Kingdom of Eswatini

CLINIC LEVEL
NON COMMUNICABLE DISEASES
CASE MANAGEMENT

DESK GUIDE

FOREWORD

Non-communicable diseases (NCDs) such as diabetes and heart disease are the second biggest cause of death in Eswatini and a significant cause of morbidity. Cases of high blood pressure, diabetes and the lifestyle factors which cause them are all steadily rising, causing increasing numbers of people to require treatment. Improving the care of NCD patients is therefore a priority for the Ministry of Health.

Most NCD care in Eswatini is provided by hospitals, but hospital services are working at full capacity, with little room for expansion. With the increasing burden on hospital resources, this model of care is no longer sustainable.

To respond to the needs of Emaswati, the Ministry of Health has established a National NCD program. An Eswatini NCD strategy is also being developed which aims to address the morbidity and premature mortality caused by NCDs. One of the recommendations of the strategy is the development of a decentralised NCD service where patients are seen at a local clinic in their community.

To compound high rates of NCDs Eswatini also has high burden of mental health conditions, much of which are underdiagnosed and undertreated. Having a long-term condition such as Diabetes, Hypertension, Asthma or HIV increases your risk of having a mental health condition such as depression or anxiety. Untreated depression impacts on a patient's quality of life as well as reducing a patient's ability to engage with and adhere to NCD treatments. Part 2 of this desk guide attempts to address the interlinking nature of NCDs and mental health. It is designed to provide those working in community clinics with tools to screen for depression and provide basic management.

Both the NCD and Mental Health components of this desk guide are based on successful pilots undertaken in the Lubombo region by COMDIS-HDS, in partnership with the Ministry of Health, community clinics, and Good Shepherd Hospital. The desk guides used in these pilot studies provide the basis of this document, modified to ensure alignment with the Eswatini NCD guidelines.

This document is for use by community nurses and is based on the work of Doctors, Nurses, and Researchers, working in hospitals, the community, national NGOs, and from the Eswatini Ministry of Health. We hope that you find this document provides a quick reference guide for busy community clinic staff to use during consultations with NCD patients.

Dr Velephi Okello
Deputy Director-Clinical Services

ABBREVIATIONS

ACEi	Angiotensin converting enzyme inhibitors
BG	Blood glucose
BMI	Body Mass Index *(equals weight (kg) divided by height (m) squared)*
BP	Blood pressure
bpm	Beats per minute
CCB	Calcium channel blocker
CVD	Cardiovascular disease
COPD	Chronic Obstructive Pulmonary Disease
eGFR	Estimated glomerular filtration rate
FBG	Fasting blood glucose
HbA1c	Glycosylated haemoglobin *(measures previous 3 months control)*
HAP	Healthy Activity Programme
IDF	International Diabetes Federation
IGT	Impaired glucose tolerance
IMAI	Integrated management of adult and adolescent illness
IV	Intravenously
Max	Maximum
mmol/l	Millimoles per litre *(a measure of concentration)*
NGO	Non-governmental organisation
PO	Oral administration (per os)
RBG	Random blood glucose
SR	Slow release
SSRI	Selective Serotonin Reuptake Inhibitor
TB	Tuberculosis
TCA	Tricyclic Antidepressants
TDS	Three times a day
TIA	Transient ischaemic attack
WHO	World Health Organisation

CONTENTS

PART A

Hypertension

Diabetes

Asthma

INTRODUCTION

This is a desk guide for managing diabetes, hypertension, asthma and mental health conditions at a clinic setting. It has been adapted for use in Eswatini in partnership with clinicians working in Eswatini's community clinics, hospitals, NGOs, and the Ministry of Health. It has been designed to comply with National Guidance on NCD management, whilst taking account of the community clinic environment.

This desk guide is a "quick reference" for community clinic nurses to provide routine care and health education to all patients.

The objective is to enable effective opportunistic screening, diagnosis and treatment of patients with cardiovascular disease, type 2 diabetes mellitus, hypertension, underlying risk factors, asthma and mental health counselling. The desk guide indicates when other guidelines should be used, such as national treatment guidelines or WHO Integrated Management of Adolescent-Adult Illness (IMAI). The management of acute illness are not within the scope of this guide.

This guide provides a systematic approach to monitoring patients with these diseases and preventing and identifying complications. It clearly indicates when referral to doctor-led facility and assessment by a more senior clinician is appropriate, in conjunction with continuing routine care at the nearest community clinic.

It will help to educate patients about lifestyle measures and specific treatments so individuals can take responsibility for their own care. This document includes brief lifestyle education messages and is accompanied by a more detailed guide on lifestyle advice and treatment support, for use by the health educator/clinician.

This desk guide incorporates recommendations from WHO "Package of Essential Non -communicable Disease Interventions (PEN) for Primary Health Care" (WHO, 2010b), WHO CVD-Risk Management Package for low and medium resource settings, and IDF Global Guidelines for Type 2 Diabetes (IDF, 2005) and has been produced by thorough review of current guidelines and relevant published literature. Most importantly it has been developed in partnership with clinicians working in the Kingdom of Eswatini.

WHEN TO USE THIS GUIDE

Use this guide for all adults and children attending a community clinic, in particular those with:

1. Medical history: (follow-up or defaulted)

- Cardiovascular disease
- Diabetes
- Hypertension
- Asthma

2. Symptoms:

- **Cardiovascular disease (CVD) (These symptoms require URGENT referral)**
  - Any pain/pressure/heaviness in their chest, which:
    - lasted more than 30 minutes (heart attack)
    - is brought on by walking/exercising
    - goes away after stopping exercise/resting (angina)
    - Vision loss or weakness or numbness of the arm/leg on one side of the body (TIA/Stroke)
    - Breathing difficulty and/or ankle swelling (heart failure)
    - Pain in the legs when walking, relieved with rest (peripheral vascular disease)
- **Hypertension** (usually asymptomatic)
  - Persistent headache
  - Visual loss
  - Nosebleeds
  - Breathing difficulty
- **Diabetes** (usually asymptomatic)
  - Passing more urine than usual
  - Increased thirst
  - Recurrent infections (consider HIV)
- **Asthma (**see Asthma chapter page 28 for more detail on Asthma Emergency symptoms)
  - Respiratory wheeze
  - Coughing- especially at night or whilst exercising
  - Shortness of breath

3. Risk factors: (consider opportunistic screening)

- Modifiable
  - Smoking
  - Overweight or obese
  - Diet high in salt, sugar, fat
  - Lack of exercise
  - Diabetes
  - Hypertension
  - High cholesterol
  - Kidney disease
- Non-modifiable
  - Family history
  - Age >40
  - Male sex

REFER TO THE SWAZILAND NATIONAL TREATMENT GUIDELINES FOR MORE DETAILED INFORMATION.

Cardiovascular disease (CVD) = angina, heart attack, stroke, peripheral vascular disease

History

Ask the patient about:

- the presenting problem – *allow them to describe it in their own words*
- symptoms and signs relevant to the presenting problem

Also ask about:

- Past history: including CVD, high blood pressure, diabetes, high cholesterol, kidney disease
- Current medications: ask to see the client's tablets
- Family history: CVD, hypertension or diabetes in a first degree relative < 50 years
- Lifestyle risk factors: smoking, obesity, age >40 etc

If suspected CVD, hypertension or diabetes, also ask if they have had:

- Pain/pressure/heaviness in their chest, which:
  - lasted more than 30 minutes (heart attack)
  - is brought on by walking/exercising
  - goes away after stopping exercise/resting (angina)
- Vision loss or weakness or numbness of the arm/leg on one side of the body (TIA/ Stroke)
- Breathing difficulty and/or ankle swelling (heart failure)
- Pain in the legs when walking, relieved with rest (peripheral vascular disease).

Refer URGENTLY to the hospital if the patient has any of these symptoms

*If the patient has **previously** had these symptoms, or has a known diagnosis of cardiovascular disease, they should be referred to the doctor led service for initial assessment.*

Physical Examination

If they **look very ill**, check signs of severe illness, and if any signs or symptoms as below, **REFER URGENTLY** to hospital:

- respiratory rate >20/min
- pulse >100bpm
- shock e.g. BP <90mmHg systolic
- very high BP ≥180mmHg systolic or ≥110mmHg diastolic
- fever >39°C, abdominal pain f guarding, chest pain, shortness of breath, altered consciousness with too low/ high glucose (<4mmol/l or >20mmol/l)

*If **no signs** of severe illness examine according to the presenting problem and possible causes of these.*

Check BP

- This should be taken routinely, at all appointments

Check waist circumference

- Measure waist circumference or weight and calculate BMI if possible
- *See Appendix 1 for correct measurement technique*

Target waist circumference:
Men: <94cm
Women: <80cm

Target BMI: 18.5 - 25

If waist circumference > 94cm (men) or > 80cm (women), and/or BMI > 25, explain about obesity risks and consider testing blood glucose

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m) squared}}$$

Investigations

Check blood glucose if:

- Symptoms of diabetes
  - Thirst and frequency passing urine
- High risk for diabetes e.g.
  - > 40 years and family history of diabetes or CVD
  - > 40 years and overweight (BMI >25)
- High cardiovascular risk e.g.
  - BP >140/90
  - Personal history CVD or kidney disease
- Pregnant (if raised BG, refer to district hospital/doctor)

Note: this list is not exhaustive and you should use your judgement to identify patients at risk

ALSO: check for HIV status and blood glucose if patient has any:

- thirst and frequency of urine
- feeling weak, tired all the time
- recurrent infections; vaginal/underarm thrush, skin boils
- vision loss
- “pins and needles” in the feet

ALSO: Screen for TB using *Swaziland National TB Screening Tool,* if the patient has no record of recent screening. If patient has symptoms such as **cough, fever, diarrhoea**:

- <2 weeks: consult national treatment guidelines or WHO IMAI
- >2 weeks: send 2 sputum samples to the lab for TB microscopy and consider COPD/asthma (if wheeze): see national clinical guidelines

ASSESSING PATIENTS FOR ASTHMA AND CHRONIC RESPIRATORY DISEASE

Asthma and COPD are both chronic lung conditions that cause shortness of breath, a wheezy chest and cough. Both can intermittently get worse and cause potentially fatal 'attacks' or exacerbations. Both are managed using inhalers. Acute attacks may require nebulised, oral or intravenous medication.

COPD is associated with lung damage from long-term exposure to smoking or environmental smoke or dust (e.g. through work) and therefore presents in adults. Asthma usually presents in childhood and is normally genetic. Asthma is fully reversible (as there is no long term lung damage)

Diagnosis	**COPD**	**Asthma**
Description	Chronic cough and shortness of breath, in smokers or former smokers.	Variable wheeze, shortness of breath, cough Improvement in symptoms (or PEFR*) 10 minutes after 4 puffs of salbutamol through a spacer
Symptoms		
Started <40 years	Rare	Common – usually in childhood
Smoking or occupational history (e.g. mining/industrial)	Nearly all	Maybe
Breathlessness	Persistent and progressive Poor response to salbutamol	Variable throughout the day and from day to day (episodic) Good response to salbutamol
Chronic cough with sputum	Common	Uncommon
Night time wheeze/cough	Uncommon	Common
Chest pain	Uncommon – consider alternative diagnosis	Uncommon - consider alternative diagnosis
Treatment	The core treatment for asthma and COPD are **inhalers. Salbutamol when required can be used for either conditions. See WHO PEN for more info on treating COPD**	

*PEFR = Peak Expiratory Flow Rate – measured on peak flow meter (see the back of the guide)

Remember if cough for 2 weeks or longer consider TB – follow local guidelines

HYPERTENSION

Types of Hypertension

Essential/Primary Hypertension

- Accounts for the majority of patients seen (80-95%)
- Usually no underlying medical cause, but cardiovascular risk factors present

Secondary Hypertension

- Elevation of BP is due to an underlying condition

Untreated hypertension leads to end-organ damage, including:

- Cardiac disease (**congestive heart failure**)
- Kidney disease **(raised creatinine or protein in urine)**
- Eye disease **(hypertensive retinopathy)**
- Brain disease **(stroke)**

This guide is only for primary hypertension. Patients with suspected secondary hypertension should be immediately referred to a doctor led service.

HYPERTENSION

Diagnosis

- A diagnosis of hypertension is made based on three different elevated systolic readings above 140 mm Hg and/or diastolic readings over 90 mm Hg

- It requires three BP measurements within a week (for example on days 1, 3 and 5).

- If patient is unable to return to clinic for three separate readings, then a diagnosis can be made with two readings, spaced as far apart as possible.

[*The blood pressure measurements can be taken and recorded in any community clinic.]*

- If BP > 140/90 recheck after sitting for 5 minutes.

STAGING:

BP 140-159/90-99: Stage 1 *(mild hypertension)*

BP 160-179/100-109: Stage 2 *(moderate hypertension)*

BP ≥ 180/110 (systolic and/or diastolic): Stage 3 *(severe hypertension)*

HYPERTENSION

Management

At diagnosis of hypertension

- Try lifestyle change alone for first 1-3 months if BP 140-159/90-99 and the patient is committed (see stepwise management below).

Decide target level for BP:

TARGET BP	
Hypertension only	< 140/90mmHg
Hypertension and diabetes	< 130/80mmHg

Note: some patients may require a different target e.g. elderly

At every appointment, for all patients with hypertension:

- Check BP and if >130/80 see hypertension management
- Check for complications
- Advise lifestyle changes (see chapter 4)
- Give patient education (see chapter 4)

Monitoring before the next appointment

- If the patient can afford it, advise them to buy a home blood pressure monitor
- This should be a validated make and model
- Patients should record their BP readings in notebook

HYPERTENSION

Anti-hypertensive Drugs

- If possible, offer drugs taken *only once per day*
- Start with lowest dose
- Recheck BP *monthly*
- Increase doses step by step manner to maximum **tolerated** dose to achieve BP con-trol (see table below)
- Monitor potential side effects and if occur lower the dose or change the drug
- If on maximum, of highest tolerated dose, and BP not controlled, **add another drug**

Note: If patient currently stable on medications other than those in this guide-line (e.g. aldomet), consider stopping the medication and monitoring. If in any doubt, discuss with a doctor led service or refer.

Monitoring

Note: Hydrochlorothiazide can cause elevated blood sugar. When initiating in diabetic or pre-diabetic patients, monitor blood glucose *at least twice per week* for the *first two weeks.*

- If on a thiazide-like diuretic (e.g. hydrochlorothiazide), and feasible, **check urea, creatinine and electrolytes** *6 monthly*
- If feasible **check urea, creatinine and electrolytes** *2 weeks* after starting an ACE in-hibitor or increasing the dose, and with each annual check up If
- feasible, check **cholesterol** levels

Aspirin:

For certain patients with multiple risk factors or a past history of CVD, aspirin is used to prevent blood clots. Aspirin can have serious side effects such as bleeding and stomach problems. **Aspirin should only be initiated by a doctor led service**, following careful risk assessment.

HYPERTENSION

Follow-up, Documentation & Patient Education

Follow-up

- Patients should be followed up monthly for review and refills.
- Check BP at each appointment
- If BP not at target level, review adherence, side-effects, adjust dose and follow up monthly (see stepwise management table below)
- Medication should be modified every 3-6 months if target not met
- Ask if any new or worsening symptoms
- Annual review: All patients should have an annual review at hospital.

Documentation

- Document results and management on patient held treatment card and community clinic patient notes
- Make follow up appointment and document
- Set annual review date at hospital and document
- Add to NCD register if new patient

Patient Education

- Lifestyle advice (see p15 for advice for ALL CVD, diabetes and hypertension pa-tients)
- Medication adherence
- Disease specific advice (see p16)
- Encourage them to use their treatment supporter or Rural Health Motivator (RHM), if available.

HYPERTENSION

Special Circumstances & Complex Patients

Patient aged < 40 years and BP >140/80

Refer to doctor-led service for investigation of possible causes of secondary hypertension.

Patient with Type 2 diabetes AND hypertension:
BP >130/80

1. Aim for lower target BP (130/80)
2. Consider a statin (if cholesterol high)
3. Consider aspirin (to be initiated by doctor)

Pregnancy

If pregnant or at high probability of becoming pregnant refer to doctor led service for specialist care (as management of patient is different)

Complex Patients
refer to doctor led service if

- Severe hypertension BP ≥ 180/110
- Multiple severe risk factors
- Multiple co-morbidities
- Elderly patients
- Pregnant
- Symptoms of CVD e.g. chest pain, shortness of breath, weakness, swelling, pal-pitations
- Kidney disease (urine dipstick positive for protein on 2 or more occasions)
- Visual problems (retinopathy)
- Suspected type 1 diabetes
- Suspected secondary hypertension
- **If in any doubt, contact the doctor led service or refer**

TABLE 3: Stepwise management of hypertension

Entry point	Management
Step 1: Community clinic level	
Mild hypertension: BP 140-159/90-99	Lifestyle modification (see chapter 4) if patient is committed If not controlled after 1-3 months go to step 2 If multiple risk factors present (see p2) go to step 2 For complex patients (see p6) refer to doctor led service
Step 2: Community clinic level	
Failure at Step 1 OR Moderate hypertension: BP 160-179/100-109	Lifestyle modification + Hydrochlorothiazide* 12.5 to 25mg PO daily until target BP reached
Step 3: Initiation at hospital level. Follow up at clinic level when stable	
Failure at Step 2 OR Severe hypertension:***** BP ≥ 180/110	Lifestyle Modification + Hydrochlorothiazide 25mg PO daily + Ace inhibitor (e.g. Captopril) OR Calcium channel blocker (e.g. Nifedipine SR)
Step 4: Initiation at hospital level. Follow up at clinic level when stable	
Failure at step 3	Lifestyle Modification + Hydrochlorothiazide 25mg PO daily + Ace inhibitor (e.g. Captopril) + Calcium channel blocker (e.g. Nifedipine SR)
Step 5: Hospital level	
Failure at step 4	Patients who have failed at step 4 should be managed by doctor led service.

* Hydrochlorothiazide can cause elevated blood sugar. When initiating in diabetic or pre-diabetic patients, monitor blood glucose at least twice per week for the first two weeks.

* For patients not already on treatment, if BP ≥ 180/110, give a stat dose of Captopril 12.5mg PO by the nurse before referring immediately to the doctor led service

TYPE 2 DIABETES

Definition

Diabetes is a condition where the patient has raised blood glucose due to an inadequate amount of, or impaired response to, insulin.

There are two types of diabetes, and they share common symptoms:

SYMPTOMS:

- thirst
- polyuria
- tiredness
- hunger
- unexplained weight loss
- frequent or prolonged infections
- skin boils
- pins-and-pricks sensation in the hands or feet
- impaired vision

TYPE 1

Cause: > the pancreas stops producing insulin
Age of Onset > generally develops in childhood
Presentation > tends to be acute, with short duration of symptoms
Management: > immediate and lifelong insulin replacement

All patients suspected of having Type 1 Diabetes must be referred urgently to a doctor-led service.

TYPE 2

Cause > the pancreas doesn't produce enough insulin OR,
the body's cells don't respond to insulin
Age of Onset > generally develops in adulthood
Presentation > tends to be chronic with longer duration of symptoms

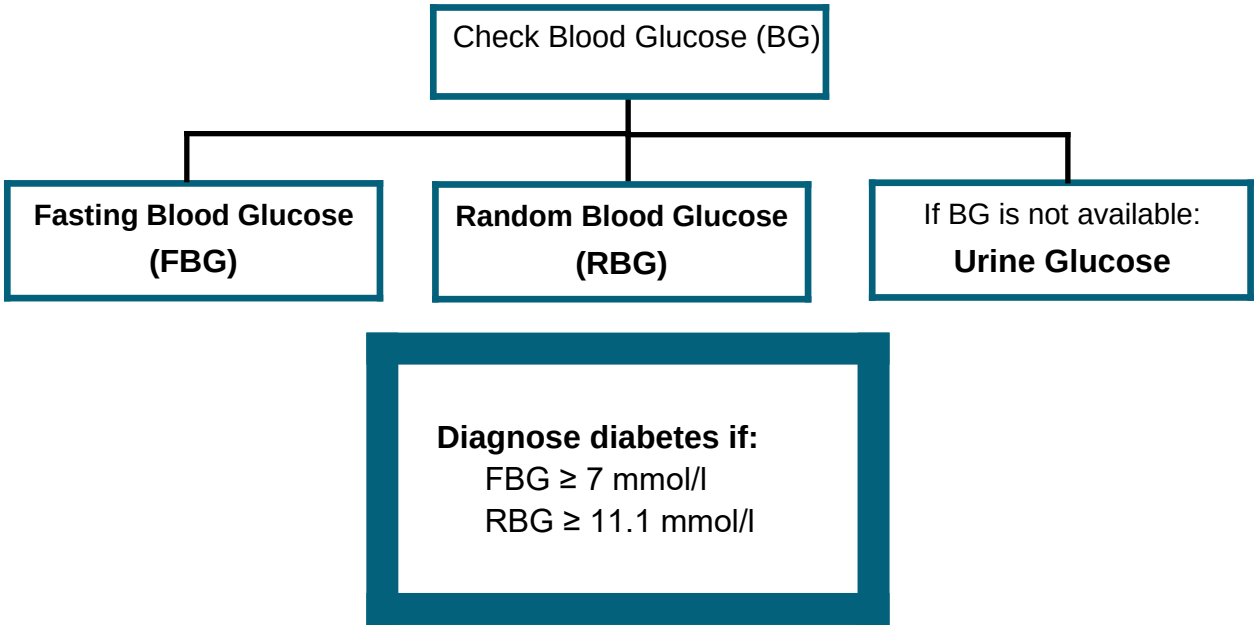
TYPE 2 DIABETES

Diagnosis

Two separate tests are required

(unless very high blood glucose level e.g. RBG ≥ 17 mmol/l or FBG ≥ 11 mmol/l).

If the first test is RBG, confirm the diagnosis with a FBG. If unsure, discuss patient with doctor-led service.



Diagnose diabetes if:

FBG ≥ 7 mmol/l

RBG ≥ 11.1 mmol/l

No diabetes if:

- FBG < 5.5 mmol/l
- RBG < 7.8 mmol/l

Give lifestyle advice (see chapter 4), but there is no need to follow up

Diagnose pre-diabetes (impaired glucose tolerance) if:

- FBG is between 5.6-6.9 mmol/L
- RBG is between 7-11 mmol/l

(then perform a FBG next morning)

If pregnant:

- Diagnose gestation diabetes if FBG >5.1mmol/l
- Refer to doctor-led service

TYPE 2 DIABETES

Management

① At diagnosis of diabetes:

- Try lifestyle change alone for *first 1-3 months* if **FBG <10 (RBG <17)** and the patient is commit-ted (see stepwise management below). Otherwise, refer to a doctor led service to start medications once a diagnosis of diabetes has been made.

② Decide target level for blood glucose reduction:

- Use a higher target level if elderly, end organ damage or unacceptable hypoglycaemia as a side effect).

Target blood glucose levels

	Normal	Target
Fasting blood	**4.0-5.5**	**5.0-7.0**
Random blood	**4.0-7.8**	**4.0 - 10.0**

③ At every appointment, *for all patients with diabetes:*

- Ask to come fasting
- On arrival test FBG, then can eat and wait for consultation
- Check BP and if >130/80 see 'Hypertension Management'
- Check for complications
- Advise lifestyle changes (see Chapter 4)
- Give patient education (see Chapter 4)

④ Monitoring before the next appointment:

- If the patient can afford it, either:
  - buy a glucometer and strip – and do their own blood glucose at home, **OR**
  - attend a nearby clinic for a glucose test, **OR**
  - do urine dipstick **before breakfast** for **glucose, ketones and protein**.

  *(Any **positive results** should be sent to the doctor-led service)*
- Advise patients to:
  - test **before breakfast** and **2 hours after a meal** *once per week*, or more frequently if poor

TYPE 2 DIABETES

Oral Hypoglycaemic Medication

- Start with lowest dose and increase step by step to achieve control of the blood glucose (BG) level (see table below for stepwise management of Type 2 diabetes).
- If blood glucose not controlled increase up to maximum dose, but if side-effects, go back to the tolerated dose, and add the next step drug until control of BG
- Check contraindications (see Chapter 7: **do not use in pregnant women**)
- Monitor potential side effects (see Chapter 7).

If in any doubt, contact the doctor led service, or refer the patient.

ASPIRIN

For certain patients with multiple risk factors or a past history of CVD, aspirin is used to prevent blood clots. Aspirin can have serious side effects such as bleeding and stomach problems. Aspirin should only be initiated by a doctor led service, following careful risk assessment.

TYPE 2 DIABETES

Diabetic Patient Follow-up:

General:

- Check **FBG** (or RBG if not fasted) and **BP** at each appointment
- If BG not at target level, review adherence, side-effects, adjust dose and follow up monthly (see stepwise management table below)
- If BG at target level, follow up *monthly*
- Ask if any new or worsening symptoms
- Ask about symptoms e.g. vision change, pins and needles or numbness, foot problems and examine if symptom present
- Encourage all patients to attend diabetic-eye screening where available
- Ask about contraception and whether planning pregnancy
- Check **Urine dipstick** (if urine dipstick positive, refer to doctor-led service)

Refer to doctor led service any diabetic patient with:

- pregnancy (for review and to switch to insulin)
- leg ulcers and/or infection
- vision loss (retinopathy, cataract)
- pins and needles/numbness in hands and feet (neuropathy)
- urine dipstick **positive**
- proteinuria on 2 or more occasions
- ketones ++
- if **creatinine >1.4mg/dl (160 µmoles/L)** or rise of more than 10% from previous level or low or falling eGFR < 45mls/min/1.73m$_2$ (severe kidney disease): **stop metformin**
- any child diagnosed with diabetes

Annual review:

- All patients should have an annual review at hospital. This should include:
- **If available check HbA1c** *(send result with patient for annual review at doctor led service)*
- **If available check cholesterol** (*send result with patient for annual review at doctor led service)*: If **low density lipoprotein (LDL) ≥2.6 mmol/L** refer to doctor led service for review
- ask about change to vision/vision loss: use vision chart, look for cataract, examine retina, refer to ophthalmologist if available.
- ask about any foot problems and assess the condition of the feet: check sensations, foot pulses and footwear
- ask about pins and needles, numbness in legs and poor erections: check for peripheral sensation loss
- discuss knowledge and beliefs of diabetes, foot care, glucose monitoring.
- discuss progress with lifestyle changes
- send to counsellor/educator or expert patient, as available

TYPE 2 DIABETES

Documentation, Patient Education & Complex Patients

Documentation

- document results and management on patient treatment card and community clinic notes
- make follow up appointment and document
- set annual review date at hospital and document
- add to NCD register if new patient

Patient education

- lifestyle advice (see Chapter 4)
- medication adherence
- disease specific advice (see Chapter 4)
- Encourage them to use their treatment supporter/RHM

Complex patients: refer to doctor led service if

- Severe hypertension BP ≥ 180/110
- Multiple severe risk factors
- Multiple co-morbidities
- Elderly patients
- Pregnant
- Symptoms of CVD e.g. chest pain, shortness of breath, weakness, swelling, palpitations
- Kidney disease (urine dipstick positive for protein on 2 or more occasions)
- Visual problems (retinopathy)
- Suspected type 1 diabetes
- Suspected secondary hypertension

If any doubt, contact the doctor-led service or refer

Table 6: Stepwise Management of Type 2 DM

Entry point	Management
Step 1: Community clinic level	
Pre-diabetes: FBG 5.6-6.9 mmol/l RBG 7-11 mmol/l	Inform patient they may develop diabetes in future Advise lifestyle modification (see chapter 4) Check blood glucose every 6 months.
Step 2: Community clinic level	
Diabetes: FBG 7-10 mmol/l RBG ≥11.1-17 mmol/l	Lifestyle modification (see chapter 4) if patient is committed If not controlled after 1-3 months go to step 3 If FBG >10mmol/l or RBG >17 go to step 3 For complex patients (see p11) refer to doctor led service
Step 3: Initiation at hospital level. Follow up at clinic level when stable.	
Failure at step 2 OR FBG >10 mmol/l RBG >17 mmol/l	Lifestyle modification + Metformin
Step 4: Initiation at hospital level. Follow up at clinic level when stable	
Failure at step 3	Lifestyle modification + Metformin + Sulphonylurea
Step 5: Hospital level	
Failure at step 4	Consider insulin. Follow up at hospital.

ASTHMA AND CHRONIC RESPIRATORY DISEASE

ASTHMA
Diagnosis

Asthma is a symptomatic disease. Although it is a chronic disease and someone with asthma does **not always** have symptoms, it will present with intermittent (coming and going) symptoms. Asthma can be initially diagnosed by a nurse in the community and treatment initiated. Patients require confirmatory diagnosis in a hospital.

Symptoms: Wheeze, cough, difficulty breathing, chest tightness, that is:

- Frequent and recurrent
- Often worse at night and early in the morning
- Symptoms variable from day to day
- Worse after exercise/triggers, e.g. exposure to animals/smoke/ aspirin/infection

Risk Factors may be, but aren't always, present and include:

- Personal or family history of hay fever, eczema or asthma (atopic disease)
- Age: *usually* in young patients (though can also be an older adult)
- Exposure to triggers can make asthma worse e.g. animals, smoke, exercise

Examination may show:

- Wheezy chest when listened to with a stethoscope –a musical note in the lungs, more when the patient breathes out, and reduces within minutes after inhaling Salbutamol.

Definitive Diagnosis requires:

- Peak Expiratory Flow Metre (PEFR) assessment. Normal peak flows are shown in the back of the guide but ideally the patient should know what their peak flow is when they are well
- When the patient is not well, test their PEFR - see how in the back of the guide
- Give 2 puffs of Salbutamol and re-test PEFR in 15 mins.
- If PEFR improves by 20%, asthma if likely. If PEFR improves slightly and the patient is an adult and smoker/ex-smoker then COPD is possible.
- **However, this is not required to start treatment. If the patient has a convincing history of asthma symptoms, you can treat as below before PEFR testing**

If your patient might have COPD instead, refer the patient to hospital for review.
Children younger than 5 should be referred to hospital.

Always consider TB.

TB screening +/- testing is required for any prolonged cough, night sweats and/or weight loss. Do not miss TB in your asthmatic patients.

Do not misdiagnose asthma in patients with TB.

ASTHMA
Acute Asthma

If a patient presents to you with wheeze and breathlessness, you must first assess the severity of the attack using the table below. **If the patient has a fever consider infection. Review after treatment and keep reviewing until symptoms settle or the patient goes to hospital. Symptoms can quickly become life-threatening.**

	Signs and symptoms	**What to do**
Mild asthma attack	Increasing wheeze and shortness of breath PEFR 50-75% best or predicted* No features of severe or life-threatening asthma (see below)	6-10 puffs Salbutamol via inhaler +/-spacer 'Double up' Salbutamol and steroid inhalers When improved return to previous dose
Severe asthma attack	Unable to complete sentences in one breath Intercostal recession (seeing gaps between the ribs when the patient breathes in) Breathing rate >25 breaths/minute Heart rate >110 beats/minute PEFR <50% of best or predicted*	**Refer to hospital urgently** -Oxygen if available -Inhaled salbutamol: 10 puffs of inhaler with spacer (see back pages) or, if available, nebuliser. Repeat salbutamol every 15-30 minutes according to response -Prednisolone[1] orally single dose and/or single dose hydrocortisone[2] IV (give before transport to hospital) -If available, 2 puffs of ipratropium bromide inhaled using spacer or nebuliser
Life-threatening asthma attack	Exhaustion, poor respiratory effort. Confusion, altered conscious level, cyanosis, heart rate <60 beats/ minute, silent chest (unable to hear breath sounds), PEFR <33% best or predicted** SpO2 <92%	**Refer immediately to hospital. Treatment as above, but repeat Salbutamol frequently** If oxygen is available, maintain oxygen saturations at 94-98%
In addition (at any level)	If there are symptoms/signs of a lower respiratory infection give an antibiotic such as amoxicillin (or if allergic, e.g. erythromycin) If symptoms resolve and patient is stable, send home with oral prednisolone[1] for 3 days (child) 7 days (adult). Say return urgently if symptoms worsen	

Once symptoms resolve the patient must be assessed - see the following page – and prescribed chronic asthma medication to prevent further attacks

[1] Prednisolone: Child 1month–11years 2mg/kg (max. 60mg) once day for 3 days (longer if needed – seek physician advice); Adult 40mg once day for 5 days

[2] Hydrocortisone: Child 2-17years 4mg/kg every 6 hours (max. 100mg); Adult 100mg every 6 hours.

ASTHMA
Chronic Prevention

The aim of this treatment is to **control** asthma, by:

- Preventing symptoms affecting the patient's life
- Preventing life-threatening acute attacks

Well-controlled asthma is:

- **No** or **minimal** limitation of daily activities
- **Daytime** asthma symptoms (needing Salbutamol) 3 times a week or less
- **Night-time** asthma symptoms **2 times a month or less**
- **No** severe exacerbation (i.e. requiring oral steroids or admission to hospital) within a month
- A PEFR above 80% predicted

Poorly or uncontrolled asthma is therefore any patient that does not achieve all the above points and you should initiate them on treatment, or increase existing treatment.

Remember that this is for patients with mild or no symptoms at present. See the previous page for more on **acute** asthma.

Treatment

Treatment consists of education and inhaled medication.

Medications are '***relievers'*** and '***preventers'***. A reliever should be used whenever the patient has symptoms. They do not need to be taken regularly. Salbutamol is a reliever. A preventer needs to be taken regularly, even if the patient does not have symptoms. Inhaled steroids such as Beclometasone are preventers.

Treatment follows a 'step-wise' process, similar to hypertension and diabetes. Patients need to be **reviewed regularly**: initially every 1-3 months and, once stable, every 6 months to assess whether the need to step up, or down, on treatment. **Do not step-down treatment until asthma has been fully controlled for 6-12 months.**

Step	Asthma Step Wise Management
Step 1	**2 puffs Salbutamol inhaler whenever needed** Education Refer to hospital for diagnosis, but continue care in community
Step 2	**2 puffs Salbutamol inhaler whenever needed +** **Inhaled steroids (preventer) beclomethasone 100 - 200 µg twice daily (100 microgram (µg) once or twice daily for children[3], 100 µg twice daily for adults)** Education Refer to hospital for diagnosis, but continue care in community
Step 3	**2 puffs Salbutamol inhaler whenever needed +** **Inhaled steroids (preventer) beclomethasone 200-400 µg twice daily (children 5-11years[3] max. 200 µg twice daily)** Education Refer to hospital for diagnosis, but continue care in community
Step 4	**2 puffs Salbutamol inhaler whenever needed +** **Inhaled steroids (preventer) beclomethasone 200-400 µg twice daily (children 2-11years[3] max. 200 µg twice daily) +** **Low-dose oral theophylline (or Montelukast or Salmeterol if available)** Education
Step 5	**2 puffs Salbutamol inhaler whenever needed +** **Inhaled steroids (preventer) beclomethasone 200-400 µg twice daily (children 2-11years[3] max. 200 µg twice daily) +** **Low-dose oral theophylline (or Montelukast or Salmeterol if available) +** **Low-dose oral steroid (almost always less than 10mg daily)** Education

[3] All children under 5 need to be reviewed by a specialist.

Give all Patients a Lifestyle Education Leaflet

Discuss the following with each patient:

Weight:

Advise all overweight patients to lose weight by increasing physical activity and healthy eating. Aim for waist circumference <94cm in men and <80cm in women. Aim for BMI between 18.5 and 25 kg/ m^2

Healthy eating:

Encourage individuals to eat less fat and salt and to increase their intake of fruit and vegetables. Also encourage patients to eat three portions of fish a week, ideally oily fish, such as mackerel, sardines and tuna

Physical Activity:

Encourage existing activity and advise 30 minutes/day of physical activity

Alcohol:

Avoid or reduce alcohol; women one drink and men two drinks only per day e.g. 2 small bottles of beer (have 2 alcohol free days per week)

Smoking (if applicable):

Encourage all patients who smoke to give up smoking. Advise patients that quitting smoking is the single most important thing they can do to protect their heart and health
Encourage all non-smokers not to start smoking

Reinforce messages at all appointments

Add additional information as required e.g. change in medication

Use local, simple and clear language

Give the patient an education leaflet

Ask the patient to repeat key points and ask if they have any questions

.

Reminders & Adherence

Remind patient:

- name and dosage of each tablet
- to take tablets as prescribed, at the same time each day
- not to take someone else's tablets
- if they forget to take a tablet, not to take an extra dose next time
- only change tablets when the health worker advises them
- of side-effects (see Chapter 7) and to tell the health worker if they experience any

Patient adherence:

- **Explain** to the patient the importance of attending clinic appointments and taking prescribed medication
- **Explain** the importance of a treatment supporter
- **Tell** the patient that if they miss an appointment a reminder will be sent or an attempt to contact them will be made
- **Give** the patient an education leaflet
- **Refer** the patient to the RHMs and community carers

Special Patient Education for Hypertension

Inform the patient:

- Hypertension is a long-term condition, but treatable with lifestyle changes and medication
- Diabetes and hypertension are linked diseases - patients with diabetes can develop hypertension and the other way around
- A healthy diet, increased physical activity, no smoking, less alcohol are essential. Decreasing salt and fat levels are important.
- Without treatment, there is increased risk of stroke, heart attack, vision problems, disease of your blood vessels, kidney failure and death
- A patient cannot give hypertension to another person (though relatives, especially offspring are at increased risk)

Encourage patients to share the message about healthy eating and increased activity with their relatives, to reduce their risk of hypertension.

Special Patient Education for Diabetes: GENERAL

Inform the patient:

- diabetes is when the body cannot properly use the foods we eat, especially sugar due to lack of insulin
- treatment is life-long
- a person cannot give diabetes to another person. However, relatives, particularly their children, are at increased risk and they must take preventive measures, as advised to the person with diabetes
- blood sugar control, a healthy diet and increased physical activity are essential
- if blood glucose is not controlled, it can cause blindness, kidney failure, heart disease, strokes, disease of your blood vessels, impotence, leg ulcers
- diabetes and hypertension are linked diseases
- patients with diabetes can develop hypertension and the other way around, especially if overweight
- high blood sugars in pregnancy can damage unborn baby
- patients with diabetes have a high risk of infection, including TB, and any cough of more than two weeks **must be** investigated

Encourage patient to:

- reduce weight if overweight
- eat a healthy balanced diet
- take regular physical activity (30 minutes per day)
- stop smoking

Special Patient Education for Diabetes

① Hypoglycaemia (low blood sugar)

- Risk of hypoglycaemia (too low blood sugar) especially if:
- on insulin and sulphonylureas
- drinking alcohol
- missed, small or delayed meals
- vigorous activity

If alert:
Drink a sugary drink, eat a sweet or a tablespoon of sugar/honey (placed under the tongue) and then have a snack.

If not alert/unconscious:
If available give hypertonic glucose IV
Urgently refer to hospital.

SYMPTOMS:

- headache
- dizziness
- anxiety
- weakness
- shakiness
- fast heartbeat
- hunger
- irritability
- cold sweat (moist skin)
- confusion
- loss of consciousness

② Hyperglycaemia (high blood sugar)

- Check BG if poor glucose control, and/or they become ill, or a recurrence of diabetes symptoms, such as thirst.

If BG ≥18 mmol/l:

- Refer urgently to hospital
- Before they leave:
  - if possible, start IV drip quickly, 1 litre 0.9% saline over 30mins-1 hour
  - encourage them to drink water, as much as possible, on the way

Special Patient Education for Diabetes: Foot Care

At diagnosis and annual review OR frequently if known problem:

- inspect both feet for any ulcers or deformity
- test foot sensation with monofilament and tuning fork
- palpate for foot pulses
- inspect footwear
- Any ulcer or new foot deformity refer to doctor-led service.

Patients with reduced sensation or absent foot pulses are high risk of acquiring foot disease.

Foot care education:

- do not walk with bare feet
- make sure shoes fit properly and do not cause shoe bites. Advice to buy
- footwear in the evening when foot size is biggest
- wash and dry your feet regularly
- check your feet regularly for any broken skin. If any new broken skin, go
- to clinic to be seen, even if painless
- do not cut calluses or corns – go to the clinic for treatment
- if patient has numbness in feet, be careful near fires and hot water

Special Patient Education for Diabetes: Eye Care

Diabetic retinopathy is a serious condition of the eye which can cause blindness but is preventable and treatable.

- All patient should attend diabetic eye screening once a year even if they have no symptoms (available at specialist eye clinics and some outreach services)
- Reassure patients screening is painless and finding problems early can prevent blindness
- Staff should ask at every appointment about dark spots or strings in their vision (floaters), blurred vision, seeing colours differently. If so, refer to an eye clinic immediately.

ASTHMA
Patient Education

Education is **crucial** at diagnosis and needs reinforcing **every time you see the patient**.
The key points you need to tell your patient (and/or their parents) are:

- Asthma is not infectious so cannot be passed from one person to another
- It is a narrowing of the airways - the reliever(Salbutamol inhaler) opens them up
- Inhalers are **completely safe** and very important care for asthma. Take time to show the inhaler to the patient and make sure they are using it. Listen to their concerns and reassure. Teach them the inhaler technique (see back pages).
- Smoking makes asthma much worse – advise to stop, this includes anyone smoking near the patient
- Avoid smoke from cooking or fires as much as possible, as this can also make asthma worse. If you cannot avoid it, wear a shirt or material (or a mask) over your mouth and nose
- If you use a kerosene lamp inside, try and replace this with an electric lamp or candle or move this as far away from the patient as possible
- Teach the patient to recognise their triggers: when does their asthma get worse? Where are they? What is near them? What have they just done? Common triggers can include exercise, animals, cold weather, pollen, smoke and certain foods and others. Once they have identified these triggers, ask them to avoid them if possible, apart from exercise. For exercise, or any other trigger it is impossible to avoid, ask them to take 2 puffs of their Salbutamol *before*, and anytime they need it during this time.
- **They must always carry their reliever inhaler (Salbutamol) with them**
- **Symptom recognition:**

An important part of asthma care is understanding their illness and when they are getting worse. Explain symptoms they may have (see page on 'Asthma Diagnosis'). If their symptoms are not controlled (see page on 'Asthma Chronic Prevention') then ask them to double dose their inhalers and attend a health facility.
If they are acutely breathless and their symptoms are not improving with their Salbutamol **they must seek urgent medical care and take up to 10 puffs of Salbutamol as required**.

Asthma attacks can be fatal but are treatable.

TREATMENT ADHERENCE

Treatment Supporters

Explain to patient why a treatment supporter is important:

- treatment is life-long, support is essential
- it can be difficult to remember to take tablets regularly, but it is vital to continue treatment
- a treatment supporter is someone they can talk to easily and who will encourage them to continue with treatment
- it is their choice who will be their treatment supporter. The treatment supporter will be called if they cannot be contacted or if there is a problem

Discuss who would be the best treatment supporter. It must be someone concerned, trusted and committed to providing support.

Help the patient choose someone e.g. family member, friend or community volunteer. If patient cannot decide, suggest someone.

Record name, address and mobile phone number of patient and treatment supporter on the patient's treatment card (see below).

Ask the patient to bring treatment supporter with them for all clinic visits, to learn about the illness, treatment and their role.

Advise treatment supporter to**:**

- meet with the patient often; try to make this an enjoyable time. If possible, meet at the time the patient takes their tablets to see them taking the tablets as prescribed
- look at tablet pack to check the patient is taking tablets correctly
- inform health worker if the patient stops taking the tablets
- encourage the patient to be active, eat healthily, stop smoking as needed and attend appointments

TREATMENT ADHERENCE

Appointment Reminders

If an individual fails to attend a review appointment, take action:

- **phone** patient and encourage them to return
- **phone** treatment supporter and ask them to remind patient
- **send** reminder letter to patient if you cannot contact them
- **ask** someone e.g. community clinic healthcare worker to visit patient at home if patient does not return

If patient is not adhering to treatment or attending appointments:

- do not criticise
- discuss any concerns or difficulties
- encourage the patient and treatment supporter to continue with support and attending appointments
- remind patient of treatment contract and the importance of continued medication

If patient has stopped medication:

- Check BP and do lab tests as appropriate
- If results are high, review and re-initiate
- The choice of drugs depends on the previous step and duration of default
- If in doubt, contact a doctor-led service

SUMMARY OF NCD APPOINTMENT AND ANNUAL REVIEW

NCD Appointment

- Assess symptoms and signs related to condition
- Measure waist circumference/weight if looks overweight
- Take BP
- Check blood glucose if indicated e.g.
  - Diabetic patient
  - Risk factors present
- Prescribe medication as disease specific guidance
- Give patient education including
  - Lifestyle advice
  - Medication adherence
  - Disease specific advice
- Encourage treatment supporter
- Make follow up appointment and ensure has annual review date at hospital
- Document results and management on treatment card and patient notes
- If new patient, add to NCD register

ASTHMA
At review appointments

Assess if asthma is **controlled** (see definition on page on 'Asthma Chronic Prevention') by asking the 4 questions:

- Have you had difficulty sleeping due to your asthma (including cough)? If so how often?
- Have you had your usual asthma symptoms during the day? If so how often?
- Has your asthma interfered with your usual activities, e.g. work/school?
- Have you had to go to a health centre because of your asthma (asthma attack)

Also:

- Ask about any new symptoms
- Check smoking status and give support to stop
- Discuss medication and side effects
- Review if patient is using their inhaler correctly – always review technique – it is very often not done correctly and this can affect treatment! – see the back of the guide
- Check PEFR, record and compare to previous records – see the back pages of the guide
- Listen to their chest and assess wheeze
- Document this in their notes

Step up treatment if asthma is uncontrolled. Refer to hospital routinely if uncontrolled and the patient is up to Step 3 in the community. Refer urgently if the patient is unwell.

Always consider TB.
TB screening +/- testing is required for any prolonged cough, night sweats and/or weight loss. Do not miss TB in your asthmatic patients. Do not misdiagnose asthma in patients with TB.

SUMMARY OF NCD APPOINTMENT AND ANNUAL REVIEW

Hospital Annual Review

- Assess symptoms and signs related to condition
- Measure waist circumference/weight
- Take BP
- Check renal function and glucose
- Ensure check-up at eye clinic is arranged
- Check cholesterol levels
- Prescribe medication as per disease specific guidance
- Give patient education including
  - Lifestyle advice
  - Medication adherence
  - Disease specific advice
  - Encourage treatment supporter
- Arrange follow up at community clinic
- Document annual review date at hospital
- Document results and management on patient held treatment card and patient notes
- If new patient – Begin a clinic held patient record, and a patient-held clinical record
- Consider VCT and TB screening and document results

DRUGS

Drugs for Hypertension

ACE inhibitors (ACEi)
Captopril 12.5-25mg PO BD (max 50mg BD)
Enalapril 5mg OD (max 40mg OD)

Calcium channel blocker (CCB)
Nifedipine 20mg daily (max 40mg BD)

Diuretics
Hydrochlorothiazide 12.5mg daily (max 25mg daily)

Central acting
Methylodpa (Aldomet) for pregnant women
250mg BD-TDS (max 3g daily)

Drugs for Diabetes Mellitus

Biguanides
Metformin 500mg OD (max 2g daily)

Sulphonylurea
Glipizide 2.5-5mg OD (max 15mg OD)

Initiating metformin:

Dose: 500mg tablet once daily after dinner

- review *after 2 weeks*
- if tolerated add one **500mg tablet** with breakfast
- if tolerated, increase by a **500mg tablet** *every 2 weeks,* up to **maximum of 1g** *twice a day*
- recheck fasting glucose at each visit

Other sulphonylurea options (as available):

- **Gliclazide** 40-80mg once daily (max 320mg daily in divided dose)
- **Glimepiride** 1mg once daily (max 8mg)
- **Glipizide** 2.5-5mg once daily (max 40mg)
- **Tolbutamide** 0.5g daily (max 2g)

If above drugs not tolerated

- use **Acarbose** 50mg daily (max 200mg TDS)

Insulin
For type 1 diabetes (childhood onset/insulin dependent diabetes) or uncontrolled type 2 diabetes, **refer to doctor-led service**.

DRUGS

Other Drugs

Aspirin

For certain patients with multiple risk factors or a past history of CVD, aspirin is used to prevent blood clots. Aspirin can have serious side effects such as bleeding and stomach problems. **Aspirin should only be initiated by a doctor led service**, following careful risk assessment.

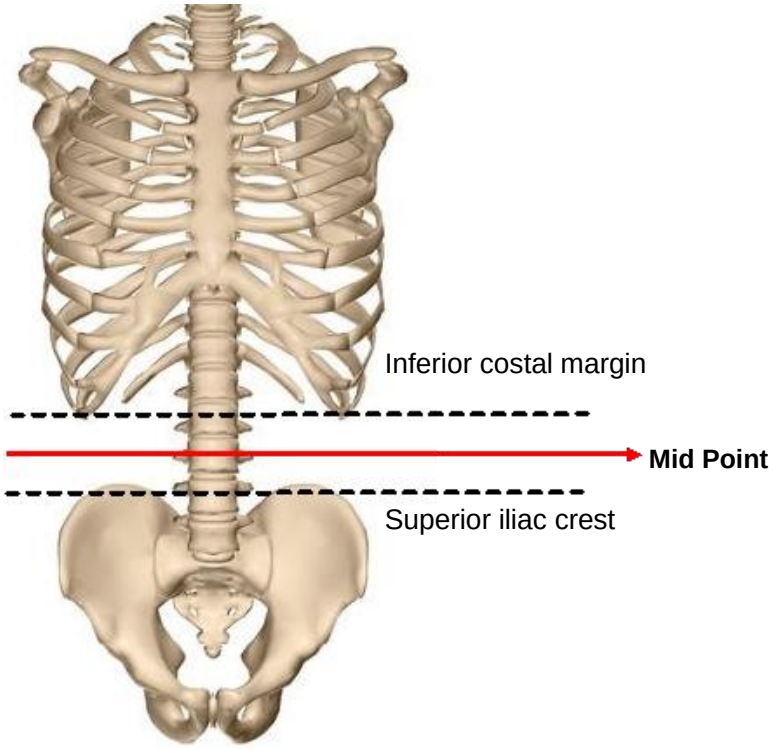
Beta blockers

These are used for certain patients, in particular those with cardiac problems. They are not routinely used for hypertension alone. Beta blockers should only be initiated by a doctor led service.

Side Effects & Contraindications

Drugs	Side effects	Contraindications
Thiazide diuretic (HTCZ)	muscle weakness (low potassium) increased serum cholesterol impaired glucose tolerance/diabetes impotence	gout
ACE-inhibitor (ACEi) (captopril)	(especially with first dose) cough low BP Angioedema difficulty in swallowing or breathing allergic reaction (sneezing, nasal congestion, itching or skin rashes) abdominal pain or swelling fainting, drowsiness, weakness or fatigue fast heartbeat headache nausea or vomiting diarrhoea abdominal cramps, pain or distension joint and chest pain foetal abnormalities high blood potassium	pregnancy hyperkalaemia bilateral renal artery stenosis angioedema
Ca-Channel block-er(CCB) (nifedipine)	Low BP hypoglycaemia ankle swelling constipation fluid retention heartburn	congestive heart failure severe left ventricular dysfunction aortic stenosis second/third degree heart block
Beta blockers (BB)	fatigue worsening of congestive heart failure swelling of face, mouth, hands or feet difficulty breathing (COPD and asthma) worsening calf pain (peripheral vascular disease) hypoglycaemia (can be masked in diabetes) weight gain depression impotence worsening dyslipidaemia in diabetes	asthma chronic obstructive airways disease second/third degree heart block bradycardia <50/min Raynaud's
Aspirin	stomach pain heartburn nausea and vomiting gastrointestinal tract complications, bleeding and ulcers haemorrhagic stroke aspirin-induced asthma	peptic ulcer (and caution if dyspepsia bleeding
Metformin	diarrhoea weight loss fast and deep breathing (lactic acidosis)	renal damage hepatic disease cardiac failure chronic hypoxic lung disease pregnancy or breast feeding
Sulphonylureas (glibenclamide)	hypoglycaemia weight gain water retention foetal abnormalities miscarriage	pregnancy or breast feeding cautious use in elderly due to risk of hypoglycaemia

APPENDIX 1A: MEASURING WAIST CIRCUMFERENCE



- Ask the patient to stand with feet 30cm apart, hands relaxed at sides. Identify the mid-point between
  - *The inferior costal margin and;*
  - *The superior iliac crest (see diagram above)*
  - *It can be helpful to have the patient assist in finding the midpoint*

- Place the tape measure around the mid-point

- Make sure the tape measure is parallel to the ground when measuring

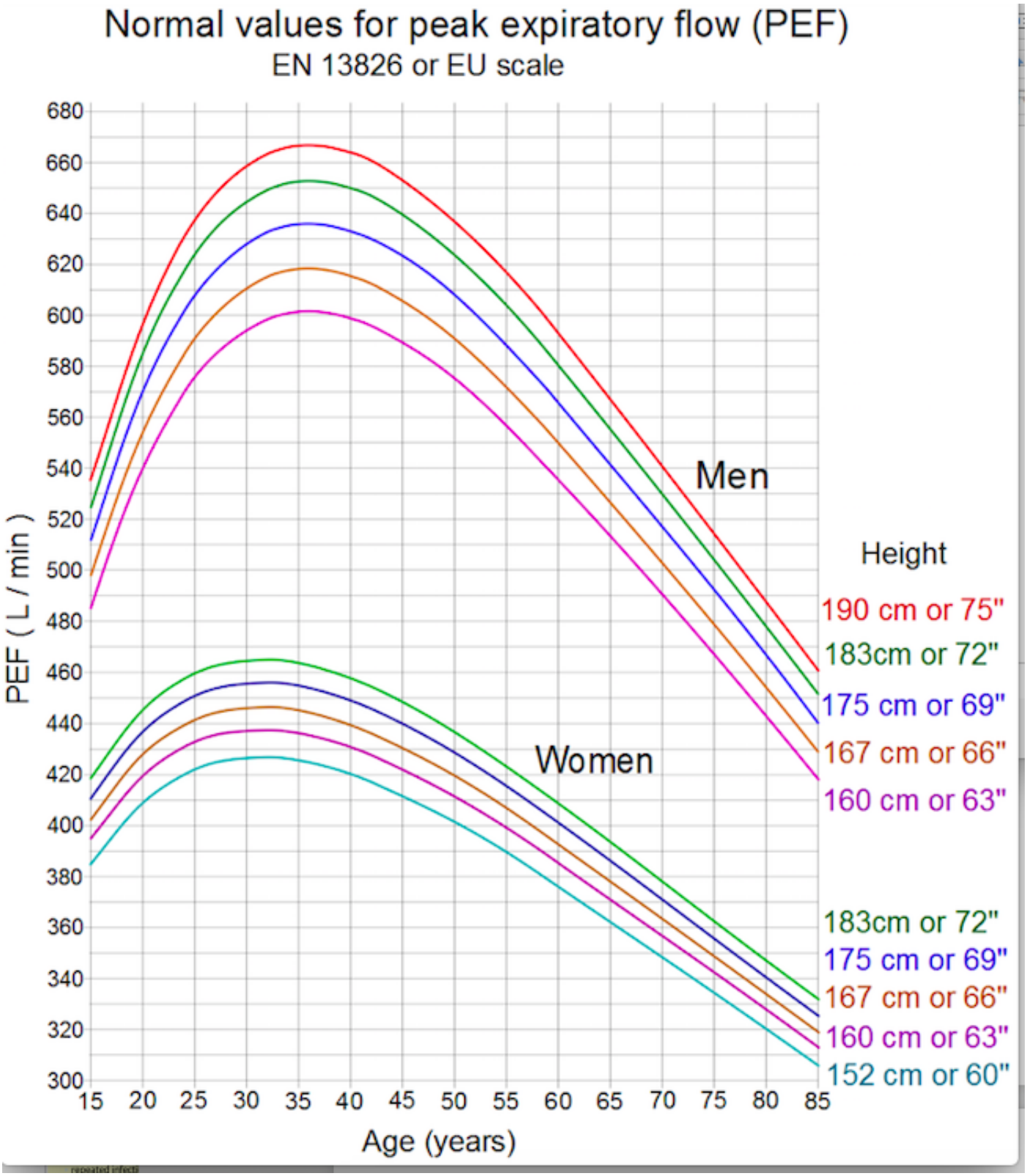
- Measure the waist circumference at the end of normal expiration

- Repeat the measurement 3 times

- Average the measurements to give your reading

- Clean the tape after use

APPENDIX 2A: ASTHMA



Häggström, Mikael (2014). "Medical gallery of Mikael Häggström 2014". WikiJournal of Medicine 1 (2). DOI:10.15347/wjm/2014.008. ISSN 2002-4436.

How to measure Peak Expiratory Flow Rate (PEFR)

1. Connect a clean mouthpiece.
2. Ensure the marker is set to zero.
3. Stand up or sit upright.
4. Take as deep a breath in as you can and hold it.
5. Place the mouthpiece in your mouth and form as tight a seal as possible around it with your lips (you can still breathe through the mouthpiece).
6. Breathe out as quickly and as hard as you can.
7. Observe and record the reading.
8. Repeat the process 3 times and record the highest reading.
9. Note in a diary the reading to allow comparison with readings on other days.

Once you have discussed the process with the patient, you should show the patient how to perform the measurement. Do this by measuring your own PEFR. Do not share mouthpieces as there is a risk of infection. Ask the patient to keep their mouthpiece safe.

Once the technique has been demonstrated, ask the patient to show you how they would perform the measurement themselves. Make sure they are doing it correctly and correct any mistakes they might be making.

Ask patient and relative if any questions or concerns about asthma or PEFR measurement.

How to use an inhaler

Using an inhaler is the **most important** aspect of core medical treatment of asthma.

Show and check how to use an inhaler **both** in the initial consultation and **also** in subsequent consultations.

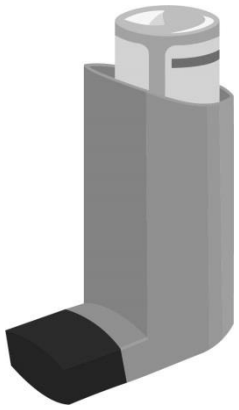
If you have a practice inhaler, slowly show them the technique first.

Explain the following 8 steps to the patient for proper use of inhalers:

1. Remove cap and hold inhaler upright then shake well
2. Breathe out completely and put mouthpiece between teeth without biting and make a seal with lips.

3. Start to breathe in slowly through mouth and at the same time press down firmly on canister.
4. Continue to breathe in as deeply as you can and then hold breath for about 10 seconds.

5. While holding breath, remove inhaler from mouth.
6. Breathe out gently away from mouthpiece.
7. If an extra dose is needed, wait 1 minute and repeat steps 2 to 6.
8. Replace cap.



Reassure the patient that using an inhaler is safe and risk-free.

Spacers

Patients, especially younger children, can find it difficult to use inhalers. Spacers mean that people do not need to coordinate taking a breath in whilst pressing the inhaler. They are a simple plastic design that allow the patients to breathe normally while inhaling the medication. They are available to buy at pharmacies.

How to make a spacer out of a plastic bottle

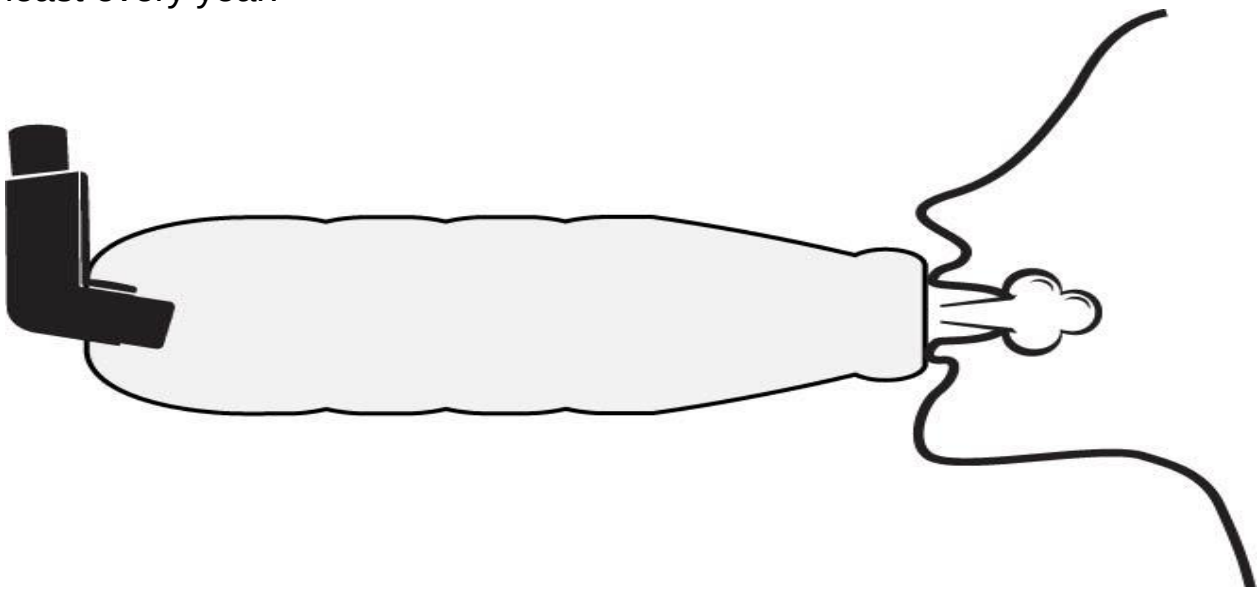
To make a spacer out of a bottle, use a soldering iron, a piece of hot metal or a candle to make a hole at the bottom of the bottle as shown below. The hole should be nearly the size of the inhaler. When the plastic is hot, the inhaler can be pressed in to make a hole of the correct size.

How to use a spacer

- Remove inhaler cap and hold upright then shake well.
- Place the inhaler into the hole in the side of the spacer.

- Breathe out gently and put mouthpiece between teeth without biting and make a seal with lips.
- Put one puff of your inhaler into the spacer and breathe in and out normally but deeply through the mouthpiece.
- It is best to take at least 3 deeply held breaths for each puff of your inhaler.
- If you find it difficult to take deep breaths, breathe in and out of the mouthpiece several times after each puff of the inhaler.
- Repeat the step above for each dose/puff needed.

Wash your spacer at least once a month - leave it to drip-dry as this helps to prevent the medicines sticking to the sides. Spacers should be replaced at least every year.



USEFUL RESOURCES

- WHO Model Formulary 2008
  www.who.int/selection_medicines/list/WMF2008.pdf
- Standard Treatment Guidelines and Essential Medicines List of Common Medical Conditions in the Kingdom of Swaziland (2012)
- WHO Integrated Management of Adolescent and Adult Illness (IMAI)

PART B

Depression

HAP Counselling

Section 1: For ALL Health Care Workers

Introduction

This section of the NCD Desk-Guide covers the identification and treatment of depression and anxiety. This section is designed to complement but NOT replace the comprehensive 'Eswatini Mental Health Desk Guide' which covers all mental disorders and their treatment. For more information on mental health disorders please refer to Eswatini Mental Health Desk Guide or the World Health Organization's MHGap handbook which can be found at:

https://www.who.int/mental_health/mhgap/en/

How are NCDs and Mental Health Linked?

Mental health conditions are common in Eswatini, particularly in people who have long term conditions such as Diabetes, Hypertension, Asthma and HIV. When a patient has multiple long-term conditions, such as Diabetes *and* HIV, their risk of having depression is significantly increased. Patients with untreated depression may struggle to attend appointments and may not take their medication regularly. These behaviours clearly have a negative impact on the management of their other health conditions. Through treating depression, we not only improve our patient's quality of life but also increase our chances of successful treatment of their other long-term conditions such as NCDs and HIV.

Depression

Definition

Depression is an illness, which causes the patient to persistently have a low mood, loss of enjoyment in activities and is a major risk factor for death by suicide. Depression is common, with approximately 1 in 5 people globally suffering from depression in their lifetime. Depression is treatable.

There are multiple types of depression- for more information please see the Eswatini Mental Health Desk Guide.

Signs and Symptoms of Depression

People may report (symptoms)	**People may look (signs)**
• Feeling sad or low mood • Little or no pleasure in doing things they usually enjoy • Disturbed sleep • Appetite changes (reduced or increased) • Poor concentration • Loss of confidence or self-esteem • Feeling guilt (or self-blame) • Loss of sex drive • Loss of energy • Thoughts of suicide or death	• Agitated, restless • Sad • Tired • Weight gain/Weight loss • Tearful • Moving or talking slowly • Not making eye contact

If a patient has suicidal thoughts, or has attempted suicide, refer urgently for a review by a doctor and/or consider referring to the National Psychiatric Referral Hospital.

Screening for Depression

All patients are at risk of depression and can develop depression at any stage. Any health worker can screen for depression using the PHQ-2 (see below). Screen all the following people for depression at diagnosis and regularly (at least once every 6 months);

- All patients with a long-term condition (e.g. Hypertension, HIV or Diabetes)
- All patients with multiple physical health problems (i.e. TB *and* HIV)

Other patients who are at high risk of depression and should be screened for depression include:

- Patients who are dependent on alcohol or illicit substances
- Patients who have a history of other mental health disorders
- Patients who have had traumatic or stressful life events (e.g. sexual abuse, rape, death of a close family member, financial difficulties)

Always screen **any patient** for depression **at that appointment** if they express symptoms of depression or you observe signs of depression.

Screening Protocol

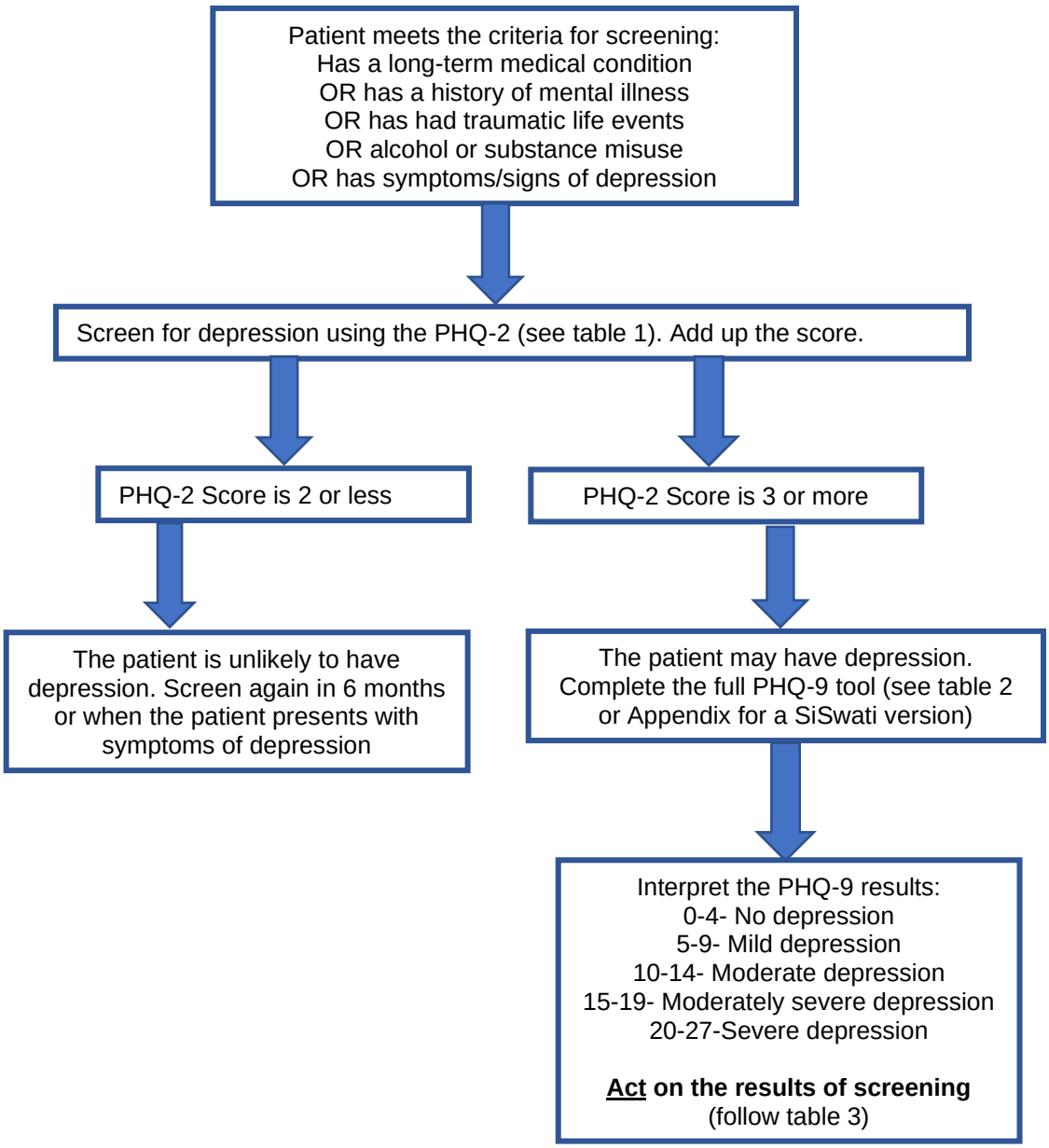


Table 1: PHQ-2 questions				
Over the last two weeks, how often have you been bothered by any of the following problems?	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things?	0	1	2	3
2. Feeling down, depressed, or hopeless?	0	1	2	3

Table 2: PHQ-9 questions				
Over the last two weeks, how often have you been bothered by any of the following problems?	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things?	0	1	2	3
2. Feeling down, depressed, or hopeless?	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much?	0	1	2	3
4. Feeling tired or having little energy?	0	1	2	3
5. Poor appetite or overeating?	0	1	2	3
6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down?	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper?	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – Being so fidgety or restless that you have been moving around a lot more than usual?	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way?	0	1	2	3
Total (each column)				
Total (all columns)				

Using the PHQ-9

- The first 2 questions of the PHQ-9 are the **same as the PHQ-2.** You do not need to ask these questions again, simply transfer the scores from the PHQ-2.
- You can ask the questions of the patient, or you can give the questionnaire to the patient to complete themselves. **See Appendix 1B for a SiSwati version.**
- Add up all the scores at the end to get a total score out of 27. Keep a record of this score.
- Interpret and act on the score using the table on the next page.

Table 3: Interpretation of PHQ-9		
Score	**Depression severity**	**Action**
0-4	**None**	Re-screen if needed in the future
5-9	**Mild**	Provide information about depression and warning symptoms Give a leaflet with explanation. Re-test after 6 months or anytime if needed
10-14	**Moderate**	Provide information about depression and warning symptoms Give a leaflet with explanation Consider offering HAP counselling **if your clinic has capacity.** If you are not trained in HAP, refer to a nurse with HAP counselling training. Re-screen after 6 months or anytime if needed
15-19	**Moderately severe**	Refer to a doctor/mental health (psychiatric) nurse to consider anti-depressant medication Offer HAP counselling. If you are not trained in HAP, refer to a nurse with HAP counselling training.
20-27	**Severe**	**Refer to a doctor for initiation of anti-depressants and/or referral to the National Psychiatric Referral Hospital** **Offer HAP counselling.** If you are not trained in HAP, refer to a nurse with HAP counselling training.
Suicidal ideation (Question 9)	**Life-threatening**	**Urgent referral for review by a doctor to consider anti-depressants, counselling and/or consider referring to the National Psychiatric Referral Hospital**
Any score with social issues e.g. child support, orphan school fees support etc	**N/A**	Referral to a social worker

Treatment for Depression

The treatment for depression is counselling and, if needed, medication. Remember depression kills (through suicide) so treatment is needed urgently in some cases.

How to approach a patient with depression

The way we care for a patient with depression can have a big impact on their outcome. People with depression may feel ashamed, shy or lack motivation to continue treatment therefore it is important to:

- Give non-judgemental support
- Listen to their concerns and feelings
- Reassure the patient that depression is treatable
- Remind them that depression is an illness and **not** a sign of weakness and **not** their fault
- Be kind and supportive always

Advice for patients with depression

- With the patients consent, provide advice to them and a **family supporter**
- Patients should continue, as far as possible, with **activities that used to be interesting or give them pleasure** (even if they do not currently seem interesting or pleasurable)
- If the patient develops thoughts of **self-harm or suicide they should come back and see help from the clinic** (see Mental Health Desk Guide for more)
- Patients should not neglect their physical health. Advise patients to try and **maintain a healthy diet and exercise** as these can help reduce symptoms.
- Reassure that it can take at least a few weeks to months before treatment reduces their symptoms of depression.
- **Encourage patients to talk about and share their feelings** with someone they trust, even when they don't feel like it. Talking can really help.
- **Discuss with the patient current causes of stress** and help identify ways of improving their problem(s)

Counselling

Some patients require counselling (see table 3). Counselling should always be confidential, supportive and must allow the individual to share their thoughts and feelings. Find out who provides counselling services in your area. This could be trained nurses (for example nurses that have been on the Healthy Activity Programme (HAP) training, psychologists, a psychiatric nurse or NGOs such as IMERSE.) HAP trained counsellors can find more information on delivering HAP in Section 2 of this desk guide.

What is Healthy Activity Program (HAP) Counselling?

Depression symptoms can affect the physical body, emotions, thoughts, and actions. The Healthy Activity Program is a form of counselling which focuses on changing the "actions" category in order to change the other three categories – i.e. body, emotions (feelings), and thoughts.

The focus of HAP is on what patients are doing (or not doing). HAP treats depression by helping patients do activities that are pleasurable and activities that solve problems. We may refer to this as "Doing Therapy".

This counselling can be delivered by any nurse who has been trained in HAP counselling through attending training or through the 'training the trainer' model.

Prescription Medication for Depression

Medication should only be initiated by a physician or appropriately trained professional. Where appropriate and with the required training, refills can be provided in the community.

All new anti-depressants need to be monitored closely after initiation as they risk serious side-effects. Patients' need to be seen at least 2 weekly intervals for the first 6 weeks after initiation to monitor their progress. If they have side effects, consider lowering the dose and consider starting a different drug. Never stop anti-depressant medication suddenly.

- Adherence to any prescribed treatment is very important
- Depression medications have potential side effects (see table 4). Seek help from a doctor/trained professional if these side effects are distressing to patients.
- Patients may experience withdrawal symptoms if they miss doses or stop medication abruptly. Never stop the medication suddenly.
- Anti-depressants are not addictive
- If they forget a tablet do not take an extra dose next time

Table 4: Indications and side-effects of common antidepressant medications

Antidepressant Class	Indications	Contraindications	Common side effects
Selective Serotonin Reuptake Inhibitors (SSRIs); **Fluoxetine Sertraline**	If sedation is not desirable. Depression with suicide Elderly and children. Physically ill patients.	Children below 12 years Pregnant and breastfeeding women	**Side effects: common** nervousness, insomnia, gastrointestinal disturbances, headache, sexual dysfunction. **Rare**: Increased anxiety and suicidal ideation. **DO NOT STOP SUDDENLY AS THIS RISKS SERIOUS 'SEROTONIN SYNDROME'. Needs to be reduced slowly, by 10mg/week for Fluoxetine or 25mg/week for Sertraline, monitoring the patient weekly.**
Tricyclic anti-depressants (TCAs); **Amitriptyline.**	If sedation is desirable. Pregnant women. Breastfeeding mothers.	Children below 12 years Suicidal patients, Elderly and physically ill	Hypotension when lying down, dry mouth, constipation, difficulty urinating, dizziness, blurred vision and sedation.

Table 5: Dosing for common anti-depressant medications

Antidepressant	Initial Dosage	Maintenance Dose	Max Dose per day
Selective Serotonin Reuptake Inhibitors (SSRIs);			
Fluoxetine	20 mg OD for 2 weeks 10 mg OD for 2 weeks (elderly &adolescents)	If no or minimal response increase the dose gradually by 10-20mg after every 2-4 weeks	60-80 mg/day
Sertraline	50 mg OD for 2 weeks	If no or minimal response increase the dose gradually by 50 mg after every 2-4 weeks	200mg/day
Tricyclic Antidepressants (TCAs)			
Amitriptyline	25mg nocte for 3/7, then 50 mg nocte for 2 weeks	If no or minimal response increase the dose gradually by 25mg after every 2-4 weeks	200 mg/day **300 mg/day for intractable cases (under Psychiatrist supervision)**
If presents with insomnia: **Adults;** T. Promethazine Hcl 25- 75 mg nocte **OR** Lorazepam 0.5 - 4 mg at bedtime **Elderly/children/adolescents;** T. Promethazine Hcl 12.5-25 mg **OR** Oral Lorazepam 0.5-1mg nocte.			

Section 2: For Healthy Activity Program (HAP) Counsellors

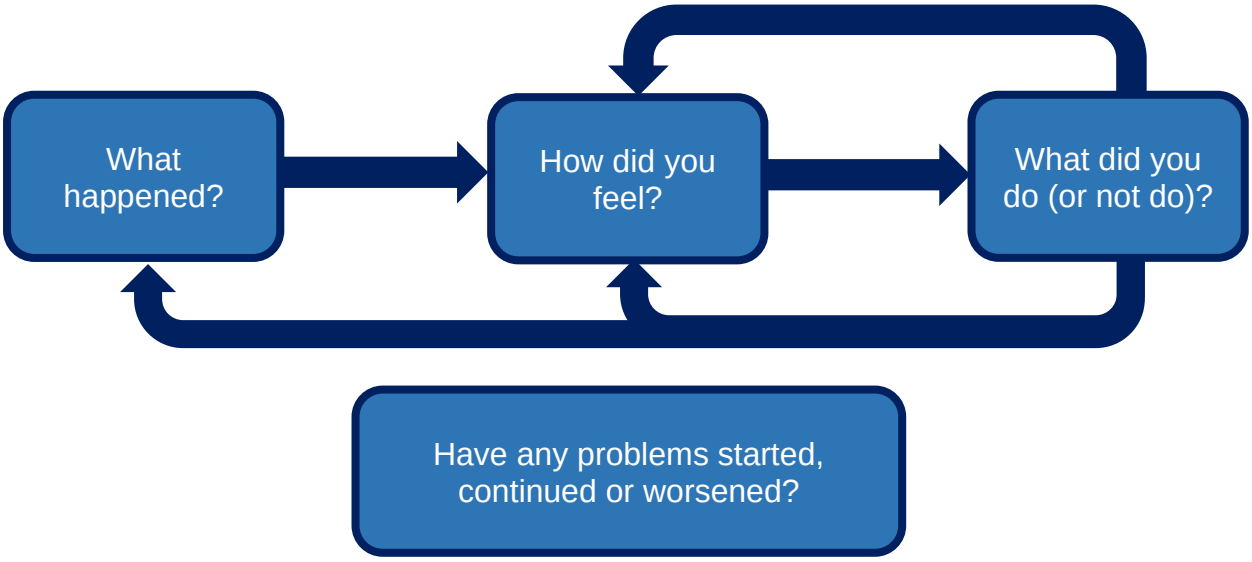
What is the purpose of this section?

This section of the desk-guide is to provide a quick reference guide and 'refresher' notes for those that have already been HAP trained. **It is not a replacement for receiving training in HAP counselling.** It contains the core principles and documents required to deliver HAP counselling (which can be photocopied when necessary).

Section 2 should be used in combination with Section 1 which contains background information on depression, its treatment and screening for depression. For more information about mental health disorders please refer to the Eswatini Mental Health Desk Guide.

Healthy Activity Model of Depression

This model can help our understanding of depression and how to treat it. It is based on an understanding that events can lead to us choosing to do (or not do) specific actions, and that these choices can either improve or worsen our mood. You can use this model to help patients understand the relationship between their mood and their actions.



Summary of Healthy Activity Program Structure

The following table summarises the key phases of HAP and the objectives of each stage. Each patient is an individual; some may need a longer program of HAP (e.g. 8 sessions) others a shorter program (e.g. 4 sessions)

Healthy Activity Program Phases and Key Phase Objectives	
Phase 1 (0.5 - 2 sessions)	• Establish an effective counselling relationship. • Help patients understand the HAP approach. • Gain their commitment for counselling, addressing barriers to treatment engagement.
Phase 2 (2 - 6 sessions)	• Consists of Phase 2a (Learning together) and Phase 2b (Getting active and solving problems). • Assess activation targets and encourage activation. • Identify barriers to activation and learn how to overcome these. • Help patients to solve (or cope with) life problems.
Phase 3 (0.5 - 1 session)	• Review and strengthen gains that the patient has made during treatment in order to prevent relapse. • Ensure patients know how and where to ask for help if they feel unwell again

Key HAP Counselling Skills

1) **Maintain session structure**
2) **Keep the focus on action**
3) **Learning collaboratively together with patients**
4) **Be non-judgemental**
5) **Acknowledge the patients experience**
6) **Recognise Traumatic Experiences and be empathetic**

If the patient expresses current abuse, sexual assault, violence or trauma, discuss and refer to a psychiatric nurse, social worker, gender-based violence services or the police. If you think they are currently at risk of harm, inform the police.

7) **Encourage Progress**
8) **Express warmth and be genuine**
9) **Maintain a strict code of confidentiality**
10) **Ask for help**

If you are concerned about a patient, the patient is very distressed, you are worried that may be suicidal or they have symptoms such as hallucinations, delusions or abnormal behaviour you must discuss this with a trained colleague. **Patient's experiencing traumatic experiences and/or exhibiting severe distress, refer to a clinical psychologist if possible. If you are unable to contact them and you remain concerned or the patient is seriously unwell, please refer urgently to a doctor.**

Delivering a Course of HAP

- HAP is ideally delivered over 5-8 sessions at intervals of 2-4 weeks.
- Some patients may not be able to attend counselling every 4 weeks, if so, you may need to extend the gaps between sessions.
- Some patients will progress quickly through the phases and need a shorter program (i.e. only 3 or 4 sessions).
- Some patients may make slower progress to meet their treatment goals and may require more than 6 sessions. In this case, extend the middle phase of treatment.
- Each session should last 30-40 minutes.
- The number of sessions in each phase is flexible, based on whether the goals of the previous phase have been achieved.
- Measure PHQ-9 scores 2-3 sessions and use to determine progress (or more often if patient is unwell or you are concerned).
- **Initial PHQ-9 scores of 20 or more (or any suicidal thoughts) require review by a doctor. Subsequent scores remaining 15+ also require review by a doctor.**
- **If the patient has not recovered at the end of 8 sessions the patient should be referred to a doctor to consider antidepressant medication. Patients already taking antidepressants need to see a doctor to review their treatment regime.**

Structuring a HAP Session

Session content will change each session however the standard structure should be maintained where possible.

1) **Open the session**- Introductions, review progress, assess suicide risk
2) **Set the agenda**- Agree this in collaboration with the patient
3) **Review homework**- As agreed in previous session
4) **Complete special taks**- These tasks will be the phase specific skills or activities
5) **Agree homework**- An example may be practising activation
6) **Close the session**- Summarise, set the next session data, complete documentation

Delivering HAP Counselling- Getting Started- Phase 1

Getting started – Phase 1 overview	
Duration	0.5 - 2 sessions.
Goals	• Engage and establish an effective relationship. • Help patients understand the Healthy Activity Program. • Elicit commitment for counselling.
Actions	**1. Open the session.** - Greetings, introductions, explain confidentiality, explain depression, explain HAP, practical information about sessions (length, duration) - Review PHQ-9 score and assess suicide risk - Gain verbal consent to progress with a course of counselling - Discuss involving a treatment supporter **2. Set an agenda** - Make a list of items you wish to cover involving the patient in this **3. SPECIAL TASK 1: Get to know your patient** - **What happened?** Find out about factors that led to the depression starting. Consider acute stress (e.g. death of loved one), long-term stress (e.g. long-term financial issues, caring for sick family members) and adverse childhood experiences (e.g. abuse, neglect, trauma). - **How do you feel?** Explore how the patient feels about these events. - **What did you do?** How did the patient's actions change in response to their experiences? What does the patient do when they feel down? - **What is the connection between what the patient does (or doesn't do) and how you feel and the stressors in their life?** Use "8 steps to Wellbeing" to support this discussion. **4. SPECIAL TASK 2: Elicit commitment for counselling.** - Discuss the patients understanding of HAP - Explore barriers to attending future sessions and attempt to find practical solutions **5. Agree homework** - practise key activities between sessions - Session 1- ask the patient to review the '8 steps to welling" card and think about how they could add these activities into their daily schedule. 6. **Close the session** - Agree date of next session - Complete patient record card and give to patient (see appendix) - Complete clinic record card (see appendix)

Delivering HAP Counselling- Learning together- Phase 2a

Learning together – Phase 2a overview	
Duration	1 session
Goals	Identify activation targets.
Actions	**1. Open the session** - Recap last session - PHQ-9 score if needed (i.e. patient is getting worst or the patient is considering ending treatment). - Assess risk of suicide at every visit (question 9 of PHQ-9) **2. Set an agenda** - In collaboration with the patient. **3. Review homework** - Review the experience. Sensitively discuss any barriers the patient had to completing the homework. **4. SPECIAL TASK 3: Encourage activation.** - Use the activity model to review activities that have occurred since the last session (e.g. arguments, events, feeling particularly low) - Map out your patients' activities using the activity calendar (verbal or written). Discuss the patients' mood before and after these activities - Look for patterns in their mood (i.e. worst/better in evenings) - Identify activities that consistently make them feel worst/better **5. Agree homework** - Identify 1 activity that helps the patient feel better. Make a specific plan for the patient to perform this activity until the next session. - Ask patient to fill in an activity plan (see appendix). Record each time they complete the agreed activity and how they felt doing the activity. - Address barriers to completing activities. Set reminders to complete activities e.g. phone alarm, routine, treatment supporters. **6. Closing session** - Set a date for the next session - Complete patient record card and give to patient (see appendix) - Complete clinic record card (see appendix)

Remember: If a patient <u>at any time</u> tells you they want to take their own life (suicide)- refer urgently to a doctor. If you are concerned your patient may take their own life imminently, you can call 977, or urgently refer to the National Psychiatric Referral Hospital. Do not leave your patient alone with sharp objects.
Patients who's PHQ-9 scores are not improving despite receiving counselling (they remain 15+) should be referred to a doctor for consideration of antidepressants.

Delivering HAP Counselling- Getting Active and Solving Problems – Phase 2b

Getting active and solving problems – Phase 2b overview	
Duration	1–5 sessions
Goals	• Strengthen the patient's understanding of HAP • Encourage activation. • Identify barriers to activation and learning how to overcome these. • Help patients solve (or cope with) life problems.
Actions	**1. Open the session** - Complete PHQ-9 every 2-3 sessions. Always do the PHQ-9 if you suspect the patient is getting worse or they are ending treatment - Assess risk of suicide at every visit (question 9 of PHQ-9) - Discuss significant events since last appointment (positive or negative) **2. Set an agenda** **3. Review homework** - Review activity plan from previous session. If achieved plan, help the patient reflect on changes in mood associated with the activities. If the patient did not achieve their plan, then discuss barriers and a new plan. **4. Special task 4: Getting active** - Develop an action plan based on the patients' reactions and experiences to previously planned activities. - **Start simple**- the end goal may be to help the patient be motivated to find a job however start with more achievable goals like taking a morning walk.. - **Breakdown activities into simple steps.** Small steps towards goals can be more realistic for a person with depression to achieve which helps build confidence and motivation. - Help the patient **schedule the activity** into their daily life. - **Discuss barriers** that can get in the way of completing the activity **5. Special task 5: Solving problems** - Examine your patients' problems e.g. relationship/financial/health issues. Not all problems can be solved but a patient can learn to cope better. - **1) Problem Definition-** Define problem clearly, be specific **2) Solution Generation-** Develop a list of solutions **3) Chose the best solution-** considers pros and cons of each option **4) Apply the solution-** Practise applying the solution **5) Evaluate solution-** Set a time limit to test the solution **6) Review the outcome-** If unsuccessful, return to step 2. **6. Agree homework-** Practise activities and solutions. Use activity plan. **7. Close the session-** Summarise, set a next session date, documentation

Examples of problem solving for common scenarios	
Family member has drinking problem	• Encourage the family member to seek treatment. • Give the patient a leaflet about hazardous drinking that they can share with their family member. • Persons close to the family member, and whom they trust/respect, can encourage and support them to stop drinking. • See also **Mental Health Desk Guide** page 26
Husband is physically abusive towards the patient	• If the patient consents, discuss with a social worker/welfare, mental health nurse, gender-based violence service and/or the police. See box on page 28. • If you think the patient's (or another person's) life is in danger, call the police immediately. Remind them that violence is illegal • Discuss safety measures. • Assess whether they have a friend they can share this information with
Patient does not have a job	• Explore options of job opportunities – like ads for vacancies. • Ask friends and family to explore their network. • Share information about government employment schemes.
Illness in the family	• Encourage the family to seek the right treatment. • Refer to a specialist/agency/hospital • Seek support oneself to deal with the burden of care.
Relationship difficulties	• Identify ways of communicating better. • Ask the person close to the patient to come for a session. • Involve a third person who can help the patient.
Financial difficulties	• Look for better job opportunities. • Explore ways of saving, seek help from friends/family.
A person in the family with special needs	• Seek professional help to support the person with special needs. • Gather information and enhance skills to care for the person with special needs. • Seek support oneself to deal with the burden of care • Consider seeking consent to discuss with social welfare or home-based care
Difficulty in coping with work stress	• Learn effective ways to cope with stress, such as taking short breaks and improving time management. • Enhance skills that will help with work performance. • Advise to seek support from seniors/co-workers.
Living away from home and family	• Maintain regular communication with the family. • Create a support network of friends. • Join community activities.

Delivering HAP Counselling- Ending Well- Phase 3

Table 16: Ending well – Overview of Phase 3	
Duration	0.5 - 1 session
Goals	• Help the patient review the HAP model in general, together with specific actions that support the patient's mood. • Help patient identify possible challenging future situations. • Help patients make a plan to deal with such situations using the skills they have learnt. • Ensure the Patient Held Record Card front cover is filled in, so that patients can refer to this if they feel low in the future.
Actions	**1. Open the session** - At last session complete the PHQ-9 score. If the score remains over 15, refer to a doctor for consideration of other treatments. If after **8 sessions** their score is 10 or over- refer to a doctor for persistent depression despite treatment. **2. Set an agenda** **3. Review homework** **4. Special task 6: Review new skills** - Review what the patient has learnt from the sessions - Highlight specific actions that the patient has used to overcome depression - Emphasise the patient's role in getting better - Motivate the patient to use their new strategies in other settings **5. Special task 7: Prepare to stay well.** - Agree a plan that will help the patient stay well in the future - For future reference make a record for the patient of all the activities that helped them to feel better and those that made them feel worse. 6. **Close the session** - Summarise progress - Remind patients where they can seek help in the future with depression if needed

Appendix 1B

LUHLA LWEMIBUTO NGEMPHILO YAKHO

PATIENT HEALTH QUESTIONAIRE (PHQ-9)

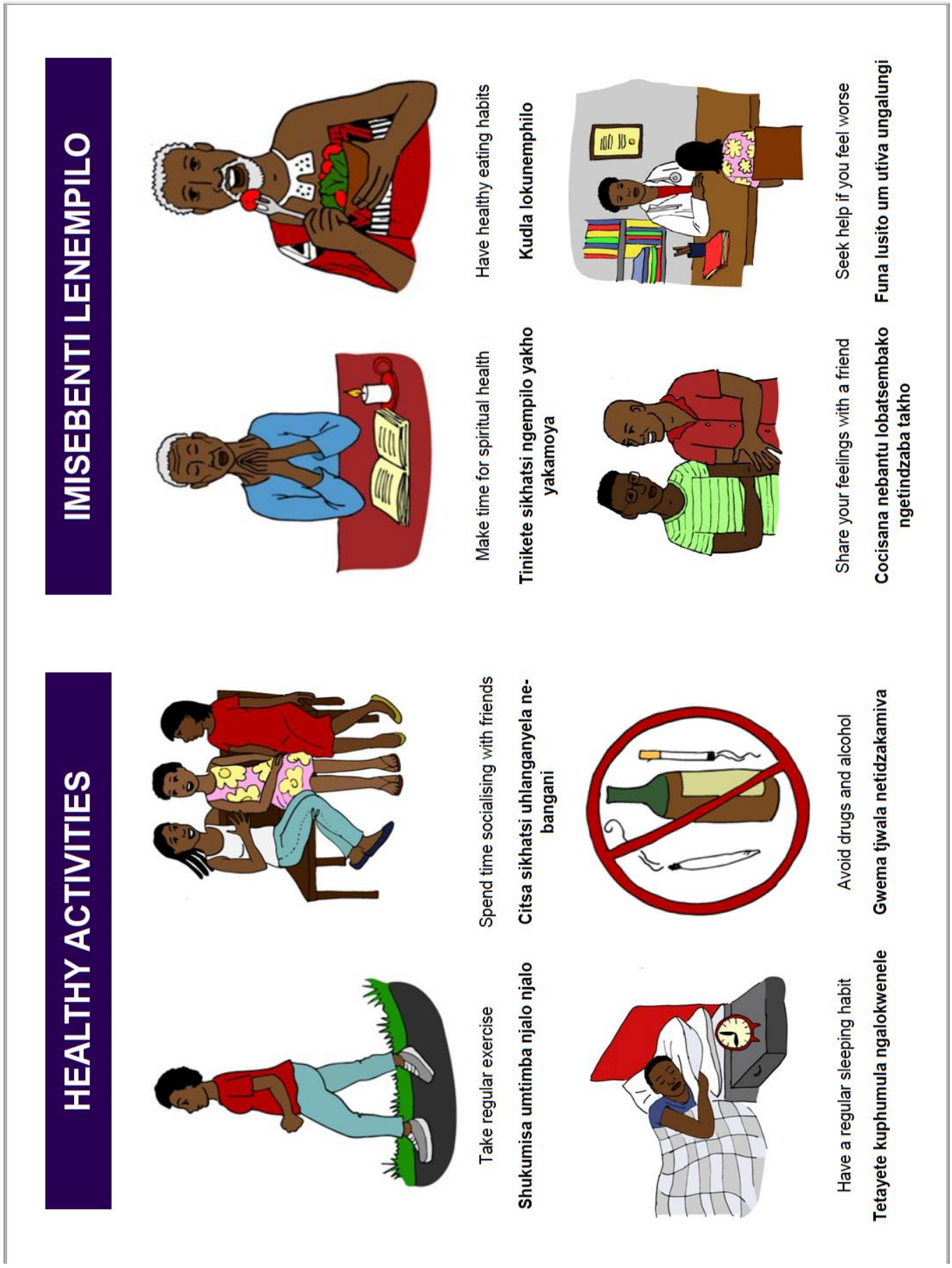
Kulamaviki lamabili lendlulile, ukhatsateke kanganani nganati tinkinga letilandzelako:

	Sebentisa nalu luphawu √ kuphendvula			
	Akukake kwenteka	**Emalanga lambalwa**	**Lokungetulu kweliviki (7 days)**	**Cishe onkhe emalanga**
1. Kuncipha kwemdlandla/inshisekelo ekwenteni tintfo letikuchazako/letikujabulisako	0	1	2	3
2. Kutiva uphansi emoyeni, ukhatsatekile noma ute litsemba	0	1	2	3
3. Kungakhoni kulala noma kulala kakhulu	0	1	2	3
4. Kutiva udziniwe noma uphelelwa ngemandla	0	1	2	3
5. Kungakhanuki kudla (inhlitiyo imnyama) noma kudla kakhulu	0	1	2	3
6. Kuva utisola/utenyanya noma usehluleki noma utentele phansi noma wentele phansi umndeni wakho	0	1	2	3
7. Kuba nebulukhuni / kulandzelela etintfweni lotentako njenge kufundza liphepha ndzaba	0	1	2	3
8. Kukhuluma wedwa noma wehle wenyuka ungati kutsi wentani	0	1	2	3
9. Kuba nemicabango yekutsi kuncono kufa, noma ucabange kutilimata.	0	1	2	3
Balalokungenhla				
SEKUKONKHE				

Was the patient referred to a Doctor? Refer if **initial** PHQ-9 = 20+ *or* if **subsequent** PHQ-9 = 15+ *or* if Q9 is positive (i.e. scoring 1,2 or 3)	**YES**	
	NO	

<u>Appendix 2B:</u> "8 Steps to Wellbeing Card".

This card is to be photocopied, given and explained to patients receiving HAP or those with mild/moderate depression not receiving HAP.



Date Attended	Action Plan	Next Session

Patient Held Record Card

Healthy Activity Program

Patient Name	
Clinic or Hospital Name	
Telephone	

Activities that help:

Activities that don't help:

Health Activity Program - Clinic Record Card – to be kept in patient notes

Facility name		Counsellor name		Patient name	

Age	Sex	DOB	Physical Address	Telephone number	Treatment supporter (TS): Name/telephone number

This information may be useful to record, as it may affect how you deliver counselling.

Occupation	Household size	Education level	Marital status	Alcohol (Y/N – if Y then average weekly amount)	Smoking status (Y/N – if Y then average daily amount)

Diagnosis (tick all that apply)							Previous mental health care
Depression	Anxiety	Epilepsy	TB-drug sensitive	TB-drug resistant	HIV	Other (please state)	

This information needs to be recorded to monitor progress and document the sessions.

Date:						
	Session number		Next appt		Notes (including agreed homework)	
	PHQ-9 score		Homework done (Y/N)			
	Referrals made					
	Medication					

Date:						
	Session number		Next appt		Notes (including agreed homework)	
	PHQ-9 score (if done)		Homework done (Y/N)			
	Referrals made					
	Medication					

Date: ___________	Session number		Next appt		Notes (including agreed homework)	
	PHQ-9 score (if done)		Homework done (Y/N)			
	Referrals made					
	Medication					

Date: ___________	Session number		Next appt		Notes (including agreed homework)	
	PHQ-9 score (if done)		Homework done (Y/N)			
	Referrals made					
	Medication					

Date: ___________	Session number		Next appt		Notes (including agreed homework)	
	PHQ-9 score (if done)		Homework done (Y/N)			
	Referrals made					
	Medication					

Date: ___________	Session number		Next appt		Notes (including agreed homework)	
	PHQ-9 score (if done)		Homework done (Y/N)			
	Referrals made					
	Medication					

ACTIVITY PLAN[1]

NAME:_____

How to complete this form:
This is a list of activities that you and your counsellor agreed you would do this week. For each day place a check mark (✓) if you did the activity or x mark (✖) if you did not do the activity. Rate how you felt when you did this activity using a number between 1-10, with 1 meaning the worst possible feeling and 10 meaning the best possible feeling. Or draw an emoticon to express how you were feeling ☺ 😐 ☹.

ACTIVITY	MON		TUES		WED		THURS		FRI		SAT		SUN	
	Did you do it? ✓or ✖	Score (1-10)	Did you do it? ✓or ✖	Score (1-10)	Did you do it? ✓or ✖	Score (1-10)	Did you do it? ✓or ✖	Score (1-10)	Did you do it? ✓or ✖	Score (1-10)	Did you do it? ✓or ✖	Score (1-10)	Did you do it? ✓or ✖	Score (1-10)
Activity 1 _____														
Activity 2 _____														
Activity 3 _____														
Activity 4 _____														
Activity 5 _____														

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Dr Ashley Sharp	COMDIS-HSD	**Dr Kalungero**	GSH
Dr Callum Pierce	COMDIS-HSD	**Sister Sweetness**	GSH
Dr Pearl Vyas	McMaster University	**Dr Anna Ray**	LHRU

Comments on these guidelines are welcome, please send to
j.walley@leeds.ac.uk or Lubombo.hru@gmail.com

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