This chapter is based on the fact that healthcare is entering a phase of transformation and that the core of this transition is the patient. Also introduced are aspects that focus specifically on healing and healing relationships as a key factor for success in modern healthcare environments. The relationships between patients, their families and medical staff are investigated. This chapter concludes with a discussion of a specific patient type; their typical diagnoses; and personal experiences.
5.6 PERSONAL APPROACH

The hardest part was the waiting. I wasn't sure what it was going to do—"if it was going to rapidly expand or slow down... if you're not sure what's going on in your body, it's hard to sit down and think about anything that's going on around you."
(Hall et al., 2015).

"I can't be the only person who fought cancer and will never say 'Well, in the end, it was a gift.'"
(Hall et al., 2015).

4.1 A PHASE OF TRANSFORMATION

PATIENTS AT THE CORE OF HEALTHCARE TRANSFORMATION
"Healthcare is entering a phase of transformation and at the core of this transition is the patient" (Hall et al., 2015).

FOCUS IS EXPANDED TO INCLUDE WELLNESS & WELL-BEING
"The focus is expanding beyond treating illness to include wellness and well-being, with patients, their families and health professionals actively participating throughout the continuum of care" (Steelcase Health, 2015, p.7).

4.2 DESIGNING FOR THE HUMAN FACTOR

Designing for the human factor can assist healthcare organisations in improving patient- and medical staff experience, support and safety (Steelcase Health, 2015, p.13). It also both improves outcomes and reduces costs through the implementation of three main elements:

- HUMANIZE: the care process to promote a compassionate experience.
- EMPOWER: people to optimise the clinical encounter.
- CONNECT: stakeholders to support better outcomes.

"My spouse and most of my family and friends are supportive, but they don't seem to really understand the constant lifetime struggle of my cancer walk. "I feel my best when I'm around other cancer survivors."
(Hall et al., 2015).

"People say, "You have to be positive. You have to fight this." You're sitting there, depressed, ill, and you just feel like saying, 'I don't feel positive.' Then you feel guilty, 'I should be positive to be healthy, but I don't feel positive.' There's this whole Catch-22."
(Hall et al., 2015).
4.4 PATIENT, THEIR FAMILIES AND MEDICAL STAFF AS FOCUS

The design determines the interaction, presence and participation of these groups.

"When spaces productively support communication and collaboration, medical staff, patients and family members can all be mutual participants in the important undertaking of improving health" (Steelcase Health, 2015, p.13).

Enhance people's connections, well-being and safety by designing for the human factor.

**Patients**

**health, comfort & convenience as first priority**

Providing the patient with greater choice and belief of control, can influence a patient's medical outcome significantly.

- Privacy
- Choice
- Sense of control
- Sense of familiarity

**Family**

**Fundamental for caring & healing**

cultivating healing relationships

**Medical Staff**

**teaching & learning**

Advancements in modern technology drive a need for spaces that accommodate new ways of sharing information (Steelcase Health, 2015, p.6).

Spaces need to incorporate technology to assist in communication and collaboration between doctors and their patients, as well as amongst doctors themselves.

Designing a pleasant work environment that provides for physical, cognitive and emotional well-being of medical staff amplifies their potential to deliver exemplary care (Steelcase Health, 2015, p.13).

The standard practice is transitioning to one that is multi-dimensional - where optimal healing environments require staff members to embrace a more team-oriented staff model (Geffen, 2004, p.97).

Management's interest in both the well-being of medical staff and the encouragement of positive staff interaction is reflected in the provision of gardens and lounges that promote greater job satisfaction (Schweitzer et al., 2004, p.73; Fotter et al., 2000, p.95).

Design should encourage positive interaction among staff with gardens and lounges to promote greater job satisfaction (Schweitzer et al., 2004, p.73).

The communication of teaching and learning between patients, their families and medical staff is of great importance; the interior environment should therefore be designed to facilitate this (Steelcase Health, 2015).

Informed interior design can further enhance the staff-patient relationship by providing opportunities for interaction through: decentralised nursing stations; private patient rooms; and consultation rooms that allow for confidential conversations. Centrally located nursing stations and glass partitions that limit interaction should therefore be avoided (Schweitzer et al., 2004, p.73).

Consulting rooms that provide opportunities for confidential discussion will strengthen the relationship between patients and medical staff (Schweitzer et al., 2004, p.73).

4.6 CANCER PATIENTS

The occurrence of cancer is increasing as the total number of cases diagnosed yearly continues to rise. Cancer is not just a disease of the body. It can wreak havoc on patients' emotions, psyche and relationships as well as their ability to live and work.

A significant percentage of cancer patients and their caregivers experience anxiety and emotional distress (Geffen, 2004, p.53).

The current team of expert specialists at Mediclinic Midstream is in need of a Cancer Centre.

The current team of expert specialists at Mediclinic Midstream consists of two Oncologists who specialise in radiation therapy. If the yearly increases in cancer diagnoses is acknowledged and the current oncology representation at Mediclinic Midstream Hospital is taken into account, the addition of a cancer treatment centre seems to be a necessity. The opportunity exists to expand on an integrative approach for cancer patients requiring a variety of treatments.

4.7 AGE GROUP

This graph illustrates the percentage of cancer cases in each age group (National Cancer Institute, 2015).

- The highest percentage of patients are in the 55-64 age group.
- This group is selected for inclusion.

The graph indicates that cancer rates are higher in males than females, with the highest percentages found in males aged 65-74 years.

Space will be designed for cancer patients that fall in the 55-64 age group. It will thus be an adult-focused oncology unit with the capability of treating patients between 26 and 64 years of age. (Poster 4 Model Inhabitant (Author, 2016))
4.1 A PHASE OF TRANSFORMATION

Healthcare is entering a phase of transformation and at the core of this transition is the patient (Hall, et al., 2015). It has been shown that interior environments profoundly affect human experience and behaviour. Healthcare organisations that embrace this reality in their interior environments are positioned to deliver value in a holistic manner (Steelcase Health, 2015, p.13; Devlin & Arneill, 2003; Ulrich, 1984).

This transformation of healthcare is driven by the increase in research that connects healthcare design to well-being (Devlin and Arneill, 2003, p.665). The medical profession is expanding its focus beyond the treatment of illnesses to also include the wellness and well-being of patients; their families; and medical staff - all of whom are active participants in this continuum of care (Steelcase Health, 2015, p.7). Now that the focus is on the patient, researchers are finding that changes and additions made in healthcare facilities and social environments can positively influence patient outcomes (Davidson & Bar-Yam, n.d.; Ulrich, 1984). It is also being found that "...sensitive design can enhance recovery (and) shorten hospital stays" (Lemprecht, 1996, p.123 cited in Devlin & Arneill, 2003:665). Many policy leaders, healthcare providers, clients and other stakeholders, who are actively participating in the changes, agree that patient involvement is critical to the success of further progress in healthcare (Hall et al., 2015).

4.2 DESIGNING FOR THE HUMAN FACTOR

Designing for the human factor can assist healthcare organisations in improving patient- and medical staff experience, support and safety. It also both improves outcomes and reduces costs through the implementation of three main elements:

- **HUMANISE** the care process to promote a compassionate experience (Steelcase Health, 2015, p.13).
- **EMPOWER** people to optimise the clinical experience (Steelcase Health, 2015, p.13).
- **CONNECT** stakeholders to support better outcomes (Steelcase Health, 2015, p.13).

Personal experience is influenced by the interior environment. A designer that acknowledges the relevance of this should design spaces that improve the patient’s experience and thus enhance their healing. Using this more humanised and compassionate approach will provide much improved patient care.

In a sense, the interior environment itself forms part of the medical procedure. Appropriate and purpose-designed interior environments can empower patients and optimise medical staff performance.

- **CONNECT** stakeholders to support better outcomes (Steelcase Health, 2015, p.13).
- **EMPOWER** people to optimise the clinical experience (Steelcase Health, 2015, p.13).
- **HUMANISE** the care process to promote a compassionate experience (Steelcase Health, 2015, p.13).

The use of EBT creates a solid foundation, supporting design decisions. Once implemented and experienced, will lead to further support from stakeholders.

4.3 HEALING RELATIONSHIPS

Healing relationships are defined as social interactions that cultivate a sense of belonging, well-being, coherence and healing (Jonas & Chez, 2004, p.4). Over the past two decades, a growing body of evidence has been documenting the value and benefits of psychosocial support interventions for patients (Cunningham, 2002). Healing relationships are a fundamental aspect of the healing process, this is confirmed and supported by Geffen's (2004, p.95) second level of healing: Connection with others.

The relationships between patients, their families and medical staff have already been highlighted as fundamental to the healing process. This is also applicable to the curing process, which relies strongly on honesty and clear communication of accurate diagnoses and treatment. Designing a space that supports these relationships is therefore key to the success of a oncology centre and should be studied in-depth.

4.4 PATIENTS, THEIR FAMILIES AND MEDICAL STAFF AS FOCUS

There are three main groups that have been identified:

- **The patient;**
- **Their family and friends;** and
- **Medical staff.**

The design of healthcare facilities influences the interaction, presence and participation of the identified groups. Appropriate design will thus have a positive influence on these groups.

Through the design of spaces that encourage communication and collaboration, will allow medical staff, patients and family members to become equal participants in the vital task of improving health and supporting healing (Steelcase Health, 2015, p.13).

4.4.1 PATIENTS

A focal point of healthcare is patient-centred care and the interior design of healing facilities. These provide the patient with greater choice and belief in personal control of their situation and can influence the results of a patient’s medical care significantly.

Patient-centred care and interior design may involve supportive care designed to target the patient’s condition at a certain stage of treatment. This can be done by meeting specific needs, providing comfort and promoting a more positive outlook on life. Information is currently available that deals specifically with these sensitive conditions and how interior design that emphasises healing can best be applied to meet specific needs. Patient comfort during the various stages of treatment and healing requires distinct interior design considerations, which may be vastly different from that of the typical hospital today. Empathy with the patient’s condition will dictate the level of comfort to be experienced through the dynamics of interior design. This supports the aim of this study.

4.4.2 FAMILY SUPPORT

Family support and presence has conventionally been limited to waiting areas and a chair in the corner of the patient’s room. To the contrary, the latest interior design approach to patient-focused comfort maximises opportunities for family interaction and participation in the treatment journey (Fottler, et al., 2000:94).

4.4.3 MEDICAL STAFF

Medical staff and their needs are often overlooked in the design of current healthcare facilities. The result is often small, enclosed staffrooms with tightly packed chairs all in a row. The immense impact of medical staff on the wellness and well-being of their patients is well known. Yet, it appears that little attention is paid to addressing staff morale. This provides a further opportunity for the interior designer to competently address these needs, thus ensuring considerate care of healthcare staff. Addressing the needs of staff through interior design greatly contributes to the creation of the congenial atmosphere required between patients and staff.

It is accepted that the design of more beneficial working facilities for medical staff will result in an improvement in their physical, cognitive and emotional well-being, which will amplify their potential to deliver exemplary care (Steelcase Health, 2015, p.13). Management’s interest in both the well-being of medical staff and the encouragement of positive staff interaction is reflected in the provision of gardens and lounges that promote greater job satisfaction (Schweiter et al., 2004, p.73; Fottler et al., 2000, p.95).

A programmatic transition from the standard mainstream medical practice goes hand-in-hand with addressing staff needs. The standard practice is transitioning to one that is multi-dimensional – where optimal healing environments require staff members to embrace a more team-oriented staff model (Geffen, 2004, p.97). The transformation of staff facilities ultimately signifies that the contribution of all medical care providers is equally valued.
4.5 RELATIONSHIPS

4.5.1 PATIENT AND FAMILY
(cultivating healing relationships)

Design without regard to research that highlights the importance of social support has resulted in less-than-ideal interior environments. These designs present spaces that restrict the presence of family support (Schweitzer et al., 2004, p.73). Spaces that are designed to be inviting and to meet the needs of family members can collaborate in their vital role as partners in healthcare (Steelcase Health, 2015, p.13).

Evidence-based theories reveal that interior design detail and layout impact healing relationships, for example, family members visit for longer in carpeted patient rooms than in the presence of a hard floor (Schweiter et al., 2004, p.73). The design and layout of furniture also needs to be considered, as they too contribute to social interactions in the waiting areas and dayrooms in healthcare settings (Schweiter et al., 2004, p.73). Well-planned spaces that provide for social contact and engagement can encourage social connectedness.

4.5.2 PATIENT AND MEDICAL STAFF
(teaching and learning)

The communication of teaching and learning between patients, their families and medical staff is of great importance; the interior environment should thus be designed to facilitate this (Steelcase Health, 2015). Advancements in modern technology drives a need for spaces that accommodate new ways of sharing information (Steelcase Health, 2015, p.6). Spaces need to incorporate technology to assist in communication and collaboration between doctors and their patients, as well as amongst doctors themselves.

Informed interior design can further enhance the staff-patient relationship by providing opportunity for interaction through: decentralised nursing stations; private patient rooms; and consultation rooms that allow for confidential conversations. Centrally located nursing stations and glass partitions that limit interaction should therefore be avoided (Schweiter et al., 2004, p.73). Creating spaces that promote interaction will provide and encourage opportunities for confidential discussions, and also strengthen the relationship between patients and medical staff (Schweiter et al., 2004, p.73).

4.6 CANCER PATIENTS

Cancer is biologically defined as cells that begin to grow in an uncontrolled fashion. The implication is that any cell in any part of the body can become cancerous and spread to other areas of the body (American Cancer Society, 2016).

Cancer annually accounts for 7.4 million deaths worldwide. Globally, it remains the leading cause of death - causing around 13% of annual mortality. One in three people will develop cancer in their lifetime; one in nine are at a risk of developing cancer again (if they survive the first time); and two in nine people are at increased risk of developing a second primary cancer (Visually, 2011).

4.6.1 PROPOSED ADDITION OF AN ONCOLOGY CENTRE AT MEDICLINIC MIDSTREAM

If the abovementioned statistics are acknowledged and the current oncology representation at Mediclinic Midstream Hospital is taken into account, there is an opportunity for the addition of an oncology centre. The treatment of cancer is one of the most expensive of our time and costs will increase in the future. The opportunity to respond to the mental, emotional and spiritual concerns of both patients with cancer and their family members cannot be ignored. From an investment point of view, a state-of-the-art cancer treatment centre at Mediclinic Midstream is guaranteed to be successful and will result in a positive return on investment (Geffen, 2004, p.97).

4.6.2 CANCER CURING TO HEALING CONTINUUM

For an illness such as cancer the curing process takes place over an extended period of time and a cure is not always guaranteed. Cancer patients tend to spend many hours in hospitals and treatment centres, sometimes only extending their lives by a few months. Some cancer sufferers will spend their last few months in a hospital ward. Regardless of whether the treatment is successful or not, the patient’s well-being is seldom considered in this process.

Yet, a patient’s well-being is of equal importance to treatment, and in the end, may be all that the patient has control of during the process.

The need for facilities that enable not only curing but also healing highlights the inadequacy of current cancer treatment centres. Ideal facilities should promote a new look and approach to healing. Employing the expertise of professional interior designers could thus lead to a more positive curing process (Samueli Institute, 2011, p.3). Therefore, the treatment of cancer should be seen as a curing to healing continuum. As Samueli (2011, p.3) stated: “Our inherent healing capacity is the most powerful resource we have for enhancing productivity: preventing disease, accelerating recovery from illness and injury, and maintaining well-being when disease cannot be cured.”
4.7 THE PATIENTS’ AGE GROUP

The most recent statistical data indicate that 66 is the median age at which cancer diagnoses are made; 25% of all newly diagnosed cancer patients are 65-74 years old (as seen in the graph below) (National Cancer Institute, 2015). Taking this into account, the oncology centre should be designed to cater for patients that fall in the age group 55-84 years of age. The interior designer should therefore consider the needs of senior citizens. Doing so would result in the design of an adult-focused cancer centre with the ability to and objective of treating 99% of all cancer cases.

4.8 PERSONAL APPROACH

A crucial question remains: What do cancer patients experience?

This section explores the cancer experience map, in particular the work of the oncology content specialist, who provided information, resources and insight into the cancer patient experience. Through the documentation of the patient’s voice, the oncology content specialist concluded that, having cancer isn’t like having any other illness; it is an experience that only those who have had cancer seem to truly understand (Hall, et al., 2015). Therefore, personal quotes are included along with other information, to acquire an empathetic understanding. From these quotations, key emotions are identified, that could be supported within the future interior design of the healthcare environment that best suites the needs and well-being of its patients.

Key emotions and thoughts identified

Isolation and loneliness - lacking information

“I was trying to find information about what treatments are available and things like that, but I kept on finding that every person is different.” (Hall et al., 2015).

Realisation

“I can’t be the only person who fought cancer and will never say ‘Well, in the end, it was a gift.’” (Hall et al., 2015).

Uncertainty and waiting

“The hardest part was the waiting. I wasn’t sure what it was going to do — if it was going to rapidly expand or slow down. If you’re not sure what’s going on in your body, it’s hard to sit down and think about anything that’s going on around you.” (Hall et al., 2015).

Cancer is a life-long journey - support should continue beyond a cancer-free diagnosis

“After I got my cancer-free diagnosis, that’s when I got depressed. Disease-free is the moment — it doesn’t mean you’re going to stay that way. Everyone around me was celebrating; they were happy, life was good, and I became completely depressed.” (Hall et al., 2015).

The support of loved ones

“I experienced overwhelming distress at my cancer’s recurrence with metastatic disease. I cried buckets of tears with my husband, family, and friends. However, the support of those who love me enough to supply companionship and food helped me realise that I wasn’t dying today.” (Hall et al., 2015).

The importance of sharing a similar journey with other patients, who understand and with whom one can identify

“People say, “You have to be positive. You have to fight this.” You’re sitting there, depressed, ill, and you just feel like saying, ‘I don’t feel positive.’ Then you feel guilty; ‘I should be positive to be healthy, but I don’t feel positive.’ There’s this whole Catch-22.” (Hall et al., 2015).

The presence of fellow cancer patients and survivors

“My spouse, and most of my family and friends are supportive, but they don’t seem to really understand the constant lifetime struggle of my cancer walk. Feel my best when I’m around other cancer survivors.” (Hall et al., 2015).

Life changing

“Initially, I couldn’t put on earrings, hold a pencil, or button my pants with grace and dignity. Now, seven months out, I have full functionality but my fingertips feel waterlogged, like I’ve been swimming or hot-tubbing for too long. My doctor says that whatever you feel after a year will likely be permanent.” (Hall et al., 2015).

Faith

“I am a firm believer in prayer. It calms me and gives me peace in times that I am spinning with emotions. It gives me someone to tell everything – however I want to say it – rather than picking the things that are appropriate for the person I’m talking to or working to say what I mean without seeming ungrateful or selfish or rude.” (Hall et al., 2015).

Although the information gathered emphasises the complexity of the cancer journey, there are hints of common points of experience. These similarities in the experiences of cancer patients were condensed and are reflected on in The Cancer Experience Map that connects common points on the clinical path. (Hall et al., 2015). The map is elaborated on in Chapter 5.3.
CONCLUSION

In this chapter the roles of patients, their families and medical staff were discussed and their importance highlighted. These considerations justify a new approach where the patient becomes the core and driver of medical transformation. Emphasis is placed on the responsibility of the interior designer for the design of these healing spaces, which will vastly improve the treatment outcomes and occupants' rate of recovery.