselves average or below
Strategic Leadership	Majority scored themselves average or below
Change Management	Majority scored average or lower
Service Delivery Innovation (SDI)	The bulk of the class scored average or lower

From the above self-assessment, it is evident that most of the cohort of students felt they were just average or below average in a number of the competencies assessed. These results also confirm the findings from the earlier needs assessment.

The ASELPH curriculum therefore was designed to respond largely to address all these identified gaps.

Table 3 below is colour coded so that it is demonstrable that competencies are common and/or similar across the frameworks indicated. The ASELPH competencies are largely derived from the DPSA SMS frameworks and the initial work done by the Health Systems Trust (HST), but they can also be aligned to the 10 competencies indicated in the National Qualifications framework of the Higher Department of Education, for NQF levels 8 and 9. The depth of the 10 competencies for NQF levels 8 & 9 are not elaborated below, but can be sourced from SAQA documents.

A further request from the National Department of Health is that the ASELPH competencies include the approach for Integrated Chronic Service (Disease) Management/ICSM or ICDM, which is being rolled out countrywide during 2014. According to the National Department of Health, the aim of the ICSM approach is to ensure a 'model of care that provides for integrated prevention, treatment and care of chronic patients at PHC level to ensure a seamless transition to assisted self-management within the community.' This will necessitate 'strong stewardship and ownership at all levels of the health system, as well as re-organisation and strengthening of the health system.' The ICSM model also addresses the six priority areas of the National Core Quality Standards for Health Establishments. With this approach, the NDoH seeks to ensure that the public health sector will be able to cope with the increased burden of healthcare during the implementation of the National Health Insurance. The ASELPH competencies identified, to an extent, provide the skills and knowledge for current and future health sector leaders to take such an approach forward.

Table 3: Strategic comparison of competency frameworks

DPSA Senior Managers Competency framework 2003	NDoH (HST) 2009	Competencies in Higher Education (SAQA 2012) NQF 8 & 9	ASELPH competency framework (2013-14)
Core			
Strategic Capability & Leadership	**Honesty and Integrity** (committed, builds and displays high standards of ethical and moral conduct, applies self-corrective measures, reliable and accountable)	**Ethics & Professional practice**	**Honesty and Integrity** (committed, builds and displays high standards of ethical and moral conduct, applies self-corrective measures, reliable and accountable)
People Management & Empowerment	**People Management and Empowering Environment** (manage, encourage and develop people in a collaborative environment, advocates teamwork, effectively manage relationships)	**Scope of knowledge**	**People Management and Empowering Environment** (encourage and develop in a collaborative environment, advocates teamwork, effectively manage relationships, encourage personal development, delegating duty, maintain a positive attitude, decision making process, and good interpersonal relations)
Programme & Project Management	**Self-Management** (recognises one's learning style, personal attributes, professional development needs, time management and initiative)	**Accountability** **Management of Learning**	**Self-Management** (recognises one's learning style, personal attributes, professional development needs, time management and initiative)
Financial Management	**Client Orientation and Customer focus** (acknowledges customer rights, service delivery according to Batho-Pele principles)	**Context and systems**	**Client Orientation and Customer focus** (acknowledges customer rights, service delivery according to Batho-Pele principles
Change Management	**Communication** (verbal and written communication, exchange of ideas, sharing of ideas and practices, internal and external)	**Producing and communicating information**	**Communication** (verbal and written communication, exchange of ideas, sharing of ideas and practices, internal and external
Process			
Knowledge Management	**Knowledge Management** (promoting and sharing of knowledge, information, and lessons learnt, applying theory to practise)	**Knowledge literacy** **Accessing, processing and managing information**	**Knowledge Management** (promoting and sharing of knowledge, information, and lessons learnt, applying theory of practice)
Service Delivery Innovation	**Programme and Project Management** (strategy, planning, implementation, monitoring and evaluation from	**Method & Procedure**	**Programme and Project Management**

DPSA Senior Managers Competency framework 2003	NDoH (HST) 2009	Competencies in Higher Education (SAQA 2012) NQF 8 & 9	ASELPH competency framework (2013-14)
	a programme perspective)		(strategy, planning implementation, monitoring and evaluation from a programme perspective)
Problem Solving and Analysis	**Problem Solving and Analysis** (systematic identification, analysis and resolution of existing and anticipated problems on a timely basis, manage risk appropriately)	**Problem Solving**	**Problem Solving and Analysis** (systematic identification, analysis and resolution of existing and anticipated problems on a timely basis, manage risk appropriately)
Client Orientation	**Community/Partnership Collaboration** (governance, stakeholder involvement and networking)	**Context and systems**	**Community/ Partnership Collaboration** (governance, stakeholder involvement and networking)
Communication	**Resource Management and Allocation** (human resources, physical resources and materials)	**Knowledge literacy**	**Resource Management and Allocation** (human resources, physical resources and materials)
	Financial Management (managing budgets in line with service delegations and recognised financial practices)	**Scope of knowledge** **Knowledge literacy**	**Financial Management** (managing budgets in line with the service delegations and recognised financial practices)
	Leadership		
	Strategic Leadership (vision, direction, delivery from an organisational perspective)		**Strategic Leadership** (vision, direction, delivery from an organisational perspective)
	Change Management (organisational transformation, benchmarking)	**Scope of knowledge** **Knowledge literacy**	**Change Management** (organisational transformation, benchmarking)
	Service Delivery Innovation (SDI) (process integration, implement new ways of performing tasks, developing organisational learning)	**Accessing, processing and managing information**	**Service Delivery Innovation (SDI)** (process integration, implement new ways of performing tasks, developing organisational learning)

Table 4: Aligning UP and UFH ASELPH module exit outcomes to the ASELPH competencies

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
Commit and uphold high standards of ethical conduct and values	**Ethics and Values in Health Care,**	**Honesty and Integrity** (committed, builds and displays high standards of ethical and moral conduct, applies self-corrective measures, reliable and accountable)	Ethics and values in healthcare, organisational behaviour change and strategy in health (EOC 770)	The delivery of healthcare services requires high ethical values and standards to promote quality of life, which improve patient outcomes. The innovative and creative leader in the health sector will be provided with skills in dealing with organisational behaviour patterns, which influence behaviour change and policy strategy. The module will focus on the difficulties in changing workplace behaviour and mechanisms of how to sustain change strategies which are workable and enabling
Establish and lead multi-disciplinary teams to engage in situation analyses and to implement change	**Public health human resources management**	**People Management and Empowering Environment** (management, encourage and develop in a collaborative environment, advocates	Strategic human resources and management performance (HRM 771)	Fellows will be taught the critical importance of human resource development and management strategies required for an effective district healthcare

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
initiatives (*social process and leadership skills)*		teamwork, effectively manage relationships)		system, which is required for an effective NHI-based healthcare system. HR planning, forecasting, analysis, implementation and evaluation processes will be integrated into service delivery target achievement. The different types of human resources and their roles for effective service delivery in working in an integrated healthcare system will be used in case studies developed in the SA health context.
Problem-solve the management of the research process (design, literature review, methodology, results, discussion, recommendation).	**Research Methodology**	**Self-Management** (recognises one's learning style, personal attributes, professional development needs, time management and initiative)	Executive leadership research project/report – e.g. Strategic review of implementation plan (AHM 771)	Fellows will be required to write up a project which can consist of a Strategic Plan for Leadership at the workplace, which they will be required to implement and monitor over a period of 6 months and then write up the strengths and weaknesses of whether this plan made a difference and to what extent they have been able to influence and change the approach of decision-making at their workplaces. A report from supervisors will be required and

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				the project will include a literature review and a detailed analysis of what was achieved, what value-added difference the project made at the workplace, what were the sustainability factors built into the plan and how it had improved service delivery. The health leadership strategies that arise out of the project will be discussed and how its broader application can be implemented towards transforming healthcare delivery at district or hospital level.
Understand and integrate customer needs into operational planning	**Operations Management, Strategic Marketing and Communication**	**Client Orientation and Customer focus** (acknowledges customer rights, service delivery according to Batho-Pele principles	**Strategic marketing (and communication) in health (SHM 770)**	The module will enable the fellow to create a messaging strategy that can be used in all marketing materials. To develop a marketing programme appropriate for the target audience using the most effective possibilities such as public relations, advertising, website (and other internet platforms), promotional seminars, conferences and trade booth opportunities, downloadable materials, direct marketing (offline & online),

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				packaging, event sponsorships and merchandising promotions. The fellow will be taught the skills to develop a communications programme that complements the marketing programme and provides timely and comprehensive internal, external and strategic communications initiatives in an integrated approach. One of the key issues will be the level of the health message and whether it makes an impact on the improvement of uptake of healthcare services
Demonstrate knowledge and skills of health education and health promotion in a health care context. Understand the core competencies of education and promotion professionals working within healthcare organisations and institutions as well as communities Promote community engagement and participation in the effective development, implementation of health promotion and education	**Health education and health promotion**	**Communication** (verbal and written communication, exchange of ideas, sharing of ideas and practices, internal and external	**Strategic marketing (and communication) in health (SHM 770)**	The module will enable the fellow to create a messaging strategy that can be used in all marketing materials. To develop a marketing programme appropriate for the target audience using the most effective possibilities such as public relations, advertising, website (and other internet platforms), promotional seminars, conferences and trade booth opportunities, downloadable materials, direct marketing (offline & online),

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
programmes (PRA Participatory Rural Appraisal) and Participatory Learning and Action (PLA) Organise and develop community using community - based project - driven approach				packaging, event sponsorships and merchandising promotions. The fellow will be taught the skills to develop a communications programme that complements the marketing programme and provides timely and comprehensive internal, external and strategic communications initiatives in an integrated approach. One of the key issues will be the level of the health message and whether it makes an impact on the improvement of uptake of healthcare services Create a messaging strategy that can be used in all marketing material
Demonstrate an understanding of accountability in the use of public funds and apply the Public Finance Management Act (PFMA) as a management tool of compliance in service delivery processes. Demonstrate an ability to audit the effectiveness of the systems and procedures for compliance with PFMA	**Public health financing and Finance** **Strategic Economics and Finance Management in Health**	**Financial Management** (managing budgets in line with the service delegations and recognised financial practices)	**Strategic financial management in health (SFM 770)**	The module will enable the fellow to implement strategies, which are practical and implementable in the workplace taking into consideration the complexities and challenges prudent and well thought through financial management strategies that not only addresses the current financial problems but provides for

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				visionary thinking in its application towards a more equitable healthcare delivery system. The importance of adequate skills required for an efficient National Health Insurance will be the focus and Fellows will be required to develop strategic financial plans based on their workplace objectives so that practical solutions can be developed that is within budget and which are affordable. .
Promote community engagement and the understanding of the national healthcare system as an open system and a social institution. Demonstrate the understanding of major events in the historical development of the South African National Health and development of human and other resources for the administrative and management of health services in South Africa. Demonstrate the understanding of district health management	**Quality Improvement Modalities (Strategies) in Health System, Health Informatics, Monitoring & Evaluation**	**Knowledge Management** (promoting and sharing of knowledge, information, and lessons learnt, applying theory of practice)	(**District) Health systems (and Hospital) re-engineering (incl. Public sector and centralisation/Decentralisation) (HSR 770)** **Leaning in Public Health (PHM 770)**	The re-engineering of the health system is one of the key pillars of the SAELPH programme with focus on improvement of services in the DHS. The new thrust of the national DOH with PHC as a key focus requires a new type of health leader who can understand the central role of PHC in a future equitable and efficient healthcare system. This module will assist to reshape the thinking of public health leaders towards building sound foundation strategies for the delivery of essential healthcare

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
system in South Africa and how it evolved. Understand the history and the philosophy of primary health-care and district health services in South Africa. Globalization and its effects on the structure and organisation of healthcare programmes and services in South Africa including planning, implementation, monitoring and evaluation of national health system in South Africa. Understand the national health policy.				services primarily at the DHS level and its impact on the overall healthcare system. Development of a decentralisation case – a South African example focused on a district as the 'man in the middle' of the decentralisation process, including the need for information, problems of supervision. Understand the international experience of re-engineering public sector providers, with special emphasis on PHC, and how they will function in a future NHI. Learning in Public Health The emerging student will be taught the fundamentals in executive leadership in healthcare systems, which will form the basic platform or foundation for understanding the challenges for application of leadership modalities at the different levels of healthcare service delivery in the public health service and how to begin to think and analyse how the principles of executive leadership at their level of

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				appointment can improve health service delivery.
Understand strategies and techniques for monitoring and evaluating programmes and the ability to assess the adequacy of programme evaluations that have been conducted. The ability to develop a monitoring and evaluation plan. The ability to evaluate a public health programme. Understand the scope of healthcare informatics, health informatics concepts and theories within a national a global context, and the roles that health informatics professionals have within healthcare organisations. Demonstrate understanding of core competencies of informatics professionals working within healthcare organisations. Recognise and assess the role of information systems within healthcare, particularly from a	**Monitoring and evaluation** **Health informatics**	**Programme and Project Management** (strategy, planning implementation, monitoring and evaluation from a programme perspective)	**Health informatics, monitoring and evaluation (MEH 771)**	Fellows will be taught the importance of evidence-based public health and how to use health data, how to interpret the data, and use it for planning and for evaluation. The critical importance of how strategically to monitor and evaluate all programmes and systems and how practical leadership requires in-depth knowledge of how to use review systems for forward planning. The use of knowledge management modalities will be used in health planning and Fellows will be required to design an M & E system that can be used at their workplace for better results in healthcare delivery.

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
management and strategic perspective. Obtain knowledge on the application of public health informatics.				
Develop skills to address complex problems often complicated by social conditions to which health workers are exposed	**Executive Leadership in Health, Complex Problem Solving, Ethics and Values in Healthcare, Negotiating Coherence and Coordination**	**Problem Solving and Analysis** (systematic identification, analysis and resolution of existing and anticipated problems on a timely basis, manage risk appropriately)	**Complex problem-solving and negotiating, coherence and coordination (CCC 770)**	The public health leader will be equipped with strategies to address difficult and intractable problems at the workplace and assist health workers to become part of the solution by utilising newly acquired problem-solving skills, which will have lasting impact in workplace settings. Negotiating techniques will be analysed for different workplace challenges and its application for greater coherence and coordination in the implementation of policy and effective management of its outcomes to improve service delivery.
Demonstrate the ability to assess public heath challenges from a rights perspective and be able to identify and assess policy responses that improve equity in health.	**Public health governance and legislation**	**Community/Partnership Collaboration** (governance, stakeholder involvement and networking)	**Policy Practice Seminar (PPS 770)**	The fundamentals of health policy practice implementation will be discussed and methods of analysis will be linked to how the best effective health policy processes can be structured to

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
Demonstrate the effectiveness of cooperative and participative governance within the public health system. Demonstrate the understanding of the key concepts, approaches and administrative issues in intergovernmental relation. Explore and utilise a 10-step process of lobbying and advocacy when developing a plan for project within their area of responsibility.				respond to the health needs. The policy chain from inception to implementation will be analysed to establish why SA health policies, which are rated as very good, are never implemented and where they are implemented, the results are less than optimal. How can policy practice assist executive leaders in health to work smarter, with fewer resources and achieve greater results for effective service delivery. The role of the community in the policy development and practice process will analysed to see what lessons can be learned to cut down on bureaucracy and red tape.
Demonstrate knowledge and understanding of legislation underpinning employment relations. Demonstrate knowledge and understanding of challenges facing the human resource function in the public sector Review individual and team performance, effect corrective	**Public health human resources management**	**Resource Management and Allocation** (human resources, physical resources and materials)	**Strengthening Human Resources for Health (HRM 771)**	Fellows will be taught the critical importance of human resource development and management strategies required for an effective district healthcare system, which is required for an effective NHI-based healthcare system. HR planning, forecasting, analysis, implementation and evaluation

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
action and identify strategies for support Apply a quality improvement strategic action cycle to identify issues, develop plans to solve problems or fill gaps, implement and assess progress against objectives (*administrative and management skills*) Establish and lead multi-disciplinary teams to engage in situation analyses and to implement change initiatives (*social process and leadership skills)* Demonstrate knowledge and understanding of HR and HRD functions Organise assets and put them through the required accounting entries and compile good records for all assets according to institutional policy. Operate and maintain assets and dispose of an assets by following proper procedures.	**Strategic Human Resources, Labour relations & Management Performance** **Health operations management**			processes will be integrated into service delivery target achievement. The different types of human resources and their roles for effective service delivery in working in an integrated healthcare system will be used in case studies developed in the SA health context
Be able to put together a strategic plan and implement strategies to acquire all operational assets.	**Health operations management**	**Strategic Leadership** (vision, direction, delivery from an organisational perspective)	**Ethics and values in healthcare, organisational behavior change and strategy in health (EOC 770)**	The application of the principles of Executive Leadership in the health sector will be examined with focus on several modalities of leadership including meta-

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
Role of power and politics in organisations	**Organisational Strategy in Health**			leadership with a focus on examining why its application by health leaders is met with so much difficulty. The challenges that prevail in the pilot districts for the National Health Insurance will be analysed. Fellows will be expected to do pre-course reading in preparation for the module as well as a post-module assignment, which may include the writing up and development of a strategic plan with a focus on executive leadership principles. Application of responsible leadership strategies in to the public health sector. The focus on contemporary views of responsible leadership in South Africa and measures to redress the shortcomings in taking responsibility and being accountable for your actions. What is the vision for responsible leadership on the horizon in the next 5 to 15 years and how can a health manager reposition his/her thinking to meet the demands and the role

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				they are to play in the new NHI funded system in the position they presently occupy. What does it mean to lead in a responsible manner be it at district, provincial or national level. This will include the call for courageous scholarship and strategies to lead collectively in a responsible manner
Acquire knowledge and insight regarding to social policy perspectives and values. Acquire knowledge, insight and skills regarding to understanding the policy process Acquire knowledge, insight and skills regarding to using evidence in policy analysis.	**Public health policy and management**	**Change Management** (organisational transformation, benchmarking)	**Health system and transformation policy (HPF 770)** **Executive Leadership for Health (LHE 770)**	Reform in SA – What is the problem? To include variations among provinces and districts, measurement issues, etc. Financing NHI: Revenue sources (general taxes, payroll taxes, etc.) the role of private insurance, fiscal space and the public finance situation in SA, covering the informal sector, etc. Pay for performance as a policy tool: practical difficulties and the critical role for management in implementation. Overview of payment: Options for paying doctors and hospitals, the role of contracting, likely consequences and implementation issues. Politics and the reform process: Stakeholder analysis and mobilising support for reform.

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				Financing NHI: Revenue sources (general taxes, payroll taxes, etc.) the role of private insurance, fiscal space and the public finance situation in S.A., covering the informal sector, etc. Organising NHI: national vs. provincial, public vs. quasi-public, roles for private administrators, choices about fiscal autonomy, relationship to various ministries. Government and market failures and the role of the public and private sectors – including corruption issues in both areas. Benefit package and targeting: Introduction to the 'step pyramid'. What should be covered and for whom? What role for co-payments as incentive and revenue source. The developmental transformation of the healthcare system is informed by the political context and the constitutional imperatives for access to care - the main function of the health system. This module will provide the fellow with analytical tools to interpret the political economy of

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				health and to develop strategies which can respond to the health needs on the ground in a practical manner so that the impact of the health policy is understood and how it informs the type of executive leader required to deliver the results of effective and efficient healthcare delivery. Fellows will be trained in costing the pooling, provisioning and procurement of health services as District or Hospital Managers to allow for the effective and efficient running of the services over which they have authority. Training will focus on their Units becoming a Cost Centre for the management of the finances allocated by the Provincial Health Authority as well as capacity building in the event hat delegations for autonomy is devolved to their level of employment. The importance of performance management will be the focus in relation to optimal budget performance, allocation within the institution as

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				well as meeting performance targets and outcome measures. Understand priority setting and how to conduct a decision tree analysis Understand the five control knobs in transformation Understand change management and why teams fail
Role of values in managing an organisation	**Organisational Strategy in Health**	**Service Delivery Innovation (SDI)** (process integration, implement new ways of performing tasks, developing organisational learning)	**Implementation of quality improvement modalities (strategies) in health system (QIM 771)**	Fellows will be required to identify the current quality challenges at their place of work and develop an advanced quality improvement strategic plan, which they can implement. The plan must respond to the recent audit of facilities conducted by the Department of Health. Fellows will be required, upon returning to their place of work, to implement the plan and after 6 months, report on the results and what improvements had occurred due to their plans. The key factors to be addressed include waiting times, availability of medication, cleanliness of

UFH ASELPH MPH module general exit outcomes	UFH ASELPH MPH modules	ASELPH competency framework	UP ASELPH modules (module code): post graduate diploma	UP ASELPH module general exit outcomes
				facilities, the long queues and patient satisfaction. Fellows will be taught quality improvement strategies related to executive leadership, learning and organisational change. Determine quality challenges in the workplace Develop an advanced quality improvement plan

All of the ASELPH modules have crosscutting themes and outcomes, therefore competencies can be linked across modules as well. The above table is a preliminary illustration of how exit outcomes from each module can be linked to specific and/or cross cutting competencies.

It is apparent from these tables that the ASELPH competencies adopted by the team and the general exit outcomes largely respond to the need of the Department of Health, as well as that of the DPSA, and to the NQF framework.

However, although the ASELPH programme is being offered at two South African universities, the content and depth differ since one is at the level of a post-graduate diploma, and the other at a Master's level. Gaps in currently offered programmes, identified from Table 4, should feed into the review process.

Challenges

While the ASELPH modules are aligned to the competency frameworks discussed above, with definitions and strategic intent listed per competency in Table 1, more work is needed in determining the skills and knowledge required for the respective competencies and in determining specific exit and learning outcomes for each of the ASELPH modules offered by the Universities of Pretoria and Fort Hare.

Monitoring and evaluating the impact of the ASELPH programme during and after the course also needs careful consideration, in order to determine if it has achieved what it set out to do. The six monthly self-assessments during the respective courses will provide some insight in this regard.

Teaching Approach

The ASELPH programme is an initiative developed in consultation with the Harvard School of Public Health. The Harvard 'control knobs' approach to health system strengthening, similar to the WHO framework of the six building blocks of the health system, is presented during the flagship course and consistently used during the ASELPH modules.

'Leadership' is a less formalised topic than management, and therefore, the ASELPH programme incorporates many more experiential learning and practical scenarios. Apart from the traditional didactic lectures, the ASELPH programme has introduced mentoring, practical 'real-time' assignments, case studies, and exposure to very experienced leaders and managers in real life work situations.

Conclusion

The current ASELPH courses offered through the Universities of Pretoria and Fort Hare are aligned to the competency requirements of the National Department of

Health and the DPSA, as well as to the NQF levels in the SA Qualifications Framework for a post-graduate diploma and a Master's degree.

Recommendations

- Develop exit outcomes with regard to skills and knowledge per ASELPH competency identified. (A draft has been developed for University of Pretoria)
- Develop well-defined learning outcomes for each module offered in the ASELPH programme in line with the ASELPH competency framework.
- Teaching methodologies, such as case-based teaching approaches, to be developed per module to ensure practice of real life situations, especially in South Africa, and further development of knowledge and skills.
- There is need to determine how best to assess the effect and impact of the ASELPH student and graduate in the workplace.

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Appendix C: Fellow's letter to nominate 360° assessors

……(Date)

Dear UP ASELPH Fellow

Re: 360°Assessment of Competencies

The ASELPH partnership wishes to implement the 360° assessment of competencies and hereby requests your cooperation and support in implementing this assessment. ASELPH, throughout your Fellowship conduct, will make Assessments of Competencies at baseline, six monthly and post-training as part of the Monitoring and Evaluation Framework. Your active and honest participation in these self-assessments will be greatly appreciated.

The 360°Assessment of Competencies is a tool used to provide feedback to you about how colleagues, i.e. supervisors/seniors, peers and subordinates, see you in the workplace. This assessment will provide ASELPH with critical additional Monitoring and Evaluation data and evidence to complement the Assessments of Competencies.

ASELPH requests you to nominate people working with you, as respondents/assessors, ideally peers/colleagues, subordinates and supervisors. To eliminate bias of your assessment, we will also be requesting your supervisor to nominate names of people working with you, ideally peers/colleagues, subordinates and any other superior/supervisor (if applicable), as respondents/assessors. The names of these people identified by you and your supervisor will be combined and names will be randomly selected from the list, which will be grouped in categories of peers, subordinates and supervisors. The assessments will be completed electronically. Communication and clear guidelines will follow to both yourself and the nominated respondents in the 360° assessment.
We hereby request that you complete the form below by nominating names and providing contact details of your nominees. All information will be treated confidentially and will not prejudice you in any way. We reiterate that this information is solely aimed at assessing the impact of the ASELPH Fellowship training on your competencies.

With your consent and that of those you have nominated to do 360^0 assessments, we may also use the information in a research study at the University of Pretoria for teaching and learning and health sector improvement purposes. The use of the information you provide for this research would be voluntary. You can refuse to allow the information you provide to be used without any consequences and without giving any reason. To ensure confidentiality

in such a study, unique codes will be provided to Fellows' and 360^0 assessors' names and only these codes will be used by the researcher. Neither you, the Fellow, nor the assessor, will be identified or identifiable individually (only group data will be presented) in any publication that might come from this study. No individual evaluations will be made available to anyone and individuals will therefore not be at risk.

We hereby request, if you are agreeable, that you complete the form below by nominating names and providing contact details of your nominees and sending this back to us by ……(date).

Once completed, kindly return the form to Sophy.vanderBerg-Cloete@up.ac.za

We thank you in advance for your cooperation and support in this regard.

Yours sincerely

ASELPH team

FELLOW'S INFORMED CONSENT

I hereby agree that below-mentioned assessors have the permission to assess my competencies in the workplace.

Fellow's name ….....(Please print)

Fellow's signature: .....……Date.....

ASELPH 360° Assessment of Competencies

Name of Fellow	Email and phone numbers

Name of Respondent and job title Relation to Fellow	Motivation or reason for choice	Email and phone numbers

Appendix D: Supervisor's letter to nominate 360° assessors

Dear ASELPH Fellow Supervisor

360° Assessment of Competencies

The purpose of requesting you to participate in this assessment is to gather information about the competencies of each Executive and Emerging Albertina Sisulu Fellow in order to document their development, as well as the contribution of the Albertina Sisulu Executive Leadership Programme in Health (ASELPH).

ASELPH is a partnership among the University of Pretoria (UP), the University of Fort Hare (UFH), and the Harvard School of Public Health (HSPH), in collaboration with the South African National Department of Health (NDOH). The purpose of the ASELPH Fellowship is to provide health leaders with a sound understanding of the evolving healthcare system and to equip them with the skills and competencies necessary to strengthen and elevate executive level training for future generations of executive health leaders.

The ASELPH partnership wishes to implement what is known as a 360° assessment of the competencies of the ASELPH fellow, …….. (name), and identified assessors, including you as a supervisor, and to eliminate bias of the fellow's assessment. We hereby request your support by identifying the people working with the ASELPH Fellow, ideally peers/colleagues, subordinates and any other superior/supervisor (if applicable), as respondents/assessors. The names of these people who will be identified by you and the fellow will be combined and names will then randomly be selected from the list that will be grouped in categories of peers, subordinates and supervisors. These assessors will complete the 360° assessment electronically.

With your consent, we may also use the information in a research study at the University of Pretoria for teaching and learning and health sector improvement purposes. The use of the information you provide for this research would be voluntary. You can refuse to allow the information you provide to be used without any consequences and without giving any reason. To ensure confidentiality in such a study, unique codes will be provided to Fellows' and 360^0 assessors' names and only these codes will be used by the researcher. Neither you, the assessor, nor the Fellow, will be identified or identifiable individually (only group data will be presented) in any publication that might come from this study. No individual evaluations will be made available to anyone and individuals will therefore not be at risk.

We thank you in advance for your cooperation and support in this regard. Please feel free to contact me for any queries at Sophy.vanderBerg-Cloete@up.ac.za or +72 (0) 824270792.

Yours sincerely

ASELPH Team

SUPERVISOR'S INFORMED CONSENT

I hereby agree that below-mentioned assessors have the permission to assess the ASELPH fellow's competencies in the workplace.

Supervisor's name .....(Please print)

Supervisor's signature: ..... Date.....

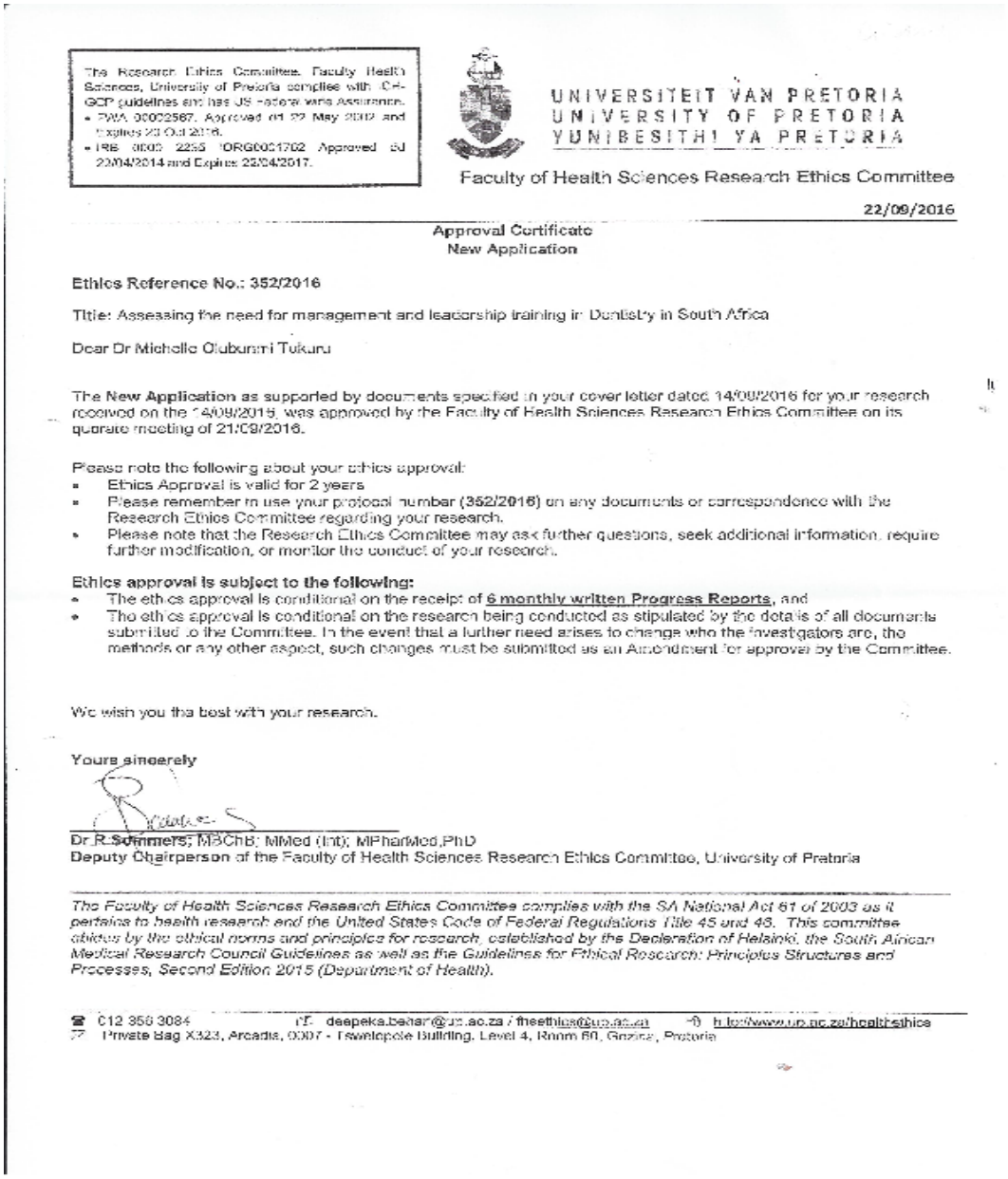
I hereby further agree to have the information I provide included in a research study in accordance with the conditions outlined above.	Yes	No

ASELPH 360° Assessment of Competencies

Name of Fellow/Fellow to be assessed

Name of Respondent and job title Relation to Fellow	**Motivation or reason for choice**	**Email and phone numbers**

Appendix E: Ethics Approval Letters



The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.
- FWA 00002567, Approved on 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved on 22/04/2014 and Expires 22/04/2017.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences Research Ethics Committee

22/09/2016

Approval Certificate
New Application

Ethics Reference No.: 352/2016

Title: Assessing the need for management and leadership training in Dentistry in South Africa

Dear Dr Michelle Olubunmi Tukuru

The **New Application** as supported by documents specified in your cover letter dated 14/09/2016 for your research received on the 14/09/2016, was approved by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 21/09/2016.

Please note the following about your ethics approval:
- Ethics Approval is valid for 2 years
- Please remember to use your protocol number (**352/2016**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:
- The ethics approval is conditional on the receipt of **6 monthly written Progress Reports**, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers; MBChB; MMed (Int); MPharMed,PhD
Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health).

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UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.
- FWA 00002567, Approved dd 22 May 2002 and Expires 03/20/2023.
- IRB 0000 2255 IORG0001762 Approved dd 22/04/2014 and Expires 03/14/2020

30/08/2018

Approval Certificate
Amendment
(to be read in conjunction with the main approval certificate)

Ethics Reference No: 325/2016

Title: The effectiveness of the Albertina Sisulu Executive Leadership programme in enhancing leadership competencies of public health service managers in South Africa.

Dear Dr Sophy Van der BergCloete

The **Amendment** as described in your documents specified in your cover letter dated 14/08/2018 received on 14/08/2018 was approved by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 29/08/2018.

Please note the following about your ethics approval:
- Please remember to use your protocol number (**325/2016**) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:
- The ethics approval is conditional on the receipt of **6 monthly written Progress Reports**, and
- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Dr R Sommers; MBChB, MMed (Int); MPharMed,PhD
Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

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Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tša Maphelo

Appendix F: Fellows Baseline Assessment

FELLOW'S INFORMATION LEAFLET AND INFORMED CONSENT

Fellow's Name

Dear Fellow

Within ASELPH, routine administration of tools, such as course evaluation forms and self-assessment forms, underpin the Monitoring and Evaluation Framework. The purpose of this baseline assessment is to gather information about the competencies of each Executive and Emerging Fellow in order to assist in future curriculum planning, to document your own development and to assess the contribution of the ASELPH Executive Fellowship Programme.

Please complete this ASELPH Executive Fellows Baseline assessment as honestly as possible so that it provides an accurate reflection from which you can trace your own success and provide information to ASELPH for ongoing programme improvement and evaluation. We will ask you to complete this same assessment at 6-month intervals.

With your consent, we may also use the information in a research study at the University of Pretoria for teaching and learning and for health sector improvement purposes. Your participation in such a research study would be voluntary. You can refuse to participate without any consequences, or stop at any time without giving any reason. To ensure confidentiality in such a study, unique codes will be provided to Fellows' names and only these codes will be used by the researcher. You will not be identified or identifiable individually, only group data will be presented, in any publication that might come from this study.

FELLOW'S INFORMED CONSENT

ASELPH intends to use this information in a research study for the purposes and in the manner outlined above. Please indicate if this is acceptable or not to you.

I hereby agree to have the information I provide included in a research study in accordance with the conditions outlined.

- ❍ Yes (1)
- ❍ No (2)

SECTION A

1. Sex:

- ❍ Male (1)
- ❍ Female (2)

2. How old are you?

3. I am currently employed in the following province:

- ❍ Eastern Cape (1)
- ❍ Free State (2)
- ❍ Gauteng (3)
- ❍ KwaZulu Natal (4)
- ❍ Limpopo (5)
- ❍ Mpumalanga (6)
- ❍ Northern Cape (7)
- ❍ North West (8)
- ❍ Western Cape (9)

4. Qualifications

4.1 Please indicate your highest qualification:

- ❍ Certificate (1)
- ❍ Diploma (2)
- ❍ Bachelor's degree (3)
- ❍ Honours degree (4)
- ❍ Master's degree (5)
- ❍ Post graduate diploma (6)
- ❍ Doctorate degree (7)
- ❍ Other (8)

4.2 Please indicate the name of the qualification

4.3 Please indicate the name of the Institution from where you received the qualification

5. Management Training:

5.1 Please indicate your previous management training:

- ❍ Yes (Please specify type of training and institution) (1)
- ❍ No previous management training (2)

5.2 Please specify type of training

5.3 Please specify institution where you received the management training

6. Please indicate your current position in your organisation i.e. Deputy Director General; Chief Director; CEO; Director; Deputy Director; Assistant Director; District Manager; Other (please specify

7. How many years have you been a managerial position (in any organisation)?

8. Indicate the term of service with your present organisation

9. Indicate the number of people who report directly to you and the size of your overall team.

Number of people reporting directly to you
Size of your overall team

SECTION B: Assessment of Competencies

Please assess yourself according to the ASELPH Leadership and Management Competencies below and tick the relevant number according to the following scale in the box:

1. People Management and Empowering Environment:

Must be able to manage and encourage people in a collaborative environment, advocate for teamwork, optimise their outputs and effectively manage relationships in order to achieve organisational goals.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
1.1 Maintain good morale in the team (1)	❍	❍	❍	❍	❍
1.2 Optimal management of absenteeism and staff - attendance rates (2)	❍	❍	❍	❍	❍
1.3 Optimal overall job performance as agreed in the PMDS (performance management development system (3)	❍	❍	❍	❍	❍
1.4 Embrace diversity in the team (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

2. Self-Management

Must be able to recognise ones learning style, personal attributes, professional development needs, be good with time management and taking initiative

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
2.1 Understand own strengths and weaknesses and have a self-development plan in place (1)	❍	❍	❍	❍	❍
2.2 Understand the team's strengths and weaknesses and have development plans in place (2)	❍	❍	❍	❍	❍
2.3 Excellent time management and meeting deadlines (3)	❍	❍	❍	❍	❍
2.4 Clear about own philosophy of leadership (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

3. Honesty and Integrity

Must be committed to honesty and integrity, build and display high standards of ethical and moral conduct, apply self-corrective measures and be reliable and accountable.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
3.1 Treats others with dignity and respect (1)	❍	❍	❍	❍	❍
3.2 Emphasise ethical standards and moral management in all aspects of work (2)	❍	❍	❍	❍	❍
3.3 Be reliable and accountable (3)	❍	❍	❍	❍	❍
3.4 Hold others (subordinates and managers) accountable for their work (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

4. Client Orientation and Customer focus

Must acknowledge customer rights and be committed to a client-orientated approach to service delivery according to Batho-Pele principles.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
4.1 Open door policy for customer complaints or compliments (1)	❍	❍	❍	❍	❍
4.2 Suggestion boxes for clients to assess service daily (2)	❍	❍	❍	❍	❍
4.3 Clients have the opportunity to give feedback re the service (anonymously and in a safe environment) (3)	❍	❍	❍	❍	❍
4.4 Suggestions are used for improvement of the service (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

5. Communication

Must be able to use verbal and written communication competently, be committed to the exchange of ideas, sharing of ideas and practices both internal and external communication effectively and consistently.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
5.1 Timeously and accurately communicate information to the team (1)	❍	❍	❍	❍	❍
5.2 Timeously and accurately communicate information to all external stakeholders (2)	❍	❍	❍	❍	❍
5.3 Regular feedback and monitoring meetings (3)	❍	❍	❍	❍	❍
5.4 Use the media and all forums to communicate health issues to the public (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

6. Resource Management and Allocation

Must be able to manage the human resources, physical resources and materials of the organisation in accordance to strategic plans of the organisation and within the legal and policy framework.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
6.1 Match the available personnel with the tasks at hand (1)	❍	❍	❍	❍	❍
6.2 Appropriate allocation of resources to deliver effective and efficient service (2)	❍	❍	❍	❍	❍
6.3 No drug or material outages/ shortages (3)	❍	❍	❍	❍	❍
6.4 Systematise community resources to improve health service access (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

7. Financial Management

Must be able to compile and manage budgets, control cash flow, institute risk management and administer tender procurement processes in accordance with
generally recognised financial practices in order to ensure the achievement of organisational objectives.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
7.1 Compile and manage budgets (1)	❍	❍	❍	❍	❍
7.2 Aware of the overall expenses and cost per patient/treatment (2)	❍	❍	❍	❍	❍
7.3 Manage fair tender procurement processes (3)	❍	❍	❍	❍	❍
7.4 Draw up financial reports and communicate to all the relevant stakeholders (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

8. Problem Solving and Analysis
Must be competent at the systematic identification, analysis and resolution of existing and anticipated problems on a timely basis and manage the risk appropriately.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
8.1 Process in place of identifying problems in the team (1)	❍	❍	❍	❍	❍
8.2 Process in place of identifying problems in service delivery and community (2)	❍	❍	❍	❍	❍
8.3 Policy in place for risk management (3)	❍	❍	❍	❍	❍
8.4 Report on these problems and solutions for this form part of knowledge sharing and management (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

9. Programme and Project Management
Must be able to develop, implement, evaluate and adjust plans to achieve desired objectives, while ensuring the optimal use of resources.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
9.1 Actively involved in identifying and developing programmes in the community (1)	❍	❍	❍	❍	❍
9.2 Monitor and evaluate the programmes to meet objectives set (2)	❍	❍	❍	❍	❍
9.3 Advocate for resources to ensure the success of these programmes and projects (3)	❍	❍	❍	❍	❍
9.4 Submit reports to keep stakeholders informed of progress and new developments of the project (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

10. Community/ Partnership Collaboration

Must be able to align the organisation's priorities with the needs and values of the community, implement the governance framework and ensure stakeholder involvement and networking.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
10.1 Coordinate and lead community efforts to address public health problems (1)	❍	❍	❍	❍	❍
10.2 Build and maintain strong relationships with the community (2)	❍	❍	❍	❍	❍
10.3 Strong community participation in all projects (3)	❍	❍	❍	❍	❍
10.4 Community representatives form part of strategic planning (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

11. Knowledge Management

Must be able to promote and sharing of knowledge, information, and lessons learnt and applying theory into practice

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
11.1 System in place for knowledge sharing (1)	❍	❍	❍	❍	❍
11.2 Infrastructure (IT system) supports the knowledge management process (2)	❍	❍	❍	❍	❍
11.3 Policies in place for knowledge management (3)	❍	❍	❍	❍	❍
11.4 Research used for service delivery improvement (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

12. Strategic Leadership

Must be able to provide vision, give direction and inspire others in order to deliver from an organisational mandate.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
12.1 Models a personal example of what is expected of others (1)	❍	❍	❍	❍	❍
12.2 Share the "big picture" of what needs to be accomplished (2)	❍	❍	❍	❍	❍
12.3 Empower people to make decisions (3)	❍	❍	❍	❍	❍
12.4 Awards and rewards system in place for people's performance (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

13. Change Management

Must be able to initiate and support organisational transformation and change in order to successfully implement new initiatives and deliver on service delivery commitments.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
13.1 Initiate and embrace change to improve the working environment (1)	❍	❍	❍	❍	❍
13.2 Explore outside the organisation for innovative ways to improve the workplace and service delivery (2)	❍	❍	❍	❍	❍
13.3 Encourage all to embrace challenging opportunities that test their skills and abilities (3)	❍	❍	❍	❍	❍
13.4 Advocate for policies to be reviewed regularly (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

14. Service Delivery Innovation (SDI)

Must be competent in process integration, policies and structures across the organisation to achieve improved efficiency and effectiveness on SDI and implement new ways of performing tasks and develop the organisation as a whole.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
14.1 Ensure that the team adheres to the principles and standards of efficiency and effectiveness (1)	❍	❍	❍	❍	❍
14.2 Runs the organisation on a common set of values that will encourage innovation (2)	❍	❍	❍	❍	❍
14.3 Manage personal and staff development to ensure a competent team (3)	❍	❍	❍	❍	❍
14.4 Regular feedback on how the organisation is performing and how to develop further (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

SECTION C: General

Kindly complete the questions below:

1. Some feel that the importance of Leadership has been overrated with regard to the health system in South Africa (SA), while others feel it is extremely important. What do you think?

2. Some researchers have shown that leaders are born while others feel that leadership skills can be acquired. What is your opinion on this?

3. How important do you think Leadership training is for health managers in SA?

4. What do you see are the biggest challenges that leaders in healthcare in SA face today?

5. In which area do you hope the ASELPH Fellowship will develop you best?

6. The ASELPH Fellowship is made up of 10 modules, which comprise one week of classroom time, the hours' preparation time and 50 hours pre-and post-reading and assignment time. What do you think is the right balance between class time and self-directed and online learning?

7. What will hinder you from implementing the learning at ASELPH in your workplace?

8. What may be some of the challenges that may influence implementing the learning from the classroom in the workplace?

9. How much better do you think this course will make you capable of managing effectively in your current work responsibilities?

10. Assessments are necessary for the evaluation of skills, knowledge or programmes and these assessments will be done during the ASELPH Executive Fellowship Programme. What is your opinion about assessments of yourself as well as of the ASELPH Fellowship that you will embark on?

11. What is your opinion about assessment of your skills and knowledge throughout the course or even in the workplace after the module? What are some of the challenges that you foresee about these assessments?

12. What methods do you think would be useful to assess whether the ASELPH Fellowship has improved your effectiveness in the workplace?

13. Competencies are important for optimal performance of managers. What are the main competencies (please name at least five competencies) that should be assessed in your workplace and how?

14. Literature has divided opinions about the value of mentoring programmes. What do you think of the actual value of mentoring programmes?

15. On a scale of 1 to 10 where 10 is “very important” and 1 is “not important at all”, how important is the faculty/lecturer for teaching and why?

Not Important at all/Very Important

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Why?

16. On a scale of 1 to 10 where 10 is “very important” and 1 is “not important at all”, how important is the facility/venue for teaching and why?

Not Important at all/ Very Important

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Why?

17. Any training programme usually has a golden thread that runs through for all the modules. What should this thread in the ASELPH Fellowship be for Fellows?

We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix G: Fellows post-training questionnaire

FELLOW'S INFORMATION LEAFLET & INFORMED CONSENT

Fellow's Name

Dear Fellow

Within ASELPH, routine administration of tools, such as course evaluation forms and self-assessment forms, underpin the Monitoring and Evaluation Framework. The purpose of this 6-monthly/post-training assessment is to gather information about the competencies of each Executive and Emerging Fellow in order to inform curriculum planning, to document your own development and to assess the contribution of the ASELPH Executive Fellowship Programme.

Please complete this ASELPH Executive Fellows assessment as honestly as possible so that it provides an accurate reflection from which you can trace your own success and provide information to ASELPH for ongoing programme improvement and evaluation. We will ask you to complete this same assessment at 6-month intervals.

With your consent, we may also use the information in a research study at the University of Pretoria for teaching and learning and health sector improvement purposes. Your participation in such a research study would be voluntary. You can refuse to participate without any consequences, or stop at any time without giving any reason. To ensure confidentiality in such a study, unique codes will be provided to Fellows' names and only these codes will be used by the researcher. You will also not be identified or identifiable individually in any publication that might come from this study.

FELLOW'S INFORMED CONSENT

ASELPH intends to use this information in a research study for the purposes and in the manner outlined above. Please indicate if this is acceptable or not to you.

I hereby agree to have the information I provide included in a research study in accordance with the conditions outlined.

❍ Yes (1)
❍ No (2)

SECTION A: Assessment of Competencies

Please assess yourself according to the ASELPH Leadership and Management Competencies below and tick the relevant number according to the following scale in the box:

1. People Management and Empowering Environment:
Must be able to manage and encourage people in a collaborative environment, advocate for teamwork, optimise their outputs and effectively manage relationships in order to achieve organisational goals.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
1.1 Maintain good morale in the team (1)	❍	❍	❍	❍	❍
1.2 Optimal management of absenteeism and staff - attendance rates (2)	❍	❍	❍	❍	❍
1.3 Optimal overall job performance as agreed in the PMDS (performance management development system (3)	❍	❍	❍	❍	❍
1.4 Embrace diversity in the team (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

2. Self-Management
Must be able to recognise ones learning style, personal attributes, professional development needs, be good with time management and taking initiative

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
2.1 Understand own strengths and weaknesses and have a self-development plan in place (1)	❍	❍	❍	❍	❍
2.2 Understand the team's strengths and weaknesses and have development plans in place (2)	❍	❍	❍	❍	❍
2.3 Excellent time management and meeting deadlines (3)	❍	❍	❍	❍	❍
2.4 Clear about own philosophy of leadership (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

3. Honesty and Integrity

Must be committed to honesty and integrity, build and display high standards of ethical and moral conduct, apply self-corrective measures and be reliable and accountable.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
3.1 Treats others with dignity and respect (1)	❍	❍	❍	❍	❍
3.2 Emphasise ethical standards and moral management in all aspects of work (2)	❍	❍	❍	❍	❍
3.3 Be reliable and accountable (3)	❍	❍	❍	❍	❍
3.4 Hold others (subordinates and managers) accountable for their work (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

4. Client Orientation and Customer focus

Must acknowledge customer rights and be committed to a client-orientated approach to service delivery according to Batho-Pele principles.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
4.1 Open door policy for customer complaints or compliments (1)	❍	❍	❍	❍	❍
4.2 Suggestion boxes for clients to assess service daily (2)	❍	❍	❍	❍	❍
4.3 Clients have the opportunity to give feedback re the service (anonymously and in a safe environment) (3)	❍	❍	❍	❍	❍
4.4 Suggestions are used for improvement of the service (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

5. Communication

Must be able to use verbal and written communication competently, be committed to the exchange of ideas, sharing of ideas and practices both internal and external communication effectively and consistently.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
5.1 Timeously and accurately communicate information to the team (1)	❍	❍	❍	❍	❍
5.2 Timeously and accurately communicate information to all external stakeholders (2)	❍	❍	❍	❍	❍
5.3 Regular feedback and monitoring meetings (3)	❍	❍	❍	❍	❍
5.4 Use the media and all forums to communicate health issues to the public (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

6. Resource Management and Allocation

Must be able to manage the human resources, physical resources and materials of the organisation in accordance to strategic plans of the organisation and within the legal and policy framework.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
6.1 Match the available personnel with the tasks at hand (1)	❍	❍	❍	❍	❍
6.2 Appropriate allocation of resources to deliver effective and efficient service (2)	❍	❍	❍	❍	❍
6.3 No drug or material outages/ shortages (3)	❍	❍	❍	❍	❍
6.4 Systematise community resources to improve health service access (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

7. Financial Management

Must be able to compile and manage budgets, control cash flow, institute risk management and administer tender procurement processes in accordance with
generally recognised financial practices in order to ensure the achievement of organisational objectives.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
7.1 Compile and manage budgets (1)	❍	❍	❍	❍	❍
7.2 Aware of the overall expenses and cost per patient/treatment (2)	❍	❍	❍	❍	❍
7.3 Manage fair tender procurement processes (3)	❍	❍	❍	❍	❍
7.4 Draw up financial reports and communicate to all the relevant stakeholders (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

8. Problem Solving and Analysis

Must be competent at the systematic identification, analysis and resolution of existing and anticipated problems on a timely basis and manage the risk appropriately.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
8.1 Process in place of identifying problems in the team (1)	❍	❍	❍	❍	❍
8.2 Process in place of identifying problems in service delivery and community (2)	❍	❍	❍	❍	❍
8.3 Policy in place for risk management (3)	❍	❍	❍	❍	❍
8.4 Report on these problems and solutions for this form part of knowledge sharing and management (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

9. Programme and Project Management

Must be able to develop, implement, evaluate and adjust plans to achieve desired objectives, while ensuring the optimal use of resources.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
9.1 Actively involved in identifying and developing programmes in the community (1)	❍	❍	❍	❍	❍
9.2 Monitor and evaluate the programmes to meet objectives set (2)	❍	❍	❍	❍	❍
9.3 Advocate for resources to ensure the success of these programmes and projects (3)	❍	❍	❍	❍	❍
9.4 Submit reports to keep stakeholders informed of progress and new developments of the project (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

10. Community/ Partnership Collaboration

Must be able to align the organisation's priorities with the needs and values of the community, implement the governance framework and ensure stakeholder involvement and networking.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
10.1 Coordinate and lead community efforts to address public health problems (1)	❍	❍	❍	❍	❍
10.2 Build and maintain strong relationships with the community (2)	❍	❍	❍	❍	❍
10.3 Strong community participation in all projects (3)	❍	❍	❍	❍	❍
10.4 Community representatives form part of strategic planning (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

11. Knowledge Management

Must be able to promote and sharing of knowledge, information, and lessons learnt and applying theory into practice

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
11.1 System in place for knowledge sharing (1)	❍	❍	❍	❍	❍
11.2 Infrastructure (IT system) supports the knowledge management process (2)	❍	❍	❍	❍	❍
11.3 Policies in place for knowledge management (3)	❍	❍	❍	❍	❍
11.4 Research used for service delivery improvement (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

12. Strategic Leadership

Must be able to provide vision, give direction and inspire others in order to deliver from an organisational mandate.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
12.1 Models a personal example of what is expected of others (1)	❍	❍	❍	❍	❍
12.2 Share the “big picture” of what needs to be accomplished (2)	❍	❍	❍	❍	❍
12.3 Empower people to make decisions (3)	❍	❍	❍	❍	❍
12.4 Awards and rewards system in place for people’s performance (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

13. Change Management

Must be able to initiate and support organisational transformation and change in order to successfully implement new initiatives and deliver on service delivery commitments.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
13.1 Initiate and embrace change to improve the working environment (1)	❍	❍	❍	❍	❍
13.2 Explore outside the organisation for innovative ways to improve the workplace and service delivery (2)	❍	❍	❍	❍	❍
13.3 Encourage all to embrace challenging opportunities that test their skills and abilities (3)	❍	❍	❍	❍	❍
13.4 Advocate for policies to be reviewed regularly (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

14. Service Delivery Innovation (SDI)

Must be competent in process integration, policies and structures across the organisation to achieve improved efficiency and effectiveness on SDI and
implement new ways of performing tasks and develop the organisation as a whole.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
14.1 Ensure that the team adheres to the principles and standards of efficiency and effectiveness (1)	❍	❍	❍	❍	❍
14.2 Runs the organisation on a common set of values that will encourage innovation (2)	❍	❍	❍	❍	❍
14.3 Manage personal and staff development to ensure a competent team (3)	❍	❍	❍	❍	❍
14.4 Regular feedback on how the organisation is performing and how to develop further (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

SECTION B: General

Kindly complete the questions below:

1. In which areas did the ASELPH Fellowship develop you best?

2. To what extent were you able to take learning from the classroom back to the workplace?

3. What were some of the challenges that influenced implementing the learning from the classroom in the workplace?

4. How much better do you think this course made you capable of managing effectively in your current work responsibilities?

5. Competencies are important for optimal performance of managers:
a. What were your main competencies that you were aware of before ASELPH?

b. What are the main competencies that were improved by ASELPH?

6. On a scale of 1-10 where 10 is “very important” and 1 is “not important at all”, how important is the faculty/lecturer for teaching and why?

Not Important at all/Very Important

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Why?

7. On a scale of 1-10 where 10 is “very important” and 1 is “not important at all”, how important is the facility/venue for teaching and why?

Not Important at all/Very Important

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Why?

8. Any training programme usually has a golden thread that runs through for all the modules. What was this thread in the ASELPH Executive Fellowship Programme?

9. Any further comments

We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix H: Assessors 360° assessment

Please indicate in the box below:
Fellows name:

Assessor's name:

FELLOW'S INFORMATION LEAFLET & INFORMED CONSENT

Dear Assessor

The purpose of requesting you to participate in this assessment is to gather information about the competencies of each Executive and Emerging Albertina Sisulu (ASELPH) Fellow in order to document their development, as well as the contribution of the Albertina Sisulu Executive Leadership Programme in the health (ASELPH) programme.

The ASELPH is a partnership among the University of Pretoria (UP), the University of Fort Hare (UFH), and the Harvard School of Public Health (HSPH), in collaboration with the South African National Department of Health (NDOH). The purpose of the ASELPH Fellowship is to provide health leaders with a sound understanding of the evolving healthcare system and to equip them with the skills and competencies necessary to strengthen and elevate executive level training for future generations of executive health leaders.

The ASELPH partnership wishes to implement what is known as a 360° assessment of competencies and hereby requests your support by completing the questionnaire below so that we can provide feedback to the Fellow about how colleagues, i.e. supervisors/supervisors, peers and subordinates, see them in the workplace. This assessment will also provide ASELPH with critical additional information for ongoing programme improvement and evaluation. Your active and honest participation in these assessments will be greatly appreciated so that the Fellow can really benefit from learning where they are seen to be stronger and focus on improving where they are weaker.

The ASELPH Fellows and their supervisors were asked to nominate the Fellow's 360° assessors, and you were identified and permission was given for you to assess her/him. An informed consent letter from the Fellow is available that permits you to assess the fellow. If you are agreeable, please complete the ASELPH Executive Assessment of the Fellow. We will then ask you, if you are agreeable to completing this assessment again after completion of the programme.

With your consent, we may also use the information in a research study at the University of Pretoria for teaching and learning and health sector improvement purposes. The use of the information you provide for this research would be voluntary. You can refuse to allow the information you provide to be used without any consequences and without giving any reason. To ensure confidentiality in such a study, unique codes will be provided to Fellows' names and only these codes will be used by the researcher. Neither you nor the Fellow will be identified or identifiable individually in any publication that might come from this study.

FELLOW'S INFORMED CONSENT

If ASELPH decides to use this 360° information in a research study for the purposes and in the manner outlined above, please indicate if this will be acceptable or not to you.

I hereby agree to have the information I provide included in a research study in accordance with the conditions outlined above:

- ❍ Yes (1)
- ❍ No (2)

SECTION A

1. Sex:

- ❍ Male (1)
- ❍ Female (2)

2. How old are you?

3. I am currently employed in the following province:

- ❍ Eastern Cape (1)
- ❍ Free State (2)
- ❍ Gauteng (3)
- ❍ KwaZulu Natal (4)
- ❍ Limpopo (5)
- ❍ Mpumalanga (6)
- ❍ Northern Cape (7)
- ❍ Northwest (8)
- ❍ Western Cape (9)

4. Qualifications

4.1. Please indicate your highest qualification:

- ❍ Certificate (1)
- ❍ Diploma (2)
- ❍ Bachelor's degree (3)
- ❍ Honours degree (4)
- ❍ Master's degree (5)
- ❍ Post graduate diploma (6)
- ❍ Doctorate degree (7)
- ❍ Other (8)

4.2 Please indicate the name of the qualification

4.3 Please indicate the name of the Institution from where you received the qualification

5. Management Training:

5.1 Please indicate, if any, your previous management training:

- ❍ Yes (Please specify type of training and institution) (1)
- ❍ No previous management training (2)

5.2 Please specify type of training

5.3 Please specify institution where you received the management training

6. Please indicate your current position in your organisation i.e. Deputy Director General; Chief Director; CEO; Director; Deputy Director; Assistant Director; District Manager; Other (please specify)

7. How many years have you been a managerial position (in any organisation)?

8. Indicate the term of service with your present organisation

9. Indicate the number of people who report directly to you and the size of your overall team.

Number of people reporting directly to you

Size of your overall team

SECTION B: Assessment of Competencies

Please assess the Fellow according to the ASELPH Leadership and Management Competencies below and tick the relevant number according to the following scale in the box:

1. People Management and Empowering Environment:
Must be able to manage and encourage people in a collaborative environment, advocate for teamwork, optimise their outputs and effectively manage relationships in order to achieve organisational goals.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
1.1 Maintain good morale in the team (1)	❍	❍	❍	❍	❍
1.2 Optimal management of absenteeism and staff - attendance rates (2)	❍	❍	❍	❍	❍
1.3 Optimal overall job performance as agreed in the PMDS (performance management development system (3)	❍	❍	❍	❍	❍
1.4 Embrace diversity in the team (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

2. Self-Management
Must be able to recognise ones learning style, personal attributes, professional development needs, be good with time management and taking initiative

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
2.1 Understand own strengths and weaknesses and have a self-development plan in place (1)	❍	❍	❍	❍	❍
2.2 Understand the team's strengths and weaknesses and have development plans in place (2)	❍	❍	❍	❍	❍
2.3 Excellent time management and meeting deadlines (3)	❍	❍	❍	❍	❍
2.4 Clear about own philosophy of leadership (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

3. Honesty and Integrity

Must be committed to honesty and integrity, build and display high standards of ethical and moral conduct, apply self-corrective measures and be reliable and accountable.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
3.1 Treats others with dignity and respect (1)	❍	❍	❍	❍	❍
3.2 Emphasise ethical standards and moral management in all aspects of work (2)	❍	❍	❍	❍	❍
3.3 Be reliable and accountable (3)	❍	❍	❍	❍	❍
3.4 Hold others (subordinates and managers) accountable for their work (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

4. Client Orientation and Customer focus

Must acknowledge customer rights and be committed to a client-orientated approach to service delivery according to Batho-Pele principles.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
4.1 Open door policy for customer complaints or compliments (1)	❍	❍	❍	❍	❍
4.2 Suggestion boxes for clients to assess service daily (2)	❍	❍	❍	❍	❍
4.3 Clients have the opportunity to give feedback re the service (anonymously and in a safe environment) (3)	❍	❍	❍	❍	❍
4.4 Suggestions are used for improvement of the service (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

5. Communication

Must be able to use verbal and written communication competently, be committed to the exchange of ideas, sharing of ideas and practices both internal and external communication effectively and consistently.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
5.1 Timeously and accurately communicate information to the team (1)	❍	❍	❍	❍	❍
5.2 Timeously and accurately communicate information to all external stakeholders (2)	❍	❍	❍	❍	❍
5.3 Regular feedback and monitoring meetings (3)	❍	❍	❍	❍	❍
5.4 Use the media and all forums to communicate health issues to the public (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

6. Resource Management and Allocation

Must be able to manage the human resources, physical resources and materials of the organisation in accordance to strategic plans of the organisation and within the legal and policy framework.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
6.1 Match the available personnel with the tasks at hand (1)	❍	❍	❍	❍	❍
6.2 Appropriate allocation of resources to deliver effective and efficient service (2)	❍	❍	❍	❍	❍
6.3 No drug or material outages/ shortages (3)	❍	❍	❍	❍	❍
6.4 Systematise community resources to improve health service access (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

7. Financial Management

Must be able to compile and manage budgets, control cash flow, institute risk management and administer tender procurement processes in accordance with
generally recognised financial practices in order to ensure the achievement of organisational objectives.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
7.1 Compile and manage budgets (1)	❍	❍	❍	❍	❍
7.2 Aware of the overall expenses and cost per patient/treatment (2)	❍	❍	❍	❍	❍
7.3 Manage fair tender procurement processes (3)	❍	❍	❍	❍	❍
7.4 Draw up financial reports and communicate to all the relevant stakeholders (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

8. Problem Solving and Analysis

Must be competent at the systematic identification, analysis and resolution of existing and anticipated problems on a timely basis and manage the risk appropriately.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
8.1 Process in place of identifying problems in the team (1)	❍	❍	❍	❍	❍
8.2 Process in place of identifying problems in service delivery and community (2)	❍	❍	❍	❍	❍
8.3 Policy in place for risk management (3)	❍	❍	❍	❍	❍
8.4 Report on these problems and solutions for this form part of knowledge sharing and management (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

9. Programme and Project Management

Must be able to develop, implement, evaluate and adjust plans to achieve desired objectives, while ensuring the optimal use of resources.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
9.1 Actively involved in identifying and developing programmes in the community (1)	❍	❍	❍	❍	❍
9.2 Monitor and evaluate the programmes to meet objectives set (2)	❍	❍	❍	❍	❍
9.3 Advocate for resources to ensure the success of these programmes and projects (3)	❍	❍	❍	❍	❍
9.4 Submit reports to keep stakeholders informed of progress and new developments of the project (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

10. Community/ Partnership Collaboration

Must be able to align the organisation's priorities with the needs and values of the community, implement the governance framework and ensure stakeholder involvement and networking.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
10.1 Coordinate and lead community efforts to address public health problems (1)	❍	❍	❍	❍	❍
10.2 Build and maintain strong relationships with the community (2)	❍	❍	❍	❍	❍
10.3 Strong community participation in all projects (3)	❍	❍	❍	❍	❍
10.4 Community representatives form part of strategic planning (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

11. Knowledge Management

Must be able to promote and sharing of knowledge, information, and lessons learnt and applying theory into practice

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
11.1 System in place for knowledge sharing (1)	❍	❍	❍	❍	❍
11.2 Infrastructure (IT system) supports the knowledge management process (2)	❍	❍	❍	❍	❍
11.3 Policies in place for knowledge management (3)	❍	❍	❍	❍	❍
11.4 Research used for service delivery improvement (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

12. Strategic Leadership

Must be able to provide vision, give direction and inspire others in order to deliver from an organisational mandate.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
12.1 Models a personal example of what is expected of others (1)	❍	❍	❍	❍	❍
12.2 Share the “big picture” of what needs to be accomplished (2)	❍	❍	❍	❍	❍
12.3 Empower people to make decisions (3)	❍	❍	❍	❍	❍
12.4 Awards and rewards system in place for people’s performance (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

13. Change Management

Must be able to initiate and support organisational transformation and change in order to successfully implement new initiatives and deliver on service delivery commitments.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
13.1 Initiate and embrace change to improve the working environment (1)	❍	❍	❍	❍	❍
13.2 Explore outside the organisation for innovative ways to improve the workplace and service delivery (2)	❍	❍	❍	❍	❍
13.3 Encourage all to embrace challenging opportunities that test their skills and abilities (3)	❍	❍	❍	❍	❍
13.4 Advocate for policies to be reviewed regularly (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

14. Service Delivery Innovation (SDI)

Must be competent in process integration, policies and structures across the organisation to achieve improved efficiency and effectiveness on SDI and
implement new ways of performing tasks and develop the organisation as a whole.

	Not competent (1)	Below-average competence (2)	Average competence (3)	Above-average competence (4)	Fully competent (5)
14.1 Ensure that the team adheres to the principles and standards of efficiency and effectiveness (1)	❍	❍	❍	❍	❍
14.2 Runs the organisation on a common set of values that will encourage innovation (2)	❍	❍	❍	❍	❍
14.3 Manage personal and staff development to ensure a competent team (3)	❍	❍	❍	❍	❍
14.4 Regular feedback on how the organisation is performing and how to develop further (4)	❍	❍	❍	❍	❍

Reflecting on the score you have given yourself, what has led you to give yourself that score?

SECTION C: General

Kindly complete the questions below:

1. Some feel that the importance of Leadership has been overrated with regard to the health system in South Africa (SA), while others feel that it is extremely important. What do you think?

2. Some researchers have shown that leaders are born while others feel that leadership skills can be acquired. What is your opinion on this?

3. How important do you think Leadership training is for health managers in SA?

4. What do you see are the biggest challenges that leaders in healthcare in SA face today?

5 In which area did the ASELPH Fellowship develop the fellow?

6. The ASELPH Fellowship is made up of 10 modules, which comprise one week of classroom time, the hours preparation time and 50 hours pre-and post-reading and assignment time. What do you think is the right balance between class time and self-directed and online learning?

7. To what extent did the fellow take learning from the classroom back to the workplace?

8. What were some of the challenges that influenced implementing the learning from the classroom in the workplace?

9. How much better do you think this course made the fellow capable of managing effectively in their current work responsibilities?

10. Assessments are necessary for the evaluation of skills, knowledge or programmes and these assessments will be done during the ASELPH Fellowship. What is your opinion about assessments of the fellow as well as of the ASELPH Fellowship that the fellow is embarking on?

11. What is your opinion about assessment of the fellow's skills and knowledge throughout the course or even in the workplace after the module? What are some of the challenges that you foresee about these assessments?

12. What methods do you think would be useful to assess whether the ASELPH Fellowship has improved the fellow's effectiveness in the workplace?

13. Competencies are important for optimal performance of managers. What are the main competencies (please name at least five competencies) that should be assessed in your workplace and how?

14. The literature has divided opinions about the value of mentoring programmes. What do you think of the actual value of mentoring programmes?

15. On a scale of 1-10 where 10 is “very important” and 1 is “not important at all”, how important is the faculty/lecturer for teaching and why?

Not Important at all/Very Important

1	2	3	4	5	6	7	8	9	10

Why?

16. On a scale of 1-10 where 10 is “very important” and 1 is “not important at all”, how important is the facility/venue for teaching and why?

Not Important at all/Very Important

1	2	3	4	5	6	7	8	9	10

Why?

17. Any training programme usually has a golden thread that runs through for all the modules. What should this thread in the ASELPH Fellowship be for Fellows?

We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix I: Assessors 360° Retrospective Assessment

FELLOW'S INFORMATION LEAFLET & INFORMED CONSENT

Dear Assessor

Thank you for your valuable input during completion of the ASELPH assessment. The final assessment is for you to recall any improvement (or not) in the Fellow's performance after the training compared to before the Fellow started the ASELPH journey. It will be of great value if you can give specific examples, where possible, in the block with the score or under general comments. This assessment will take you about 5 to 10 minutes.

With your consent, we may also use the information in a research study at the University of Pretoria for teaching and learning and health sector improvement purposes. The use of the information you provide us for this research would be voluntary. You can refuse to allow the information you provide to be used without any consequences and without giving any reason. To ensure confidentiality in such a study, unique codes will be provided to Fellows' names and only these codes will be used by the researcher. Neither you nor the Fellow will be identified or identifiable individually in any publication that might come from this study.

FELLOW'S INFORMED CONSENT

If ASELPH decides to use this 360° information in a research study for the purposes and in the manner outlined above, please indicate if this is acceptable or not to you.

I hereby further agree to have the information I provide included in a research study in accordance with the conditions outlined above:

- ❍ Yes (1)
- ❍ No (2)

Please indicate in the box below: Assessor's (Your) name:

Please indicate in the box below: Fellow's (Fellow's) name

Competencies	**No Improvement (1)**	**Little Improvement (2)**	**Average Improvement (3)**	**A lot of Improvement (4)**	**Exceptional Improvement (5)**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
1. People Management and Empowering Environment: Must be able to manage and encourage people in a collaborative environment, advocate for teamwork, optimise their outputs and effectively manage relationships in order to achieve organisational goals.					
2. Self-Management Must be able to recognise one's learning style, personal attributes, professional development needs, be good with time management and taking initiative					
3. Honesty and Integrity Must be committed to honesty and integrity, build and displays high standards of ethical and moral conduct apply self-corrective measures and be reliable and accountable.					
4. Client Orientation and Customer focus Must acknowledge customer rights and be committed to a client-orientated approach to service delivery according to Batho-Pele principles.					
5. Communication Must be able to use verbal and written communication competently, be committed to the exchange of ideas, sharing of ideas and practices both internal and external communication effectively and consistently.					
6. Resource Management and Allocation Must be able to manage the human resources, physical resources and materials of the organisation in accordance to strategic plans of the organisation and within the legal and policy framework.					
7. Financial Management Must be able to compile and manage budgets, control cash flow, institute risk management and administer tender procurement processes in accordance with generally recognised financial practices in order to ensure the achievement of organisational objectives.					

8. Problem Solving and Analysis Must be competent at the systematic identification, analysis and resolution of existing and anticipated problems on a timely basis and manage the risk appropriately.					
9. Programme and Project Management Must be able to develop, implement, evaluate and adjust plans to achieve desired objectives, while ensuring the optimal use of resources.					
10. Community/ Partnership Collaboration Must be able to align the organisation's priorities with the needs and values of the community, implement the governance framework and ensure stakeholder involvement and networking.					
11. Knowledge Management Must be able to promote and share knowledge, information, and lessons learnt and applying theory into practice.					
12. Strategic Leadership Must be able to provide vision, give direction and inspire others in order to deliver from an organisational mandate.					
13. Change Management Must be able to initiate and support organisational transformation and change in order to successfully implement new initiatives and deliver on service delivery commitments.					
14. Service Delivery Innovation (SDI) Must be competent in process integration, policies and structures across the organisation to achieve improved efficiency and effectiveness on SDI, and implement new ways of performing tasks and develop the organisation as a whole.					
General Comments on the improvement (or not) after the ASELPH Fellowship training (according to your previous assessment). Please do feel free to add more information if you wish to • **How ASELPH developed the Fellow** • **How much better the Fellow is managing**					
Comments from Electronic/Telephonic interview: • **You knew the fellow before he attended the ASELPH Fellowship training. Above are some improvements you mentioned in your previous assessment. Are there any other comments re the improvement of the Fellow's performance that you wish to add?** • **What are the specific areas from before the training where the programme made a difference?**					

We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix J: Daily Module Assessment

Sample

The information about the modules for the week was adequately disseminated prior to the start of the course

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
Executive Leadership (1)	❍	❍	❍	❍	❍

Comments:

Team Building (Svd Berg-Cloete/L Thomas)

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
The presentation was clear (1)	❍	❍	❍	❍	❍
The presenter's presentation and teaching skills were excellent (4)	❍	❍	❍	❍	❍
The presenter's knowledge was excellent (5)	❍	❍	❍	❍	❍
The materials will be applicable in my place of work (6)	❍	❍	❍	❍	❍
My knowledge increased (7)	❍	❍	❍	❍	❍

Comments:

Group presentations of **Executive Leadership for Health** ***(to include responsible leadership) (LHE771)*** cases:

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
The group presentations were valuable (1)	❍	❍	❍	❍	❍

Comments:

Please give us your general feedback re Executive Leadership for Health *(to include responsible leadership) (LHE771)* by responding to the following statements:

1. The course objectives were achieved:
   - ❍ Strongly Disagree (1)
   - ❍ Disagree (2)
   - ❍ Neither Agree nor Disagree (3)
   - ❍ Agree (4)
   - ❍ Strongly Agree (5)

Comments:

2. I have developed the Competencies as specified in the module overview:

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Comments:

3. My level of knowledge of the subject/s prior to attending this module:

- ❍ Very Weak (1)
- ❍ Weak (2)
- ❍ Average (3)
- ❍ High (4)
- ❍ Very High (5)

Comments:

4. My level of knowledge of the subject/s after attending this module:

- ❍ Very Weak (1)
- ❍ Weak (2)
- ❍ Average (3)
- ❍ High (4)
- ❍ Very High (5)

Comments:

5. The information from this module will help me to reflect on and contribute to discussions on **Executive Leadership for Health**

- ❍ Strongly Disagree (1)
- ❍ Strongly Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Comments:

6. What aspects of **Executive Leadership for Health** would you want to reflect on and/or discuss with colleagues?

7. How can the learning from the **Executive Leadership for Health** module be applied in your place of work?

8. What will you do differently in your job after this module?

9a. I would like to attend more courses on **Executive Leadership for Health**

- ❍ Strongly Disagree (1)
- ❍ Strongly Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

9b. What topics would you like this module to include?

10. The **Executive Leadership for Health** module was well organised and managed:

- ❍ Strongly Disagree (1)
- ❍ Strongly Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Comments:

General Comments: Do you have any other comments or thoughts about the course you would like the Albertina Sisulu Executive Health Leadership Programme to take note of

Appendix K: Permission Letter: University of Pretoria

Permission to research at the University of Pretoria

To: Acting Dean, Faculty of Health Sciences
University of Pretoria

Prof De Jager

From: The Investigator
University of Pretoria

Dr van der Berg-Cloete

Re: Permission to do research at School of Health Systems & Public Health, University of Pretoria

Prof Buch, Prof White and I are researchers working at the University of Pretoria. I am requesting permission on behalf of us all to conduct a study at the **School of Health Systems & Public Health, University of Pretoria,** which involves the Fellows who completed and are still on the ASELPH Fellowship training.

The request is lodged with you in terms of the requirements of the Promotion of Access to Information Act. No. 2 of 2000.

The title of the study is The effectiveness of the Albertina Sisulu Executive Leadership Programme in enhancing leadership competencies of public health service managers in South Africa.

The researchers request access to gather information from the ASELPH Fellows during the ASELPH course.

We intend to publish the findings of the study in a professional journal and/ or at professional meetings, such as symposia, congresses, or other meetings of the same nature.

We intend to protect the personal identity of the Fellows by assigning each patient a random code number.

We undertake not to proceed with the study until we have received approval from the Faculty of Health Sciences Research Ethics Committee, University of Pretoria.

Yours sincerely

Signature of the Principle Investigator

Permission to do the research study at this institution and to access the information as requested is hereby approved.

Acting Dean

University of Pretoria

Prof De Jager

Signature

Official Stamp

Permission to do research at the University of Pretoria

To: Chairperson: School of Health Systems and Public Health, University of Pretoria

Prof K Voyi

From: The Investigator

University of Pretoria

Dr S E van der Berg-Cloete

Re: Permission to do research at School of Health Systems & Public Health, University of Pretoria

Prof Buch, Prof White and I are researchers working at the University of Pretoria. I am requesting permission on behalf of us all to conduct a study at the **School of Health Systems & Public Health, University of Pretoria**, which involves the Fellows who completed and are still on the ASELPH Fellowship training.

The request is lodged with you in terms of the requirements of the Promotion of Access to Information Act. No. 2 of 2000.

The title of the study is The effectiveness of the Albertina Sisulu Executive Leadership Programme in enhancing leadership competencies of public health service managers in South Africa.

The researchers request access to gather information from the ASELPH Fellows during the ASELPH course.

We intend to publish the findings of the study in a professional journal and/ or at professional meetings, such as symposia, congresses, or other meetings of the same nature.

We intend to protect the personal identity of the Fellows by assigning each patient a random code number.

We undertake not to proceed with the study until we have received approval from the Faculty of Health Sciences Research Ethics Committee, University of Pretoria.

Yours sincerely

Signature of the Principle Investigator

Permission to do the research study at this hospital and to access the information as requested is hereby approved.

Chairperson

School of Health Systems and Public Health

Prof K Voyi

Signature of the CEO

Official Stamp

Appendix L: Permission Letter: Public Healthcare Facilities

Permission to access Records / Files / Data base at the

_____Hospital

To: Chief Executive Officer/Information Officer
Hospital

Dr _____

From: The Investigator
University of Pretoria

Dr van der Berg-Cloete

Re: Permission to do research at Public Healthcare Facilities

Prof Buch, Prof White and I are researchers working at the University of Pretoria. I am requesting permission on behalf of us all to conduct a study at the **Public Healthcare Facilities**, which involves the Fellows who completed and are still on the ASELPH Fellowship training.

The request is lodged with you in terms of the requirements of the Promotion of Access to Information Act. No. 2 of 2000.

The title of the study is The effectiveness of the Albertina Sisulu Executive Leadership Programme in enhancing leadership competencies of public health service managers in South Africa.

The researchers request access to gather information from the ASELPH Fellows at your facilities.

We intend to publish the findings of the study in a professional journal and/ or at professional meetings, such as symposia, congresses, or other meetings of the same nature.

We intend to protect the personal identity of the Fellows by assigning each patient a random code number.

We undertake not to proceed with the study until we have received approval from the Faculty of Health Sciences Research Ethics Committee, University of Pretoria.

Yours sincerely

Signature of the Principle Investigator

Permission to do the research study at this hospital and to access the information as requested is hereby approved.

Chief Executive Officer

_____Hospital

Dr _____ _____

Signature of the CEO

Hospital Official Stamp

Appendix M: Permission Letter: ASELPH Executives

Permission to conduct the ASELPH effectiveness study

To: Director: ASELPH
University of Pretoria

From: The Investigator

Prof E Buch

Dr S van der Berg-Cloete

Re: Permission to conduct the ASELPH effectiveness study

Prof Buch, Prof White and I are researchers working at the University of Pretoria. I am requesting permission on behalf of us all to conduct the ASELPH effectiveness study that involves the Fellows who completed and are still on ASELPH Fellowship training.

The request is lodged with you in terms of the requirements of the Promotion of Access to Information Act. No. 2 of 2000.

The title of the study is The effectiveness of the Albertina Sisulu Executive Leadership Programme in enhancing leadership competencies of public health service managers in South Africa.

The researchers request access to information that involves the ASELPH Executive Fellowship Programme.

We intend to publish the findings of the study in a professional journal and/ or at professional meetings, such as symposia, congresses, or other meetings of the same nature.

We intend to protect the personal identity of the Fellows by assigning each patient a random code number.

We undertake not to proceed with the study until we have received approval from the Faculty of Health Sciences Research Ethics Committee, University of Pretoria.

Yours sincerely

Signature of the Principle Investigator

Permission to do the research study at this hospital and to access the information as requested is hereby approved.

Director

ASELPH

Prof E Buch

Signature of Director

Appendix N: Demographic Results of Fellows

Table1: Sex, Age, Province			
n=27		**Responses**	
		N	**%**
Sex	Male	8	30
	Female	19	70
Age	<30	1	4
	31 - 40	4	15
	41 - 50	12	44
	51 - 60	10	37
Province employed in	Eastern Cape	2	7
	Free State	3	11
	Gauteng	11	41
	KwaZulu Natal	3	11
	Limpopo	3	11
	Northwest	5	18

Table 2: Qualifications			
		Responses	
		N	**%**
Highest Qualification	**Bachelor's degree**: B.Pharm BCur in Nursing; Bachelor of Science; Bachelor of Medicine & Bachelor of Surgery; Bachelor's degree in Occupational Therapy; Bachelor of Nutrition ; Bachelor of Speech and Hearing Therapy	13	48
	Honours degree: BA Hons Human Resource Development ; Honours Degree in Population Studies	5	19
	Master's degree: MBChB ; MPH; International Public Health; Masters in Consumer Science; MBA; Ma Cur in Nursing	4	15
	Post-graduate diploma: Project Management	4	15
	Doctorate degree: Pharmaceutical Chemistry	1	4
Institution	**Gauteng:** Sefako Makgatho Health Sciences University (SMU), University of South Africa (Unisa), University of Johannesburg (UJ) and University of Pretoria (UP)	14	44

	Western Cape: University of Western Cape (UWC)	1	4
	North West: NWU	4	15
	KZN: UKZN, UDW (Durban Westville)	2	8
	Limpopo: University of Limpopo	4	15
	Eastern Cape: University of Fort Hare (UFH), Walter Sisulu	3	12
	Colleges: Nursing College,	1	4
	Abroad: Unisex Queensland	2	7
	NR	7	26
Table 3: Management Training			
Management Training	Yes	16	59
	No	10	37
	NR	1	4
Type of management training	Specific Management Training: Public health, MBA, admin management, nursing, pharmacy	15	94
	Non-specific i.e. management training	1	6
Institution for management training	**Tertiary Institutions:** UJ, Yale, UFH, UP, UWC., UCT, UKZN **Other:** FPD (Foundation for Professional Development), PALAMA (Public Administration Leadership and Management Academy); DOH (Department of Health)		
Table 4: Organisational Position, Service and Team			
Current position in your organisation	CEO	4	15
	Deputy Director	5	19
	Assistant Director	2	7
	District Manager	3	11
	Manager/Supervisor Level: programme manager, Clinical Manager; Assistant Manager; Operational Manager, Sub-district mental health coordinator; Master Trainer (MDR TB); Nutrition Co-ordinator; Chief Supervisory Occupational Therapist; Senior Lecturer; Chief Supervisor Occupational Therapist; Assistant Manager ; Senior Manager nursing	13	48
Length of managerial position (in any organisation)	1-4 years	5	19
	5–9 years	10	37
	10-14 years	10	37
	15 years or more	1	4
	None	1	4

Term of service with your present organisation	Less than 2 years	5		19
	Between 2 and 5 years	5		19
	Between 5 and 10 years	12		44
	Between 10 and 20 years	2		7
	More than 20 years	3		11
The number of people who report directly to you and the size of your overall team.		**Average**	**Minimum**	**Maximum**
	Direct Team	11	2	51
	Overall team	645	2	5323

Appendix O: Demographic Results of Assessors

Table1: Gender, Age, Province						
		Reponses (n=83)				
		Supervisor	Colleague	Subordinate	N	%
1. Gender	Male	13	14	6	33	40
	Female	11	24	15	50	60
2. Age	<30	0	0	4	4	5
	31 - 40	4	8	6	18	22
	41 - 50	7	8	5	20	24
	51 - 60	8	14	3	25	30
	>61	3	2	0	5	6
	NR	2	6	3	11	13
		Supervisor	Colleague	Subordinate	N	%
Province employed in	Eastern Cape	3	3	1	7	8
	Free State	2	2	2	6	7
	Gauteng	11	14	7	32	39
	KwaZulu Natal	3	7	2	12	14
	Limpopo	2	6	3	11	13
	Mpumalanga	0	0	0	0	0
	Northern Cape	0	0	1	1	1
	Northwest	3	6	5	14	17
Table 2: Qualifications						
Qualifications	Certificate	0	1	1	2	2
	Diploma	2	5	3	10	12
	Bachelor's degree	3	8	6	17	20
	Honours degree	6	2	6	14	17
	Master's degree	10	11	2	23	28
	Post graduate diploma	0	4	1	5	6
	Doctorate degree	2	1	0	3	4
	Other		4	0	4	5
	NR	1	2	2	5	6
Name of Qualifications	**Certificate** **Diploma:** N. Dip. Procurement Management; Diploma in Pharmacy; Post grad diploma in health and welfare; Advanced diploma in Business Project Management; National Diploma in Credit Management; Diploma in Administrative Management; Diploma in Nursing Admin; Diploma in Transport Management **Bachelor's degree:** Bcur, B.Pharm; B. Speech-Language-,and Hearing Therapist, Bachelor's Degree in Information Studies; BTech (Community Science); Bachelor of Administration; BA **Honours degree** :					

	Master's degree : MBChB, MBA, Mcur, MSocSci, MMED (Fam Med), MPA, MPH, MSc Dent, MScDietetics, MSc Radiography **Other:** Fellow of the College of Physicians					
					N	%
Name of the Institution	Gauteng: UNISA, UJ, UP, SMU				28	34
	Western Cape				6	7
	KZN				7	8
	Limpopo				3	4
	Eastern Cape				4	5
	UFS				4	5
	Technikons: Wits, TUT, SA				5	6
	Colleges				3	4%
	Abroad				8	10%
	NR				7	8%
Table 3: Management Training						
		Supervisor	Colleague	Subordinate	N	%
Previous management training:	Yes	18	24	8	50	60
	No previous management training	4	7	10	21	25
	NR	2	7	3	12	14
Management training	Specific: hospital Mx, MBA, nursing mx, public health, pharmacy Mx, EMDP, Non-specific: management, short courses etc					
Institution where you received the management training	**Tertiary institutions** including UJ, Yale, UFH, UP, UWC., UCT, UKZN, UFS, **Other**: FPD, GCRA, Spark health, Growth link, DOH					
Table 4: Organisational Position, Service and Team						
Current position in your organisation	Deputy Director General; District Manager;	0	1	0	1	1
	Chief Director	2	0	0	2	2
	CEO	3	0	0	3	4
	Director	7	2	0	9	11
	Deputy Director	4	12	3	19	23
	Assistant Director: Assistant Director: Speech and Hearing	2	5	3	10	12
	Other	8	12	12	32	39
	Other (please specify): programme manager , Clinical Manager; Assistant Manager; Operational Manager, Sub-district mental health coordinator; Master Trainer(MDR TB); Nutrition Co-ordinator; Chief Supervisory Occupational					

	Therapist; Senior Lecturer; Chief Supervisor Occupational Therapist; Assistant Manager ; Senior Manager nursing					
	NR	0	4	3	7	8
Length of managerial position (in any organisation)	1-4 years	2	3	6	11	13
	5 – 9 years	6	8	6	20	24
	9-14 years	9	15	4	28	34
	More than 15 years	7	5	1	13	16
	None	0	7	4	11	13
Term of service with your present organisation	Less than 2 years	0	0	1	1	1
	Between 2 and 5 years	6	3	1	10	12
	Between 5 and 10 years	3	5	4	12	14
	Between 10 and 20 years	3	10	5	18	22
	More than 20 years	8	10	2	20	24
	Other/NR	4	10	8	22	27

Number of people who report directly to you and the size of your overall team.	**Reponses (n=83)**					
	Average	Supervisor	Colleague	Subordinate	Min	Max
Direct team	17	2-124	1-100	1-74	1	124
Overall team	65	2-714	1-435	1-850	1	850

Appendix P: Fellows significance of performance indicators

Competency	Performance indicator	Probability P≤ 0.05	Significance (z)	Below average competence		Above Average competence	
				Pre-training	Post-training	Pre-training	Post-training
Table 1: People Management and Empowering Environment: Significance of Fellow's Scores							
1. People Management and Empowering Environment	1.1 Maintain good morale in the team	0.001	-3.317	59	19	41	81
	1.2 Optimal management of absenteeism	0.029	-2.183	74	41	26	59
	1.3 Optimal overall job performance as agreed in the PMDS (performance management development system	0.001	-3.317	67	22	30	74
	1.4 Embrace diversity in the team	0.001	-3.212	44	19	52	78
	Average pre- and post-training scores			61	28	37	73
Table 2: Self-Management: Significance of Fellow's Scores							
2. Self-Management	2.1 Understand own strengths and weaknesses and have a self-development plan in place	0.002	-3.051	52	7	48	89
	2.2 Understand the team's strengths and weaknesses and have development plans in place	0.005	-2.840	67	19	33	74
	2.3 Excellent time management and meeting deadlines	0.008	-2.646	63	33	37	63
	2.4 Clear about own philosophy of leadership	0.001	-3.464	59	11	41	85
	Average pre- and post-training scores			60	20	40	78
Table 3: Honesty and Integrity: Significance of Fellow's Scores							
3. Honesty and Integrity	3.1 Treats others with dignity and respect	0.000	4.532	22	4	78	93
	3.2 Emphasise ethical standards and moral management in all aspects of work	0.020	-2.333	44	11	56	81
	3.3 Being reliable and accountable	0.008	-2.646	30	0	70	96
	3.4 Hold others (subordinates and managers) accountable for their work	0.011	-2.530	48	14	52	81
	Average pre- and post-training scores			36	10	64	88

Table 4: Client Orientation and Customer focus: Significance of Fellow's Scores							
4. Client Orientation and Customer focus	4.1 Open door policy for customer complaints or compliments	0.014	-2.449	30	4	70	81
	4.2 Suggestion boxes for clients to assess service daily	0.414	-0.816	37	26	63	59
	4.3 Clients have the opportunity to give feedback re the service (anonymously and in a safe environment)	0.020	-2.333	44	7	52	44
	4.4 Suggestions are used for improvement of the service	0.058	-1.897	44	19	56	63
	Average pre- and post-training scores			39	19	60	62
Table 5: Communication: Significance of Fellow's Scores							
5. Communication	5.1 Timeously and accurately communicate information to the team	0.012	-2.496	48	11	52	85
	5.2 Timeously and accurately communicate information to all external stakeholders	0.007	-2.714	59	0	41	74
	5.3 Regular feedback and monitoring meetings	0.035	-2.111	52	26	44	70
	5.4 Use the media and all forums to communicate health issues to the public	0.317	-1.000	63	44	37	48
	Average pre- and post-training scores			56	20	44	69
Table 6: Resource Management and Allocation: Significance of Fellow's Scores							
6. Resource Management and Allocation	6.1 Match the available personnel with the tasks at hand	0.008	-2.673	59	19	41	74
	6.2 Appropriate allocation of resources to deliver effective and efficient service	0.021	-2.309	52	22	41	70
	6.3 No drug or material outages/shortages	0.012	-2.500	67	33	26	59
	6.4 Systematise community resources to improve health service access	0.021	-2.309	63	37	30	56
	Average pre- and post-training scores			60	28	34	65

Table 7: Financial Management: Significance of Fellow's Scores							
7. Financial Management	7.1 Compile and manage budgets	0.317	-1.000	56	37	44	56
	7.2 Aware of the overall expenses and cost per patient/treatment	0.248	-1.155	67	63	26	41
	7.3 Manage fair tender procurement processes	0.248	-1.155	63	44	33	48
	7.4 Draw up financial reports and communicate to all the relevant stakeholders	0.034	-2.121	63	33	33	59
	Average pre- and post-training scores			65	44	34	51
Table 8: Problem Solving and Analysis: Significance of Fellow's Scores							
8. Problem Solving and Analysis	8.1 Process in place of identifying problems in the team	0.000	-3.638	70	4	30	85
	8.2 Process in place of identifying problems in service delivery and community	0.001	-3.207	67	19	33	74
	8.3 Policy in place for risk management	0.035	-2.111	67	33	33	59
	8.4 Report on these problems and solutions for this form part of knowledge sharing and management	0.052	-1.941	63	30	0	63
	Average pre- and post-training scores			67	26	32	70
Table 9: Programme and Project Management: Significance of Fellow's Scores							
9. Programme and Project Management	9.1 Actively involved in identifying and developing programmes in the community	0.003	-3.000	63	19	37	70
	9.2 Monitor and evaluate the programmes to meet objectives set	0.021	-2.309	63	26	33	67
	9.3 Advocate for resources to ensure the success of these programmes and projects	0.007	-2.714	59	22	41	70
	9.4 Submit reports to keep stakeholders informed of progress and new developments of the project	0.020	-2.333	63	26	33	63
	Average pre- and post-training scores			62	23	36	68

Table 10: Community/ Partnership Collaboration: Significance of Fellow's Scores							
10. Community/ Partnership Collaboration	10.1 Coordinate and lead community efforts to address public health problems	0.317	-1.000	52	30	48	59
	10.2 Build and maintain strong relationships with the community	0.317	-1.000	52	30	48	59
	10.3 Strong community participation in all projects	0.206	-1.265	56	30	44	59
	10.4 Community representatives form part of strategic planning	0.206	-1.265	59	30	19	41
	Average pre- and post-training scores			55	30	40	55
Table 11: Knowledge Management: Significance of Fellow's Scores							
11. Knowledge Management	11.1 System in place for knowledge sharing	0.001	-3.317	56	22	33	74
	11.2 Infrastructure (IT system) supports the knowledge management process	0.034	-2.121	78	52	22	44
	11.3 Policies in place for knowledge management	0.020	-2.333	67	41	26	48
	11.4 Research used for service delivery improvement	0.020	-2.333	81	30	19	63
	Average pre- and post-training scores			70	36	25	57
Table 12: Strategic Leadership: Significance of Fellow's Scores							
12. Strategic Leadership	12.1 Models a personal example of what is expected of others	0.000	-3.638	63	4	37	93
	12.2 Share the "big picture" of what needs to be accomplished	0.008	-2.673	52	11	48	85
	12.3 Empower people to make decisions	0.013	-2.496	56	15	44	78
	12.4 Awards and rewards system in place for people's performance	0.109	-1.604	56	26	44	67
	Average pre- and post-training scores			56	14	44	81

Table 13. Change Management: Significance of Fellow's Scores							
13. Change Management	13.1 Initiate and embrace change to improve the working environment	0.002	-3.051	56	11	41	85
	13.2 Explore outside the organisation for innovative ways to improve the workplace and service delivery	0.004	-2.887	59	19	37	78
	13.3 Encourage all to embrace challenging opportunities that test their skills and abilities	0.020	-2.324	56	19	41	78
	13.4 Advocate for policies to be reviewed regularly	0.011	-2.530	67	33	30	63
	Average pre- and post-training scores			61	20	37	76
Table 14: Service Delivery Innovation (SDI): Significance of Fellow's Scores							
14. Service Delivery Innovation (SDI)	14.1 Ensure that the team adhere to the principles and standards of efficiency and effectiveness	0.004	-2.887	67	26	33	67
	14.2 Runs the organisation on a common set of values that will encourage innovation	0.001	-3.500	74	15	26	78
	14.3 Manage personal and staff development to ensure a competent team	0.021	-2.309	74	37	26	56
	14.4 Regular feedback on how the organisation is performing and how to develop further	0.004	-2.887	70	26	30	67
	Average pre- and post-training scores			71	26	29	67

Appendix Q: Assessors' proportions of fellows' competencies

COMPETENCY	PERFORMANCE INDICATORS	BELOW-AVERAGE (%)	ABOVE-AVERAGE (%)
Table 1: People Management and Empowering Environment: Assessors' proportions			
1. People Management and Empowering Environment	1.1 Maintain good morale in the team	24	76
	1.2 Optimal management of absenteeism	36	64
	1.3 Optimal overall job performance as agreed in the PMDS (performance management development system	22	78
	1.4 Embrace diversity in the team	22	78
Average: People Management and Empowering Environment		**26**	**74**
Table 2: Self-Management: Assessors' proportions			
2. Self-Management	2.1 Understand own strengths and weaknesses and have a self-development plan in place	24	76
	2.2 Understand the team's strengths and weaknesses and have development plans in place	29	71
	2.3 Excellent time management and meeting deadlines	36	64
	2.4 Clear about own philosophy of leadership	26	74
Average: Self-management		**29**	**71**
Table 3: Honesty and Integrity: Assessors' proportions			
3. Honesty and Integrity	3.1 Treats others with dignity and respect	19	81
	3.2 Emphasise ethical standards and moral management in all aspects of work	20	80
	3.3 Being reliable and accountable	18	82
	3.4 Hold others (subordinates and managers) accountable for their work	22	78
Average: Honesty and Integrity		**20**	**80**
Table 4: Client Orientation and Customer focus: Assessors' proportions			
4. Client Orientation and Customer focus	4.1 Open door policy for customer complaints or compliments	18	82
	4.2 Suggestion boxes for clients to assess service daily	33	67
	4.3 Clients have the opportunity to give feedback re the service (anonymously and in a safe environment)	32	68
	4.4 Suggestions are used for improvement of the service	24	76
Average: Client Orientation and Customer focus		**27**	**73**
Table 5: Communication: Assessors' proportions			
5. Communication	5.1 Timeously and accurately communicate information to the team	22	78
	5.2 Timeously and accurately communicate information to all external stakeholders	24	76

	5.3 Regular feedback and monitoring meetings	25	75
	5.4 Use the media and all forums to communicate health issues to the public	44	56
Average: Communication		**29**	**71**
Table 6: Resource Management and Allocation: Assessors' proportions			
6. Resource Management and Allocation	6.1 Match the available personnel with the tasks at hand	30	70
	6.2 Appropriate allocation of resources to deliver effective and efficient service	30	70
	6.3 No drug or material outages/shortages	37	63
	6.4 Systematise community resources to improve health service access	38	62
Average: Resource Management and Allocation		**34**	**66**
Table 7: Financial Management: Assessors' proportions			
7. Financial Management	7.1 Compile and manage budgets	42	58
	7.2 Aware of the overall expenses and cost per patient/treatment	37	63
	7.3 Manage fair tender procurement processes	37	63
	7.4 Draw up financial reports and communicate to all the relevant stakeholders	40	60
Average: Financial Management		**39**	**61**
Table 8: Problem Solving and Analysis: Assessors' proportions			
8. Problem Solving and Analysis	8.1 Process in place of identifying problems in the team	27	73
	8.2 Process in place of identifying problems in service delivery and community	29	71
	8.3 Policy in place for risk management	30	70
	8.4 Report on these problems and solutions for this form part of knowledge sharing and management	29	71
Average: Problem Solving and Analysis		**29**	**71**
Table 9: Programme and Project Management: Assessors' proportions			
9. Programme and Project Management	9.1 Actively involved in identifying and developing programmes in the community	40	60
	9.2 Monitor and evaluate the programmes to meet objectives set	35	65
	9.3 Advocate for resources to ensure the success of these programmes and projects	34	66
	9.4 Submit reports to keep stakeholders informed of progress and new developments of the project	34	66
Average: Programme and Project Management		**36**	**64**
Table 10: Community/ Partnership Collaboration: Assessors' proportions			
10. Community/ Partnership Collaboration	10.1 Coordinate and lead community efforts to address public health problems	36	64
	10.2 Build and maintain strong relationships with the community	35	65
	10.3 Strong community participation in all projects	39	61

	10.4 Community representatives form part of strategic planning	40	60
Average: Community/ Partnership Collaboration		**37**	**63**
Table 11: Knowledge Management: Assessors' proportions			
11. Knowledge Management	11.1 System in place for knowledge sharing	30	70
	11.2 Infrastructure (IT system) supports the knowledge management process	40	60
	11.3 Policies in place for knowledge management	39	61
	11.4 Research used for service delivery improvement	42	58
Average: Knowledge Management		**38**	**62**
Table 12: Strategic Leadership: Assessors' proportions			
12. Strategic Leadership	12.1 Models a personal example of what is expected of others	30	70
	12.2 Share the "big picture" of what needs to be accomplished	26	74
	12.3 Empower people to make decisions	26	74
	12.4 Awards and rewards system in place for people's performance	44	56
Average: Strategic Leadership		**31**	**69**
Table 13: Change Management: Assessors' proportions			
13. Change Management	13.1 Initiate and embrace change to improve the working environment	26	74
	13.2 Explore outside the organisation for innovative ways to improve the workplace and service delivery	38	62
	13.3 Encourage all to embrace challenging opportunities that test their skills and abilities	33	67
	13.4 Advocate for policies to be reviewed regularly	35	65
Average: Change Management		**33**	**67**
Table 14: Service Delivery Innovation (SDI): Assessors' proportions			
14. Service Delivery Innovation (SDI)	14.1 Ensure that the team adhere to the principles and standards of efficiency and effectiveness	25	75
	14.2 Runs the organisation on a common set of values that will encourage innovation	25	75
	14.3 Manage personal and staff development to ensure a competent team	28	72
	14.4 Regular feedback on how the organisation is performing and how to develop further	28	72
Average: Service Delivery Innovation (SDI)		**26**	**74**

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