

Decentralising non-communicable disease care in the Kingdom of Eswatini: successes, challenges and recommendations from a pilot study in Lubombo region



POLICY BRIEF

Good Shepherd Hospital's Sister Sweetness screens a patient for diabetes and hypertension at a family health promotion day



Background

In 2014, in conjunction with the Eswatini Ministry of Health and other local stakeholders, COMDIS-HSD initiated the decentralisation of diabetes and hypertension care from Good Shepherd Hospital (GSH) to community clinics in Lubombo region, Eswatini.

This 2-year pilot involved 10 intervention clinics and 10 control clinics in Lubombo region. Our aim was to improve accessibility by providing high-quality NCD care across the region. Our pilot study also assessed the feasibility and effectiveness of decentralising diabetes and hypertension care across Eswatini.



This project was funded with UK aid from the UK government



Our methods

Each intervention clinic was given patient-held patient cards and clinic-held patient cards to record patient information.

These acted as both recording systems and prompts to healthcare workers to give appropriate care. Blood pressure cuffs, stethoscopes and blood glucose monitors were provided for clinics that needed them.

We developed an Eswatini diabetes/hypertension desk guide and training manual, and conducted 3.5 days of training for a selection of nurses from the intervention clinics so that they would be able to undertake the intervention.

Through an agreement with the Ministry of Health and Central Medical Stores, the intervention clinic nurses were given the tools to give adequate and high-quality healthcare to patients with hypertension and/or diabetes.

Recruitment

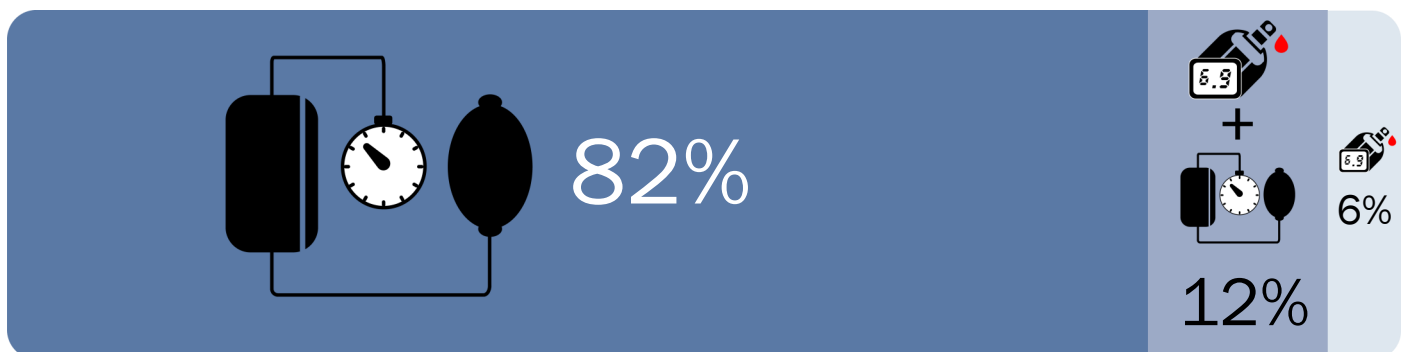
1,125 patients were recruited to the intervention clinics in total:

- 923 (82%) had hypertension alone
- 68 (6%) had diabetes alone
- 134 (12%) had both diabetes and hypertension.

Numbers recruited per clinic ranged from 52 to 304.

Data was recorded for 573 patients who attended at least 4 appointments.

78% of those recruited to the intervention were women.



How well did we deliver the intervention?

We gathered data on how well we delivered the process in a real world setting. For this, we used the guidance from the desk guides that advised patients to attend community clinics for monthly reviews.

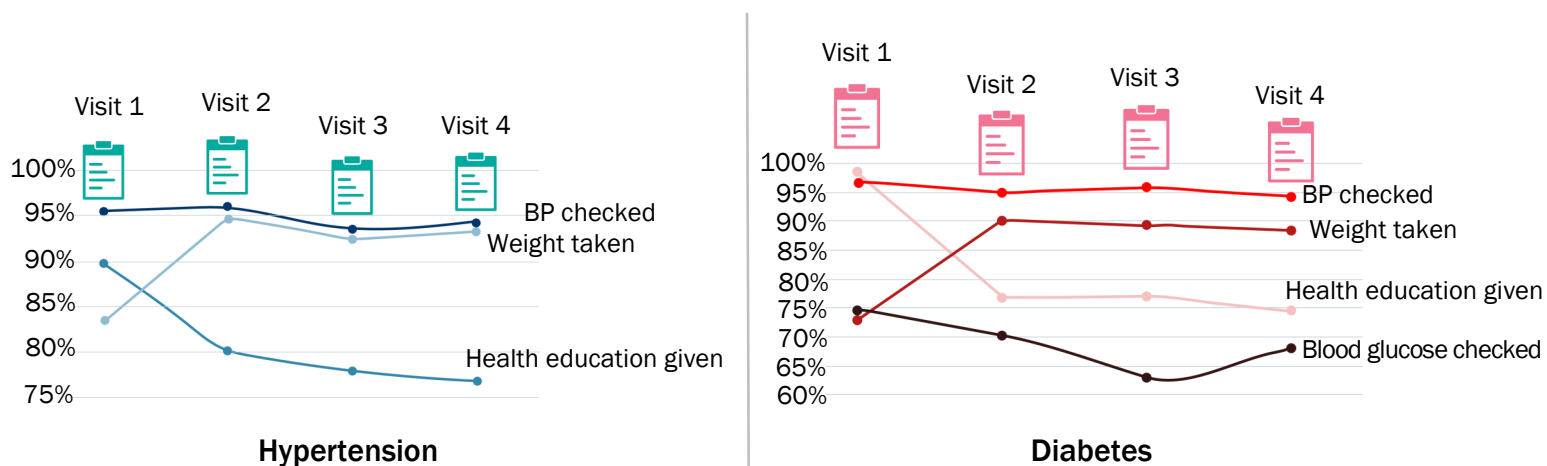
For each monthly visit, nurses were expected to provide health education and to complete weight and BP checks for all patients and blood glucose checks for diabetic patients.

The results show that weight and BP were checked for almost all patients throughout the intervention. Blood glucose was measured less reliably and the proportion fell during the intervention from 75% of diabetic patients at Visit 1 to 68% of patients at Visit 4. Ongoing delivery of health education to patients was documented. By session 4, 77% of hypertensive patients and 75% of diabetic patients continued to receive health education interventions.

Map of the clinics involved in the pilot



Completion of routine tasks over time



5 recommendations for policy and practice

1

Decentralisation in other regions of Eswatini



Due to the effectiveness of our pilot in clinics across the Lubombo region, we recommend that decentralisation should begin in other regions of Eswatini. The desk guide, training manual and recording templates have been made available for this purpose.

2

Implement integrated regional outreach programmes for mentoring and monitoring of rural clinics



Continued mentoring can help address issues with medication stock outs or old, faulty equipment, as well as ensure consistent record-keeping. Several outreach programmes already exist at GSH for TB, HIV, and home-based care. With support, outreach programmes that include mentoring and monitoring of rural clinics by experienced nurses can be expanded to include NCDs. Consideration should also be given to approaches which would allow scheduled NCD outreach visits by doctors to community clinics to review complex patients.

3

Allow community clinic nurses to undertake assessments of uncomplicated patients



We are confident that community clinic nurses are able to undertake baseline assessments for uncomplicated patients, as seen in the Lubombo pilot. However, patients with complications should still be referred to a doctor-led service.

4

Revisit agreements between Central Medical Stores and rural clinics



Our pilot highlighted frequent medication stock-outs where clinics have been without certain medications for months. We recommend that the contract between Central Medical Stores and rural clinics be revisited to evaluate their medication needs and procedures on what to do in the event of stock-outs.

5

Encourage consistent record-keeping



Before any expansion of the intervention, the national NCD programme must work with a Client Management Information System to agree how to enter routine NCD care within a patient's electronic record to ensure complete and consistent record-keeping, as well as providing prompts for appropriate care. We also recommend the continued use of patient-held treatment cards.

4 challenges to consider for the future

1

Availability of medication supplies

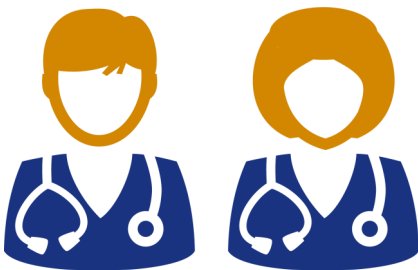


Despite the agreement to supply community clinics with appropriate medication, problems were experienced throughout the pilot with clinics regularly running out of certain medications (e.g. Hydrochlorothiazide). Some clinics reported not having certain drugs for months. As such, they were required to send patients to hospitals or private pharmacies (if available) for routine drug refills.

Client access to medications locally was a key part of decentralisation, but was not always met. There was frequent 'rationing' of diabetes and hypertension medications; normally patients would receive a supply sufficient for one month, but were only given enough medication for shorter periods.

2

Lack of initial assessment by doctor



Initially it was intended that all patients with a new diagnosis should be seen by a doctor at GSH for initial assessment before receiving nurse-led continuing care in community clinics. However, it became apparent that GSH doctors did not have the capacity to undertake such a large number of assessments, and patients did not want to travel to GSH to be assessed. However, nurses at the community clinics appear to have undertaken initial assessments of uncomplicated patients effectively without support from doctors.

3

Culture of record-keeping



In the control clinics, some diabetes/hypertension patients were being treated, but it was not possible to evaluate whether the diagnosis and treatment provided was appropriate. This is because record-keeping was poor and there was no record-keeping for NCD treatment. In several clinics, nurses had only mobility registers distributed by the ministry, and in other clinics, nurses had only tables inside notebooks to record basic personal information and medications given to the patient.

4

Geographical difficulties



Some of the clinics chosen for the pilot were located in areas where there is poor public transport, away from high- or moderate-quality roads. This makes mentoring and data collection difficult, and also makes it difficult for patients to access healthcare.

9 successes of the NCD decentralisation pilot



Our pilot intervention, using a large cohort of patients in the Lubombo region, demonstrates that it is feasible to decentralise diabetes and hypertension management to community clinics.

1

Decentralisation appears to have been undertaken successfully with intervention clinics diagnosing and treating patients with diabetes and hypertension. The ability of community clinics to successfully deliver the components of NCD care is demonstrated by process indicators.

2

The technical working group has been proactive in addressing issues with the pilot and service delivery in the rural clinics as they have arisen.

3

The national treatment guidelines for hypertension and type 2 diabetes service delivery were well received during the pilot.

4

The clinic-held and patient-held treatment cards were accurately completed by clinics, encouraging good recording and prompting clinicians to undertake appropriate care.



Family health promotion day in Eswatini



Barry Dube (right) testing blood pressure as part of the screening programme

“Decentralisation appears to have been undertaken successfully with intervention clinics diagnosing and treating patients with diabetes and hypertension.”



A patient is tested for diabetes and hypertension in the TB clinic at Good Shepherd Hospital, Siteki.

5

A comprehensive, culturally-specific training programme was developed as part of the pilot, consisting of 3.5 days of interactive training, including role-plays, lectures by expert clinicians and training evaluation.

6

The training programme and manual were well received and found to be effective. Staff at control clinics involved in the pilot have now been trained to intervention standard, learning about the prevention, management and treatment of diabetes and hypertension.

7

An agreement was made between the National NCD lead, the Chief Pharmacist, and a representative from Central Medical Stores to provide previously unreleased medications for hypertension and type 2 diabetes to rural community clinics. Access to these drugs was essential to the care that the intervention clinics were able to provide during the pilot.

8

Overall trends in all physiological parameters (including extreme values) improved, although a significant proportion of patients remained above identified targets at follow-up.

9

Medication usage demonstrates that patients were able to change regimes over the intervention, with a trend towards the combination regimes recommended by the desk guide.

Maintain a healthy weight

Being overweight or obese can increase your risk of developing diabetes, hypertension, heart problems and cancer. It also reduces your life expectancy.

The best way to maintain a healthy weight is to:

- Do regular physical activity.
- Eat a healthy balanced diet.
- Measure your weight and waist circumference regularly.
- If you are overweight set yourself goals to reduce your weight (eg. 0.5kg per week).

Aim for a waist circumference that is less than 94cm for men and less than 80cm for women.

If you have any questions about the illnesses in this brochure or how to live a healthy life please contact your local health facility.



Health Care Worker:

Telephone:

A simple guide to healthy living...



Attend your clinic for regular checkups and take your medication

It is important that you attend your appointments at the health clinic to see the health care worker.

Take a friend or family member (treatment supporter) with you to all your appointments.

It is important that you take your medication even if you feel well.

Do not miss doses of your tablets.

If you miss a dose **do not** take a double dose.

Do not share your tablets with other people.

If you think you are experiencing side effects, contact the health clinic.





Swaziland
Ministry of
Health

There are some important facts you should know about hypertension, diabetes and cardiovascular disease.



Hypertension

Hypertension occurs when your blood is at a higher pressure than normal.

If it is not treated, hypertension can cause stroke, heart attack, kidney failure and death.

You cannot transmit hypertension to someone else. It is a lifelong condition that can be treated with medication and lifestyle changes. If someone in your family has hypertension, you are more likely to be affected.



Type 2 Diabetes

Type 2 Diabetes is a condition where the body cannot use the food you eat. This results in high blood sugar levels.

If it is not controlled, diabetes can cause blindness, kidney failure, heart disease, disease of your blood vessels, poor erections and leg ulcers. High blood sugar levels in pregnancy can also damage unborn babies.

You cannot transmit diabetes to someone else. It is a lifelong condition that can be treated with medication and lifestyle changes. If someone in your family has hypertension, you are more likely to be affected.



Cardiovascular Disease

Cardiovascular disease is a condition where the blood vessels to the heart, brain and limbs are narrowed or blocked. This can lead to several serious conditions such as angina (chest pain), heart attack, or stroke.

Diabetes and hypertension increases the risk of cardiovascular disease.

There are many ways for you to improve your health...

Stop smoking

Giving up smoking is the most important thing you can do to protect your health.

If you smoke, you are much more likely to have heart attacks, strokes, lung disease, cancer and poor erections.

Smoking in the home is harmful to your family.

All tobacco products are dangerous, including those you don't smoke, like snuff.



Avoid alcohol

Long term alcohol use may cause heart disease, liver disease and stroke.



Keep active

Increasing physical activity will help keep your heart healthy.

A lack of physical activity increases your chance of having a stroke, heart attack and dying.

Try to do 30 minutes per day of activity that makes you out of breath and sweaty. For example:

- Manual work (eg. farming)
- Fast walking
- Running
- Sports
- Cycling




Eat healthy food

Improving your diet can improve your health. Eating unhealthy food or being overweight can cause heart disease, stroke and cancer.

Try to:

- Eat at least 5 portions of fruit or vegetables every day
- Eat plenty of fish
- Drink plenty of clean water
- Grill or boil food; avoid deep fried food
- Use as little cooking oil as possible - less than 1 tablespoon per day
- Avoid salt and salty foods
- Avoid fatty foods
- Avoid red meats. Remove visible fat before cooking
- Avoid sugary foods (especially if you have Diabetes)
- Avoid sugary drinks. Choose 'light' or 'zero' sugar options
- Avoid processed foods







A healthy diet, increased physical activity, not smoking and less alcohol are essential to improve your health and to help prevent diseases like hypertension and diabetes.

If you want to change any of the behaviours discussed then please talk to your health care worker.