

## 10. Attachments



### 10.1 Appendix A

#### Informed Consent to Health Care Professionals

##### AUTHORISATION TO PARTICIPATE IN A RESEARCH PROJECT.

TITLE OF STUDY: In-hospital quality of care for diabetes mellitus in relation to patient satisfaction: an intervention study.

Dear Prof/Dr/.....date...../...../.....

##### THE NATURE AND PURPOSE OF THIS STUDY.

I understand that I am being asked to take part in a research study. The overall aim of this study is to investigate the effect of a medical educational intervention on attitudes, practice and patient satisfaction.

##### EXPLANATION OF PROCEDURES TO BE FOLLOWED.

For this study we would like you to complete the Diabetes Attitude Scale (DAS-3) and the Diabetes Practice Scale (DPS).

##### 3. RISK AND DISCOMFORT INVOLVED.

There is no risk and discomfort involved in this study.

##### 4. POSSIBLE BENEFITS OF THIS STUDY.

This study will provide a better understanding of the concerns and problems faced by health personnel and diabetic patients and guidance for planners and policymakers for improving the quality of health care.

##### 5. INFORMATION

If you have any questions concerning this study, you should contact: Dr Helena Oosthuizen (Tel: (012) 354 2354 of the Department Internal Medicine, Faculty of Health Sciences, University of Pretoria.

## 6. VOLUNTARY PARTICIPATION

Participation in this study is voluntary. No compensation for participation will be given. You are free to withdraw your consent to participate in this study at any time. Refusing to participate will involve no penalty or loss of benefits.

## 7. CONFIDENTIALITY.

All records obtained in this study will be regarded as confidential. Results will be published or presented in such a fashion that no person will be identified by name.

## 8. CONSENT TO PARTICIPATE IN THIS STUDY.

I have read the above information before signing this consent form. The content and meaning of this information have been explained to me. I have been given the opportunity to ask questions and am satisfied that they have been answered satisfactorily. I hereby volunteer to take part in this study. I have received a signed copy of this informed consent agreement.

.....  
 Interviewee signature Date

.....  
 Witness Date

.....  
 Witness Date

## 10.2 Appendix B

### Diabetes Attitude Scale

Please rate for the following items whether you strongly agree (SA), agree (A), neutral (N), disagree (D) or strongly disagree (SD) by placing a cross on your most appropriate response.

In general I believe that:

1	Health care professionals who treat people with diabetes should be trained to communicate well with their patients	SA	A	N	D	SD
2	People who do not need to take insulin to treat their diabetes have a pretty mild disease	SA	A	N	D	SD
3	There is not much use in trying to have good blood sugar control because the complications of diabetes will happen anyway	SA	A	N	D	SD
4	Diabetes affects almost every part of a diabetic person's life	SA	A	N	D	SD
5	The important decisions regarding daily diabetes care should be made by the person with diabetes	SA	A	N	D	SD
6	Health care professionals should be taught how daily diabetes care affects patients' lives	SA	A	N	D	SD
7	Older people with Type II diabetes do not usually get complications	SA	A	N	D	SD
8	Keeping the blood sugar close to normal can help prevent the complications of diabetes	SA	A	N	D	SD
9	Most people can enjoy life and still keep tight blood sugar control	SA	A	N	D	SD
10	Health care professionals should help patients make informed choices about their care plans	SA	A	N	D	SD
11	It is important for the nurses and dieticians who teach people with diabetes to learn counselling skills	SA	A	N	D	SD
12	People whose diabetes is treated by just a diet do not have to worry about getting many long-term complications	SA	A	N	D	SD

13	Almost everyone with diabetes should do whatever it takes to keep their blood sugar close to normal	SA	A	N	D	SD
14	The emotional effects of diabetes are pretty small	SA	A	N	D	SD
15	People with diabetes should have the final say in setting their blood glucose goals	SA	A	N	D	SD
16	Blood sugar testing is not needed for people with Type II diabetes	SA	A	N	D	SD
17	Low blood sugar reactions make tight control too risky for most people	SA	A	N	D	SD
18	Health care professionals should learn how to set goals with patients, not just tell them what to do	SA	A	N	D	SD
19	Diabetes is hard because you never get a break from it	SA	A	N	D	SD
20	The person with diabetes is the most important member of the diabetes care team	SA	A	N	D	SD
21	To do a good job, diabetes educators should learn a lot about being teachers	SA	A	N	D	SD
22	Type II diabetes is a very serious disease	SA	A	N	D	SD
23	Having diabetes changes a person's outlook on life	SA	A	N	D	SD
24	People who have Type II diabetes will probably not get much payoff from tight control of their blood sugars	SA	A	N	D	SD
25	People with diabetes should learn a lot about the disease so that they can be in charge of their own diabetes care	SA	A	N	D	SD
26	Type II diabetes is as serious as Type I diabetes	SA	A	N	D	SD
27	Tight control is too much work	SA	A	N	D	SD
28	A person with diabetes can lead a normal life	SA	A	N	D	SD
29	What the patient does has more effect on the outcome of diabetes care than anything a health professional does	SA	A	N	D	SD
30	Tight control of blood sugar makes sense only for people with Type I diabetes	SA	A	N	D	SD
31	It is frustrating for people with diabetes to take care of their disease	SA	A	N	D	SD
32	People with diabetes have a right to decide how hard	SA	A	N	D	SD

10.3	they will work to control their blood sugar					
33	People who take diabetes pills should be as concerned about their blood sugar as people who take insulin	SA	A	N	D	SD
34	People with diabetes have the right <u>not</u> to take good care of their diabetes	SA	A	N	D	SD
35	Support from family and friends is important in dealing with diabetes	SA	A	N	D	SD

2 Under which circumstances would you not perform a 24 hour urine collection?

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3 What would you regard as optimal values for the following in a diabetic patient?

HbA <sub>1c</sub>	
Total Cholesterol	
LDL Cholesterol	
Fasting glucose	
Postprandial glucose	
Bedtime glucose	
BP	

4 Match the following 2 columns – the right column can have more than 1 connection

Hard exudates  
Multiple Cotton wool spots  
Worm-like lesions  
retinal  
Cataracts  
Dot and blot haemorrhage  
Vitreous haemorrhage  
Neovascularisation  
Maculopathy  
Retinal detachment

Refer urgently  
Does not need urgent but as soon as possible  
Does not need referral to an ophthalmologist

**Practice Questionnaire**

To be completed by medical officers, registrars, interns and consultants.

1 List 4 diabetic complications you would screen for in hospitalised diabetic patients and mention how would you screen for it.

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2 Under which circumstances would you not perform a 24 hour urine collection?

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 -----  
 -----

3 What would you regard as optimal values for the following in a diabetic patient?

HbA <sub>1c</sub>	
Total Cholesterol	
LDL Cholesterol	
Fasting glucose	
Postprandial glucose	
Bedtime glucose	
BP	

4 Match the following 2 columns – the right column can have more than 1 connection

Hard exudates  
 Multiple Cottonwool spots  
 Micro-aneurisms  
 referral  
 Cataracts  
 Dot and blot bleedings  
 Vitreous haemorrhage  
 Neovascularization  
 Maculopathy  
 Retinal detachment

Refer urgently  
 Does not need urgent but as soon as possible  
 Does not need referral to an ophthalmologist

5 What is the colour of the Mydriacil bottle's lid? \_\_\_\_\_

6 What are the 5 most important aspects on which a diabetic patient should be educated?

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7 Complete the following table

	Strongly Disagree =1	Disagree = 2	Not sure = 3	Agree = 4	Strongly Agree =5
1. All oral agents used to treat type 2 diabetes are equally effective					
2. Diabetes is a progressive disease that requires increasing numbers of therapies or doses of agents to control it over time.					
3. It is not important for people with diabetes to maintain HbA <sub>1c</sub> levels of $\leq 7\%$					
4. Clinicians should not be concerned about insulin-resistant patients since they do not have frank diabetes					
5. It is better for the patient's long term health to allow glucose to rise with age rather than increase dosages or numbers of agents					
6. The progressive worsening of type 2 diabetes over time (as the patient ages) cannot be avoided.					
7. Repaglinide offers advantages to patients with type 2 diabetes when used in combination with sulfonylureas					

## 10.4 Appendix D

### Informed Consent of Patients

AUTHORISATION TO PARTICIPATE IN A RESEARCH PROJECT.

TITLE OF STUDY: **In-hospital quality of care for diabetes mellitus in  
relation to patient satisfaction: an intervention study.**

Dear Mr/Mrs/Ms.....date...../...../.....

#### 1. THE NATURE AND PURPOSE OF THIS STUDY.

I understand that I am being asked to take part in a research study. The overall aim of this study is to investigate the effect of a medical educational intervention on attitudes, practice and patient satisfaction.

#### 2. EXPLANATION OF PROCEDURES TO BE FOLLOWED.

For this study we shall ask some personal questions concerning yourself. The questions will be asked in a language that you understand.

#### 3. RISK AND DISCOMFORT INVOLVED.

For this study only questions will be asked. Some questions are of a personal nature.

#### 4. POSSIBLE BENEFITS OF THIS STUDY.

This study will provide a better understanding of the concerns and problems faced by diabetic patients and guidance for planners and policymakers for improving the quality of health care.

#### 5. INFORMATION

If I have any questions concerning this study, I should contact:

Dr H Oosthuizen (Tel: (012) 3542354) or Prof P. Rheeder of the Clinical Epidemiology Unit, University of Pretoria.

#### 6. VOLUNTARY PARTICIPATION

Participation in this study is voluntary. No compensation for participation will



be given. You are free to withdraw your consent to participate in this study at any time. Refusing to participate will involve no penalty or loss of benefits.

7. CONFIDENTIALITY.

All records obtained in this study will be regarded as confidential. Results will be published or presented in such a fashion that no person will be identified by name.

8. CONSENT TO PARTICIPATE IN THIS STUDY.

I have read or had read to me in a language that I understand the above information before signing this consent form. The content and meaning of this information have been explained to me. I have been given the opportunity to ask questions and am satisfied that they have been answered satisfactorily. I hereby volunteer to take part in this study. I have received a signed copy of this informed consent agreement.

.....  
Interviewee signature

.....  
Date

.....  
Parent or legal guardian signature

.....  
Date

.....  
Witness

.....  
Date

.....  
Witness

.....  
Date

(To be completed by medical student/research assistant)

10.5 Appendix E

Patient Demographic Information

Study number: \_\_\_\_\_

Gender \_\_\_\_\_

Ethnic Group \_\_\_\_\_

Age \_\_\_\_\_

Address

Previous clinic/Dr responsible for the patient's diabetes care:

\_\_\_\_\_

Type of DM: (type 2= diagnosed after age 30 and not on Insulin within first year of diagnosis):

Patient proficient in Afrikaans or English Yes  No

Reason for admission \_\_\_\_\_  
\_\_\_\_\_

Treating Doctors Consultant \_\_\_\_\_ MO/Registrar: \_\_\_\_\_

Intern: \_\_\_\_\_

Ward \_\_\_\_\_ Hospital \_\_\_\_\_

Treatment Prior to admission  
\_\_\_\_\_

Treatment at time of admission  
\_\_\_\_\_

Treatment at time of discharge  
\_\_\_\_\_

10.5 Appendix E



Patient Demographic Information

Study number: \_\_\_\_\_

Gender \_\_\_\_\_

Ethnic Group \_\_\_\_\_

Age \_\_\_\_\_

Address

Previous clinic/Dr responsible for the patient's diabetes care:

\_\_\_\_\_

Type of DM: (type 2= diagnosed after age 30 and not on Insulin within first year of diagnosis):

Patient proficient in Afrikaans or English Yes  No

Reason for admission \_\_\_\_\_  
\_\_\_\_\_

Treating Doctors Consultant \_\_\_\_\_ MO/Registrar: \_\_\_\_\_

Intern: \_\_\_\_\_

Ward \_\_\_\_\_ Hospital \_\_\_\_\_

Treatment Prior to admission \_\_\_\_\_  
\_\_\_\_\_

Treatment at time of admission \_\_\_\_\_  
\_\_\_\_\_

Treatment at time of discharge \_\_\_\_\_  
\_\_\_\_\_

**Screening:**

Done by: \_\_\_\_\_

(1) Fundoscopy Yes/No Dilated  no  unsure

refer to Ophthalmology Yes/No

(2) 24 h urine albumin or micral Yes/No result (mg/l): \_\_\_\_\_

(3) foot-vascular-assessment DP felt Yes/No side absent:

TP felt Yes/No side absent:

(4) foot-neuropathy assessment:

General comment only:

normal/abnormal

Specified: Vibration Yes/No:

result:.....

Monofilament Yes/No:

result:.....

Cotton wool Yes/No:

result:.....

Pinprick Yes/No:

result:.....

(5) HbA<sub>1c</sub> Yes/No: result:.....

(6) Control:

Number of glucose values last 48 hours prior to discharge:

Values:

Days in hospital

Dead

Alive

**(7) Referrals:** \_\_\_\_\_ Process \_\_\_\_\_

**Dr or clinic** \_\_\_\_\_

**Date** \_\_\_\_\_

**Special referrals eg eyes:** \_\_\_\_\_

**Date** \_\_\_\_\_

1) During your stay in hospital did anyone tell you more about diabetes or how to treat it? Yes/No

2) if yes: who told you this Doctor, Intern, Student, Sister in Charge, Nurse, Diabetic Clinic Sister, Dietician, Social worker, Other: \_\_\_\_\_

3) What did they tell you (identify theme):

Knowledge appropriate (yes/no)

Nature of disease \_\_\_\_\_

Treatment and control \_\_\_\_\_

Diet \_\_\_\_\_

Injection technique and devices \_\_\_\_\_

Complications \_\_\_\_\_

Foot care \_\_\_\_\_

Home monitoring \_\_\_\_\_

Hypoglycaemia: \_\_\_\_\_

Recognition and management: \_\_\_\_\_

Sick day management: \_\_\_\_\_

Other \_\_\_\_\_

**Patient Education Process**

On day of discharge the research assistant will ask the patient whether he/she was given any education on diabetes. The assistant will note 1) by whom education was given 2) what topic was covered and 3) whether there was sufficient understanding of the topic.

- 1) During your stay in hospital did anyone tell you more about diabetes or how to treat it? **Yes/No**
- 2) If yes: who told you this: **Doctor, Intern, Student, Sister in Charge, Nurse, Diabetic Clinic Sister, Dietician, Social worker, Other:** \_\_\_\_\_

3) What did they tell you (identify theme):	Knowledge appropriate (yes/no)
Nature of disease _____	_____
Treatment and control _____	_____
Diet _____	_____
Injection technique and devices _____	_____
Complications _____	_____
Foot care _____	_____
Home monitoring _____	_____
Hypoglycaemia: _____	_____
Recognition and management: _____	_____
Sick day management: _____	_____
Other _____	_____

# 10.7 Appendix G

## The Charlson Comorbidity Index

### Weighted index of Comorbidity

<u>Assigned Weights</u>	Good	Good	Fair	Poor	<u>Conditions</u>
1	For how long of all day has your health limited your activities?				Myocardial infarction Congestive heart failure Peripheral vascular disease Cerebrovascular disease Dementia COPD Connective tissue disease Ulcer disease
2	The kinds or amounts of vigorous activities you can do, like lifting heavy objects, running or participating in strenuous sports				Mild liver disease
	The kinds or amounts of moderate activities you can do, like moving a table, carrying groceries or bowling				Diabetes
	Walking uphill or climbing a few flights of stairs				Hemiplegia
	Bending, lifting, or stooping				Moderate or severe renal disease
	Walking one block				Diabetes with end-organ damage
3	How much bodily pain have you had during the past 6 months?				Any tumour Leukaemia Lymphoma
	None		Very Mild		Moderate or severe liver disease
	Moderate		Severe		
Does your health keep you from working at a job, doing the house or going to school?				Metastatic solid tumour AIDS	
6	Yes, for more than 3 months		Yes, for 3 months or less		

## 10.8 Appendix H

### Health-Related Quality of Life

1. In general, would you say your health is:

Excellent	Very Good	Good	Fair	Poor
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2. For how long (if at all) has your health limited you in each of the following activities?

		More than 3 months	3 Months or less	Not limited at all
A	The kinds or amounts of vigorous activities you can do, like lifting heavy objects, running or participating in strenuous sports			
B	The kinds or amounts of moderate activities you can do, like moving a table, carrying groceries or bowling			
C	Walking uphill or climbing a few flights of stairs			
D	Bending, lifting, or stooping			
E	Walking one block			
F	Eating, dressing, bathing, or using the toilet			

3. How much bodily pain have you had during the past 4 weeks?

None	Very Mild	Mild	Moderate	Severe	Very Severe
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4. Does your health keep you from working at a job, doing work around the house or going to school?

Yes, for more than 3 months	Yes, for 3 months or less	No
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5. Have you been unable to do certain kinds or amounts of work, housework or schoolwork because of your health?

Yes, for more than 3 months	Yes, for 3 months or less	No
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		of the time	of the time	A good bit of the time	Some of the time	A little of the time	None of the time
6	How much of the time, during the past month, has your health limited your social activities (like visiting with friends or close relatives)?						
7	How much of the time, during the past month, have you been a very nervous person?						
8	During the past month, how much of the time have you felt calm and peaceful?						
9	How much of the time, during the past month, have you felt downhearted and blue?						
10	During the past month, how much of the time have you been a happy person?						
11	How often, during the past month, have you felt so down in the dumps that nothing could cheer you up?						

12. **Definitely** **Mostly** **Not** **Mostly** **Definitely**  
**True** **True** **Sure** **False** **False**
- A. I am somewhat ill
- B. I am as healthy as anybody I know
- C. My health is excellent
- D. I have been feeling bad lately

13. Do you have any long standing illness, disability or infirmity? \_\_\_\_\_

If yes, what is it? \_\_\_\_\_

14. Degree of disability	no disease	1
	non-limiting disease	2
	has to take care	3
	limited in activity/mobility	4
	unable to work or walk outdoors	5
	Requires help with activities of daily living	6

15. Have you had any of the following problems over the last month?

Sleep problems \_\_\_\_\_

Concentration difficulties \_\_\_\_\_

Nervous problems \_\_\_\_\_

Worrying over every little thing \_\_\_\_\_

Always tired \_\_\_\_\_

Headaches \_\_\_\_\_

Constipation \_\_\_\_\_

Fainting/dizziness \_\_\_\_\_

Sickness/nausea \_\_\_\_\_

Palpitations (heart beating rapidly) \_\_\_\_\_

Back trouble \_\_\_\_\_

Persistent cough \_\_\_\_\_

Colds/flu \_\_\_\_\_

Bladder/kidney problems \_\_\_\_\_

Stiff/painful joints \_\_\_\_\_

Sinus/catarrh/blocked nose \_\_\_\_\_

Trouble with eyes \_\_\_\_\_

Trouble with ears \_\_\_\_\_

Other (please specify) \_\_\_\_\_

### Patient Satisfaction Questionnaire

Please rate how satisfied you are with the following aspects of your health care from very dissatisfied (VD) to very satisfied (VS).

(numbering continue from Health-Related Quality of Life as this is part of patient profile)

16. Friendly providers	VD	D	N	S	VS
17. Encouraging providers	VD	D	N	S	VS
18. Helpful providers	VD	D	N	S	VS
19. Respectful providers	VD	D	N	S	VS
20. Considerate providers	VD	D	N	S	VS
21. Providers who listen to me	VD	D	N	S	VS
22. Supportive providers	VD	D	N	S	VS
23. Providers who let me talk	VD	D	N	S	VS
24. Providers who let me know what is expected	VD	D	N	S	VS
25. Competent providers	VD	D	N	S	VS
26. The consistency of the Information	VD	D	N	S	VS
27. Communication understandable	VD	D	N	S	VS
28. Maintenance of contact	VD	D	N	S	VS
29. Follow-up service	VD	D	N	S	VS
30. Fair (equal treatment)	VD	D	N	S	VS
31. Available at suitable times for me	VD	D	N	S	VS
32. Availability of a toilet	VD	D	N	S	VS
33. Cleanliness of the place	VD	D	N	S	VS
34. Privacy during consultation	VD	D	N	S	VS
35. Thoroughness of examination	VD	D	N	S	VS

36. Cost of attendance		D	N	S	VS
37. The medicine I get	VD	D	N	S	VS
38. Convenience of the service	VD	D	N	S	VS

Week: ...../...../20.....

on Tuesday

No of Patients in Monday firm:.....

Drs in Monday firm: interns.....MOs.....Registrars....

on Wednesday

No of Patients in Tuesday firm:.....

Drs in Tuesday firm: interns.....MOs.....Registrars....

on Thursday

No of Patients in Wednesday firm:.....

Drs in Wednesday firm: interns.....MOs.....Registrars....

on Friday

No of Patients in Thursday firm:.....

Drs in Thursday firm: interns.....MOs.....Registrars....

Current referral flow, assessed each Friday: earliest appointment.

To foot clinic...../...../00

To eye clinic if urgent...../...../00

To eye clinic if non-urgent...../...../00

To DM clinic...../...../00

**Data Pertaining to Workload.**

To be completed by medical students weekly.

Week:...../...../00 to ...../...../00

**on Tuesday**

No of Patients in Monday firm:.....

Drs in Monday firm: Interns.....MOs.....Registrars....

**on Wednesday**

No of Patients in Tuesday firm:.....

Drs in Tuesday firm: Interns.....MOs.....Registrars...

**on Thursday**

No of Patients in Wednesday firm:.....

Drs in Wednesday firm: Interns.....MOs.....Registrars...

**on Friday**

No of Patients in Thursday firm:.....

Drs in Thursday firm: Interns.....MOs.....Registrars...

Current referral time: assessed each Friday: earliest appointment.

To foot clinic...../...../00

To eye clinic if urgent...../...../00

To eye clinic if non-urgent...../...../00

To DM clinic...../...../00