



Promoting Healthy Ageing

Age Friendly Primary Health Care Clinical Toolkit

*Developed using the WHO Toolkit for
Age Friendly Primary Health Care*

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Comments/suggestions are welcome

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This document has been developed using the World Health Organization (WHO) Age-friendly Primary Health Care (PHC) Centres Toolkit and local materials which was agreed upon at an expert group meeting held by the Mona Ageing and Wellness Centre, University of the West Indies, Mona Campus on May 10-12, 2010 with partners from Case western University, the Pan American Health Organization, non-governmental organizations and health specialists from several Caribbean Countries

It includes:

1. A general introduction
2. Clinical assessment and key management approaches for the four geriatric giants:
 - Geriatric Giant 1: Memory Loss
 - Geriatric Giant 2: Urinary Incontinence
 - Geriatric Giant 3: Depression
 - Geriatric Giant 4: Falls/Immobility
3. Universal Design – design for an user-friendly PHC Centre
4. Guidelines for Signage inside and outside the PHC Centre
5. References

Introduction

Given the ageing of the Caribbean population, increasing attention to the needs of the older person is warranted. In an effort to promote the responsiveness of community-based primary health care to the needs of the population at large and to the growing numbers of older persons, a set of general principles guiding Age-Friendly Community-based Primary Health Care has been developed by the World Health Organization (WHO). These general principles aim at providing guidance and setting standards in the provision of community-based primary health care to ensure that service is age-sensitive, age-responsive and more accessible to users of all ages, particularly older persons.

Users of health care services, especially older users, must be empowered and enabled to remain active, productive and independent in their own communities for as long as possible. As an overall objective, the general principles enable older persons to achieve active ageing, defined by WHO as the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age.

Improving care for older persons requires a change in health care practices. Health services will need to implement plans, policies and procedures to ensure that quality care is available to older persons.

Ageing is multifactorial and includes social, economic, mental and physical components which are all interrelated.

Specific care issues for older people

Age-related functional decline of physiologic systems means that older people are less able to prevent and recover from illnesses due to deconditioning. Functional decline has been identified as a leading cause of hospitalization of people and can manifest as the development of malnutrition, decreased functional mobility, loss of skin integrity, incontinence, falls, the development of delirium, problems with medication, poor self-care and depression. There is also evidence that functional decline in older people is associated with adverse outcomes - increased length of stay in hospitals, higher levels of institutionalization and increased mortality.

In addition, the region is experiencing an increase in chronic diseases. Increasing longevity of older persons means more persons are living longer, requiring more health care.

Prevention of the complications associated with chronic disease will be critical. The complex needs associated with co-morbidities require holistic approaches. It is important that older persons are screened and where the used screen is positive, receive comprehensive assessment and intervention.

Care of older persons often involves other family members. The presence of a carer is often the significant factor in enabling an old person to return to, or remain living in the community. However, caring also has consequences for the people supporting the older person and health care professionals need to be aware of the stress and difficulties that affect carers when planning the transition from the hospital setting.

Care takes place in a number of settings which require planning, integration and coordination of services. Care settings should be designed and managed so that appropriate physical, social and environmental features relating to the special needs of older persons are provided.

Health services require strong and robust protocols and collaboration with ongoing community support providers. This will ensure that treatment and care provided by health services are used for time-limited responses only. By taking an integrated approach, health services together with ongoing community support providers, can manage many of the chronic conditions and diseases that affect older persons. This will result in better outcomes and continuity of care. Links to social services are critical.

Basic Health Care

The majority of the problems that seniors encounter occur in the community and the primary health approach is the best way to reduce such problems. Health care workers can support older persons to stay independent and healthy by understanding age-related changes and norms. Among seniors, even those who are relatively healthy, there is a constant need for regular health care and health supervision. This includes the monitoring of blood pressure, early detection and treatment of illness, monitoring of medications (adherence and side effects), monitoring of nutritional status (under- and over-nutrition), and the promotion of healthy lifestyles.

Older persons often have multiple pathologies. Poly-pharmacy issues arise as they often are taking multiple drugs. There is also the tendency to accept their aches and pains as “due to old age”. They need to be encouraged to discuss their symptoms and should not be hurried. They need to feel comfortable during health consultations. The interactions between older clients and health providers can be complicated by age-related changes such as poor hearing and memory impairment which can result in poor communication. A careful assessment will establish whether any of these factors are present.

Principles of Health Care for Older Persons

- There are greater variations among individuals at higher ages.
- Ageing does not produce an abrupt decline in organ function; disease does.
- The ageing process is accelerated by risk factors such as smoking, sedentary lifestyle and obesity.
- Healthy old age can be attained with different levels of prevention and health promotion.

The Toolkit

The ensuing toolkit is organized in sections beginning with an assessment aid, general flow chart, and screening tool followed by the complete protocols for:

Memory Loss

Activities of Daily Living

Depression

Urinary Incontinence

Falls

Hypertension

Diabetes

The toolkit documents clinical tools and algorithms for the management of older persons at all levels of health. The objective of a health centre using the tools is 100% of primary health care levels meeting the needs of older person.

Important Concepts

- Diseases can be present early because of the lack of reserve capacities.
- Clinical signs and symptoms often differ from those of younger persons.
- Older persons get symptoms but tend to present later for health care service.
- Small interventions can produce dramatic results.
- All levels of prevention are effective in old age.

Functional capacity is an important concept to older persons. Health interventions aim at preserving maximum function.

Assessment

Assessments of older persons should be comprehensive and not only focus on physical aspects. They should also include functional and cognitive assessments, as well as, social support assessment. These should be done annually and updated.

Clinical assessment and key management approaches for the four geriatric giants

- The organized clinical approach is an efficient way to identify, assess and manage patient care. The clinical approach, as illustrated in the flowchart (see page 3) is a stepwise flow from the 10-minute comprehensive screening through identification of health problems; assessment, management and follow-up.
- Patients who attend the PHC Centre for health care will be screened by a trained community health aide in the waiting room (Step 1).
- If screening is positive for any of the four geriatric giants, step 2, 3 and 4 as specified below will be followed.
- If hearing or vision problem is identified, the patient should be referred to the doctor for an appropriate action.

The organized clinical process consists of the following four steps:

Step 1: 10-minute comprehensive screening (Tool 1)

- Should be done by a member of the PHC centre while the patient is waiting to see the doctor and included in the medical record.
- Try to provide privacy for the patient as much as possible.

Step 2: Geriatric giants assessment (Tool 2 to 7)

- Assessment by doctors using questionnaire and physical examination.
- Where there are multiple conditions, the doctor needs to prioritize assessment and decide which condition to work up in the first visit and schedule subsequent visits for other conditions. The following order is suggested:
 1. **Memory loss**
 2. **Depression**
 3. **Urinary Incontinence**
 4. **Falls/immobility**

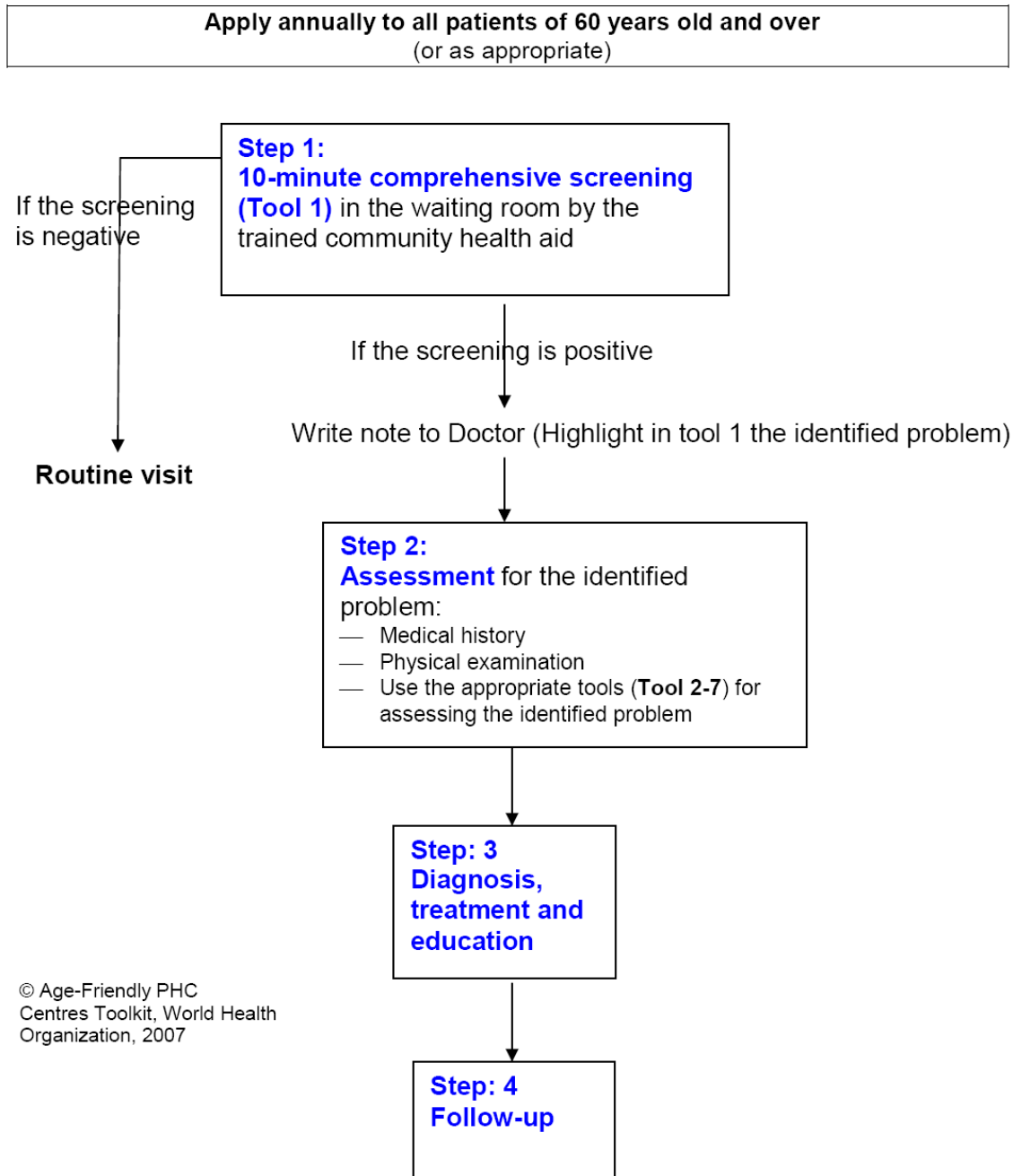
Step 3: Diagnosis, treatment and education

- Establish diagnosis.
- Plan pharmacological and non pharmacological management strategies.
- Counsel patients and family/caregivers on appropriate targets for reducing risk, including education. This can be done by nurse or a community health worker.
- Refer to appropriate services when needed.

Step 4: Follow-up

- Assess response and effectiveness of treatment.
- Change clinical management as necessary.
- If needed, discuss referral for specialty evaluation and management.

Stepwise flow from screening through identification of health problems to management and follow-up

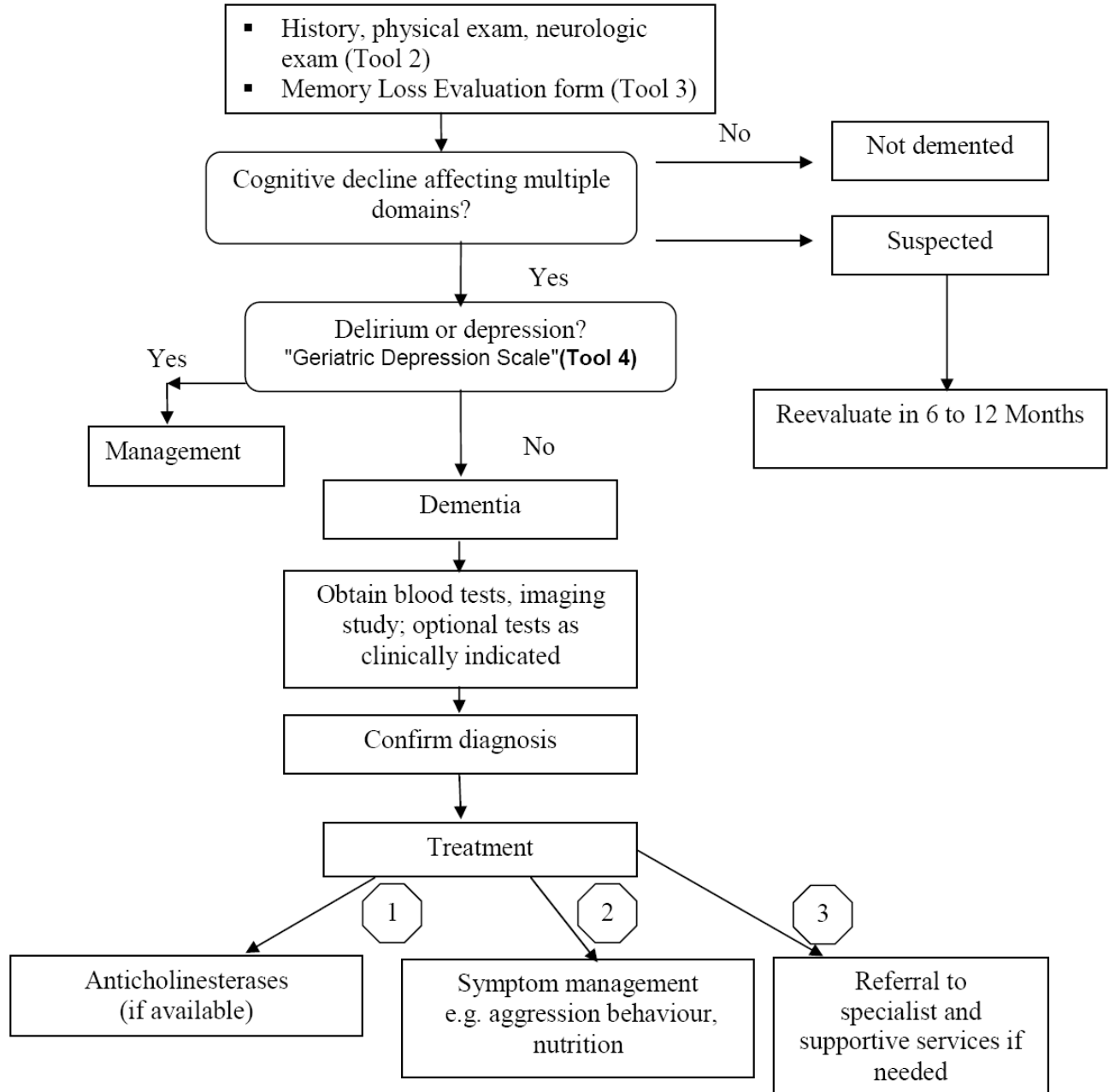


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Centres Toolkit, World Health
Organization, 2007

MEMORY LOSS

Managing memory loss – If positive on screening tool

Note: If there are national guidelines, please follow.



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Tool 2:- Mini-mental state examination (MMSE)

What for ?	Screening of cognitive impairments
By whom ?	Medical doctor
How long ?	15 minutes

MiniMental

NAME OF SUBJECT _____ Age _____

Years of School Completed _____

Approach the patient with respect and encouragement. Date of Examination _____

Ask: Do you have any trouble with your memory? Yes [] No []

May I ask you some questions about your memory? Yes [] No []

SCORE ITEM

5 () TIME ORIENTATION

Ask:

What is the year _____ (1), season _____ (1),
month of the year _____ (1), date _____ (1),
day of the week _____ (1)?

5 () PLACE ORIENTATION

Ask:

Where are we now? What is the state _____ (1), city _____ (1),
part of the city _____ (1), building _____ (1),
floor of the building _____ (1)?

3 () REGISTRATION OF THREE WORDS

Say: Listen carefully. I am going to say three words. You say them back after I stop.
Ready? Here they are... PONY (wait 1 second). QUARTER (wait 1 second), ORANGE
(wait one second). What were those words?

_____ (1)
_____ (1)
_____ (1)

Give 1 point for each correct answer, then repeat them until the patient learns all three.

5 () SERIAL 7 s AS A TEST OF ATTENTION AND CALCULATION

Ask: Subtract 7 from 100 and continue to subtract 7 from each subsequent remainder until I tell you to stop. What Is 100 take away 7 ? _____ (1)

Say:

Keep Going _____ (1), _____ (1),
_____ (1), _____ (1).

3 () RECALL OF THREE WORDS

Ask:

What were those three words I asked you to remember?

Give one point for each correct answer. _____ (1),
_____ (1), _____ (1).

2 () NAMING

Ask:

What is this? (show pencil) _____ (1), What is this? (show watch) _____ (1).

1 () **REPETITION**

Say:

Now I am going to ask you to repeat what I say. Ready? No ifs, ands, or buts.
Now you say that. _____(1).

3 () **COMPREHENSION**

Say:

Listen carefully because I am going to ask you to do something:

Take this paper in your left hand (1), fold it in half (1), and put it on the floor. (1)

1 () **READING**

Say:

Please read the following and do what it says, but do not say it aloud. (1)

Close your eyes

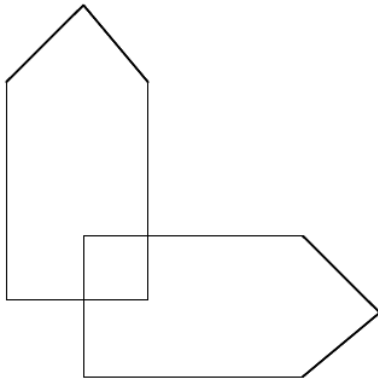
1 () **WRITING**

Say:

Please write a sentence. If patient does not respond, say: Write about the weather. (1)

1 () **DRAWING**

Say: Please copy this design.



TOTAL SCORE _____ (*)

*: **Score:**

27-30	Normal
20-26	Mild impairment
10-19	Moderate impairment
Below 10	Severe impairment
For scores below 27	Complete the memory loss evaluation form(Tool 3) and follow the flowchart for managing memory loss

Source: Folstein, M. F., Folstein, S. E., McHugh, P. R. " Mini-Mental Test ": A practical method for grading the cognitive state of patients for the clinician. *J. Psychiatry Res.*, 1975; 12: 189-198.

Tool 3: Memory loss evaluation form

What for ?	Memory loss clinical questioning
By whom ?	Medical doctor
How long ?	5-15 minutes

Name: _____ Age: _____ Date: _____

History of the Memory Problem

Psychiatric history

Family History

- hypertension dementia Parkinson's disease depression
- stroke cardiovascular disease down's syndrome
- diabetes

Medications currently taking

Symptoms (circle positives)

- speech difficulty confusion aggressive delusions
- hallucinations emotional change fall, injury
- balance problems eating problems behaviour changes

Main problem identified by family/caregiver

- 1.
- 2.
- 3.

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Activities of Daily Living Assessment (ADL)

Index of independence in ADL

What for ?	Assessing autonomy in daily activities
By whom ?	Nurse or medical doctor
How long ?	10 minutes

ACTIVITIES Points (0-6)	INDEPENDENCE (1 Point) NO supervision, direction or personal assistance	DEPENDENCE (0 Points) WITH supervision, direction, personal assistance or total care
BATHING Points-----	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.
DRESSING Points-----	(1 POINT) Gets clothes from closet and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	(0 POINTS) Needs help with dressing self or needs to be completely dressed.
TOILETING Points-----	(1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	(0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
TRANSFERRING Points-----	(1 POINT) Moves in and out of chair unassisted. Mechanical transferring aides are acceptable.	(0 POINTS) Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE Points-----	(1 POINT) Exercises complete self control over urination and defecation.	(0 POINTS) Is partially or totally incontinent of bowel or bladder.
FEEDING Points-----	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
TOTAL POINTS = _____ 6 = High (patient independent) 0 = Low (patient very dependent)		

Source: Katz S, Down TD, Cash HR, Grotz RC. Progress in the development of the index of ADL. *The gerontologist* 1970 10(1), 20-30.

Tool 4: Geriatric Depression Scale (GDS)

What for ?	Assessing state of depression		
By whom ?	Patient, nurse or trained health worker		
How long ?	5 minutes		
Instructions:	Circle the answer that best describes how you felt over the <u>past week</u> .		
	1. Are you basically satisfied with your life?	yes	no
	2. Have you dropped many of your activities and interests?	yes	no
	3. Do you feel that your life is empty?	yes	no
	4. Do you often get bored?	yes	no
	5. Are you in good spirits most of the time?	yes	no
	6. Are you afraid that something bad is going to happen to you?	yes	no
	7. Do you feel happy most of the time?	yes	no
	8. Do you often feel helpless?	yes	no
	9. Do you prefer to stay at home, rather than going out and doing things?	yes	no
	10. Do you feel that you have more problems with memory than most?	yes	no
	11. Do you think it is wonderful to be alive now?	yes	no
	12. Do you feel worthless the way you are now?	yes	no
	13. Do you feel full of energy?	yes	no
	14. Do you feel that your situation is hopeless?	yes	no
	15. Do you think that most people are better off than you are?	yes	no
	Total Score		

Scoring Instructions:	Score one point for each bolded answer. A score of 5 or more suggests depression.		
	Total Score:		

If positive, follow the depression management flowchart.

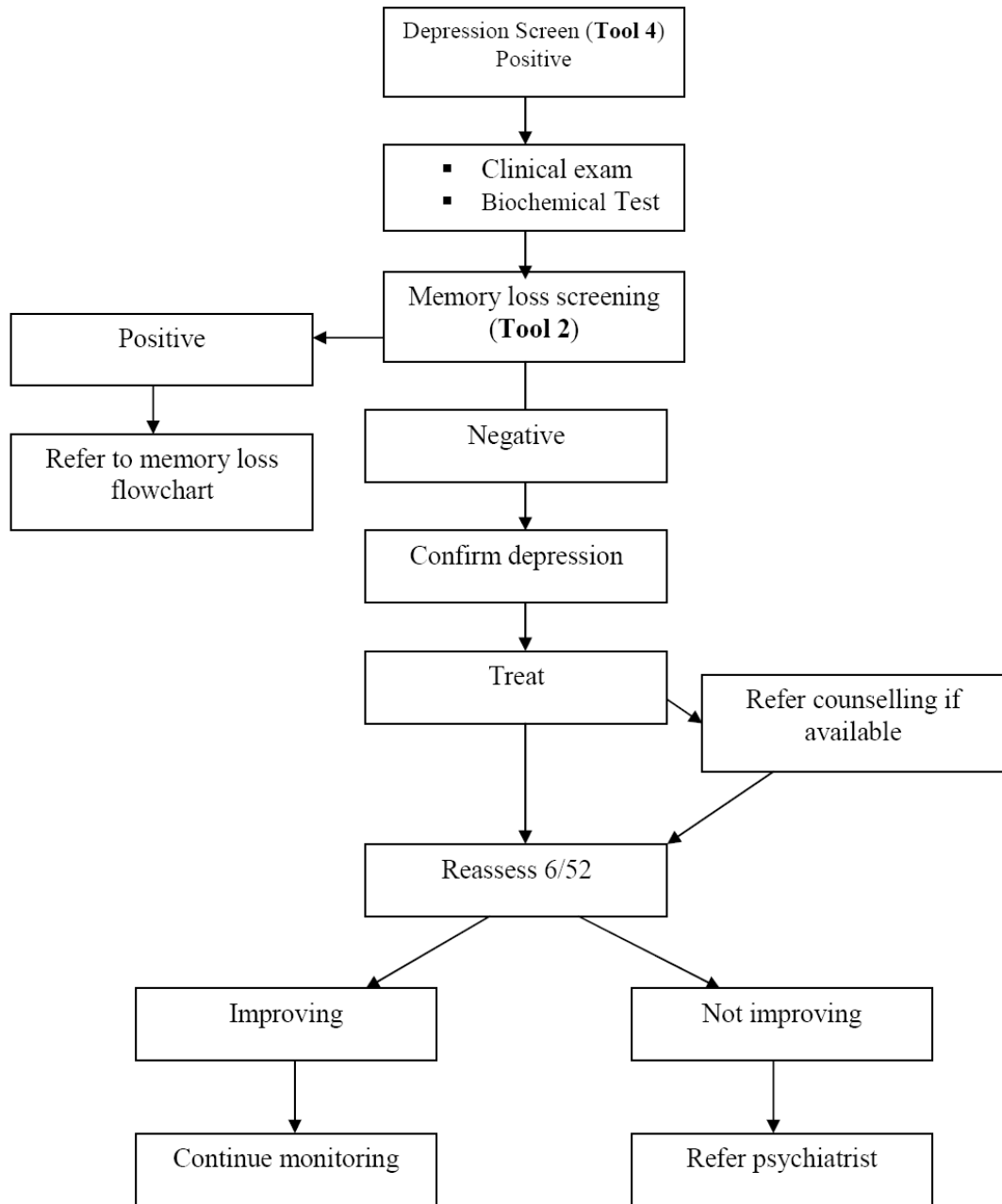
Source: Yesavage JA, Brink TL, Rose TL, Lum O, Huang V, Adey MB, Leirer VO. Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research* 17: 37-49, 1983.

DEPRESSION

For persons without mental impairment:

Managing depression if screening tool indicates positive for depression (nurse does screening tool)

Note: If there are national guidelines, please follow.



TOTAL SCORE _____ (*)

Tool 4: GDS

What for ?	Assessing state of depression
By whom ?	Patient, nurse or trained health worker
How long ?	5 minutes

Instructions:	Circle the answer that best describes how you felt over the <u>past week</u> .		
	1. Are you basically satisfied with your life?	yes	no
	2. Have you dropped many of your activities and interests?	yes	no
	3. Do you feel that your life is empty?	yes	no
	4. Do you often get bored?	yes	no
	5. Are you in good spirits most of the time?	yes	no
	6. Are you afraid that something bad is going to happen to you?	yes	no
	7. Do you feel happy most of the time?	yes	no
	8. Do you often feel helpless?	yes	no
	9. Do you prefer to stay at home, rather than going out and doing things?	yes	no
	10. Do you feel that you have more problems with memory than most?	yes	no
	11. Do you think it is wonderful to be alive now?	yes	no
	12. Do you feel worthless the way you are now?	yes	no
	13. Do you feel full of energy?	yes	no
	14. Do you feel that your situation is hopeless?	yes	no
	15. Do you think that most people are better off than you are?	yes	no
	Total Score		

Scoring Instructions:	Score one point for each bolded answer. A score of 5 or more suggests depression.		
	Total Score:		

If positive, follow the depression management flowchart.

Source: Yesavage JA, Brink TL, Rose TL, Lum O, Huang V, Adey MB, Leirer VO. Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research* 17: 37-49, 1983.

Tool 2: MMSE

What for ?	Screening of cognitive impairments
By whom ?	Medical doctor
How long ?	15 minutes

MiniMental

NAME OF SUBJECT _____ Age _____

Years of School Completed _____

Approach the patient with respect and encouragement. Date of Examination _____

Ask: Do you have any trouble with your memory? Yes [] No []

May I ask you some questions about your memory? Yes [] No []

SCORE ITEM

5 () TIME ORIENTATION

Ask:

What is the year _____ (1), season _____ (1),
month of the year _____ (1), date _____ (1),
day of the week _____ (1)?

5 () PLACE ORIENTATION

Ask:

Where are we now? What is the state _____ (1),
city _____ (1), part of the city _____ (1),
building _____ (1), floor of the building _____ (1)?

3 () REGISTRATION OF THREE WORDS

Say: Listen carefully. I am going to say three words. You say them back after I stop.
Ready? Here they are... PONY (wait 1 second). QUARTER (wait 1 second), ORANGE
(wait one second). What were those words?

_____ (1)
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Give 1 point for each correct answer, then repeat them until the patient learns all three.

5 () SERIAL 7s AS A TEST OF ATTENTION AND CALCULATION

Ask: Subtract 7 from 100 and continue to subtract 7 from each subsequent remainder
until I tell you to stop. What is 100 take away 7? _____ (1)

Say:

Keep Going _____ (1), _____ (1),
_____ (1), _____ (1).

3 () RECALL OF THREE WORDS

Ask:

What were those three words I asked you to remember?

Give 1 point for each correct answer. _____ (1),
_____ (1), _____ (1).

2 () NAMING

Ask:

What is this? (show pencil) _____ (1). What is this? (show watch) _____ (1).

1 ()

REPETITION

Say:

Now I am going to ask you to repeat what I say. Ready? No ifs, ands, or buts.

Now you say that. _____ (1).

3 ()

COMPREHENSION

Say:

Listen carefully because I am going to ask you to do something:

Take this paper in your left hand (1), fold it in half (1), and put it on the floor. (1)

1 ()

READING

Say:

Please read the following and do what It says, but do not say it aloud. (1)

Close your eyes

1 ()

WRITING

Say:

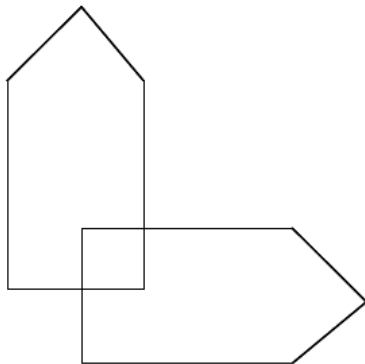
Please write a sentence. If patient does not respond, say: Write about the weather.

(1)

1 ()

DRAWING

Say: Please copy this design.



TOTAL SCORE _____ (*)

*: **Score:**

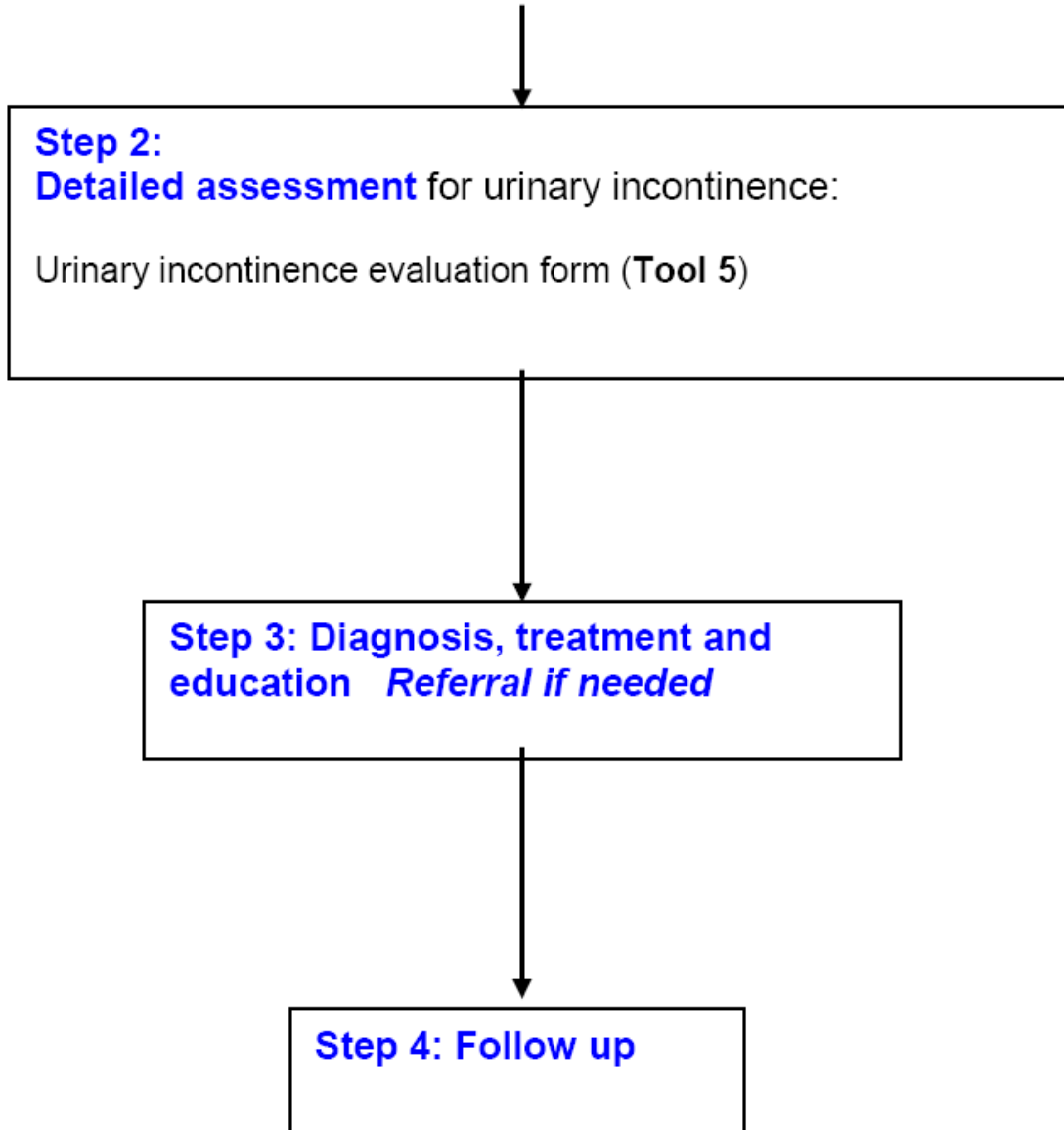
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20-26	Mild impairment
10-19	Moderate impairment
Below 10	Severe impairment
For scores below 27	Complete the memory loss evaluation form (Tool 3) and follow the flowchart for managing memory loss

Source: Folstein, MF Folstein, SE, McHugh, PR "Mini-Mental Test ": A practical method for grading the cognitive state of patients for the clinician. *J. Psychiatry Res.*, 1975; 12: 189-198.

URINARY INCONTINENCE

Clinical process of managing urinary incontinence
– When risk of urinary incontinence is found

If positive screening for urinary incontinence (Step 1)



Tool 5: Urinary incontinence evaluation form

What for ?	Urinary incontinence evaluation
By whom ?	Part 1: Nurse or trained health care worker Part 2: Medical doctor
How long ?	15 minutes

PART 1

Name: _____ **Age:** _____ **Date:** _____

Genitourinary history.

Bladder tumor Recurrent UTI Kidney stones Prostate problem

Women only

N° of Pregnancies _____

Menopause? Y/N How long? _____

Estrogens Y/N

Family history cancer breast Hysterectomy Ovaries removed

Summary of incontinence

When did the problem begin?

Does it influence with your activities of daily living?

If yes, how?

What makes the problem worse?

Running Sneeze, cough Laugh Lift Bending down

Running water

What problems do you have with passing your urine? (adapt culturally)

- Starting
- Slow stream
- Discomfort

- Hematuria
- Inc. emptying

Voiding problems (circle all that apply)

Damp without recognition

Can hold:

- Indefinitely Few minutes Minute or two Nocturia

PART 2

Medication review – What medication are you currently taking?

(note beta blocker, sedative, narcotic, diuretic, anticholinergic, calcium channel blockers, non-prescription drugs, cold remedy, herbals)

Treatment (as indicated)

FALLS

The clinical process of managing falls
(When risk of falls is found)

If positive screening for falls (**Step 1**)

Step 2:

Detailed assessment for falls:

- Falls evaluation Form (**Tool 6**)
- Analysis of gait/feet
- Activities of daily living assessment (Katz) (**Tool 7**)

Step 3: Diagnosis, treatment and education

Step 4: Follow-up

Advise patient to

- seek medical treatment after fall,
- record falls,
- refer for home assessment/modification, help/assistance if needed/available.

Tool 6: Falls evaluation form

What for ?	Investigation of the origin of falls
By whom ?	Part 1: Nurse or trained health care worker Part 2: Medical doctor
How long ?	20 minutes

PART 1

Name: _____ **Age:** _____ **Date:** _____

History of Your Falls

Description of the fall

We need to hear the details of your falls so we can understand what is causing them. Answer the following questions about your last fall.

When was this fall? _____

Date (approximate) _____ Time of Day _____

- What were you doing before you fell?
- Do you remember your fall, or did someone tell you about it?
- How did you feel just before?
- How did you feel going down?
- What part of your body hit?
- What did it strike?
- What was injured?
- Anything else you recall?
- Do you think you passed out?
- Do you have joint pain?
- Do you have joint instability?
- Do you have foot problems?
- Do you use a cane/walker?

How often have you fallen in the past six months?

What medication are you currently taking?

- Psychotropic medications Diuretics Antiarrhythmics
 Noticed any vision changes Yes/Non
 Eye exam past year Yes/Non

PART 2

Feet – any abnormalities

Gait analysis

Gait: normal abnormal

Up-and-Go test: ____ sec

(patient who takes more than 30 seconds is at risk)

Abnormal if: Hesitant start

- Broad-based gait
 Extended arms
 Heels do not clear toes of other foot
 Heels do not clear floor
 Path deviates

Balance test:	YES	NO
(1) Side-by-side, stable 10 sec	<input type="checkbox"/>	<input type="checkbox"/>
(2) Semi-tandem, stable 10 sec	<input type="checkbox"/>	<input type="checkbox"/>
(3) Full tandem, stable 10 sec	<input type="checkbox"/>	<input type="checkbox"/>

Up-and-Go test:
 -Stand from chair,
 -Walk 10 feet (3 meters),
 -Turn around,
 -Walk back,
 -Sit down

Balance test:
 (1) **side-by-side**: feet side by side, touching;
 (2) **semi-tandem**: side of the heel of one foot touching the big toe of the other;
 (3) **tandem**: heel of one foot directly in front of and touching the toes of the other foot.
 Each stance is progressively more difficult to hold. People unable to hold a position for 10 seconds are not asked to attempt further stands.

Tick if abnormal

	STRENGTH		TONE	
	Left	Right	Left	Right
ARM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Quad strength: can rise from chair without using arms Y / N

Treatment (to be completed by the doctor):

- 1.
- 2.

Tool 7: Activities of Daily Living Assessment (ADL)

Index of independence in ADL

What for ?	Assessing autonomy in daily activities
By whom ?	Nurse or medical doctor
How long ?	10 minutes

ACTIVITIES Points (0-6)	INDEPENDENCE (1 Point) NO supervision, direction or personal assistance	DEPENDENCE (0 Points) WITH supervision, direction, personal assistance or total care
BATHING Points-----	(1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	(0 POINTS) needs help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.
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FEEDING Points-----	(1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person.	(0 POINTS) Needs partial or total help with feeding or requires parenteral feeding.
TOTAL POINTS = _____ 6 = High (patient independent) 0 = Low (patient very dependent)		

Source: Katz S, Down TD, Cash HR, Grotz RC. Progress in the development of the index of ADL. *The gerontologist* 1970 10(1), 20-30.

HYPERTENSION AND DIABETES

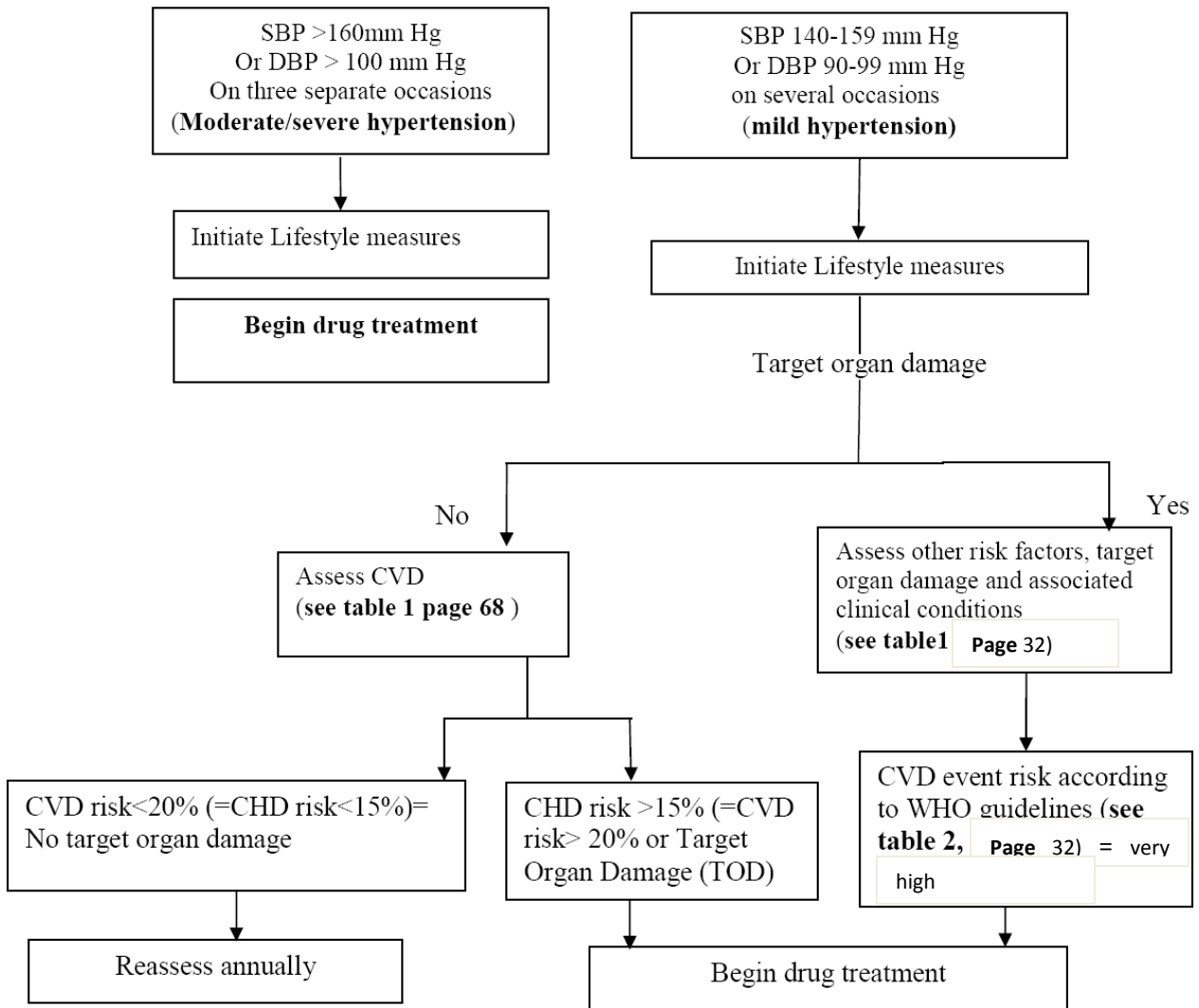
- These are two of the most common illnesses in older persons.
- If there are national guidelines, please follow them. The example given here is from Jamaica.
- Please refer to health promotion materials on physical activity and nutritional counselling.

Clinical assessment and key management approaches for two major chronic diseases

Management of hypertension

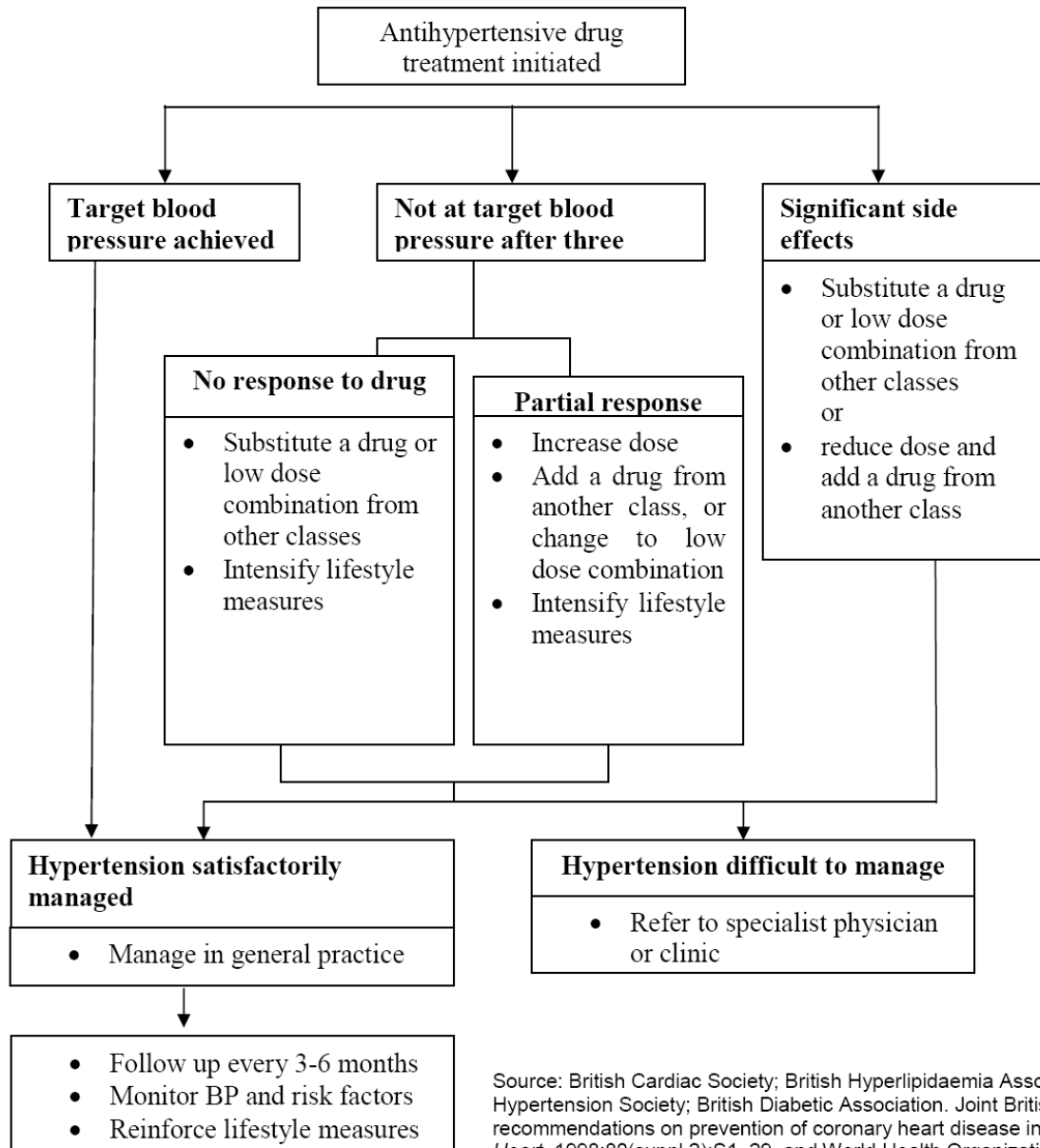
Most countries have national guidelines for classification of hypertension which should be followed. If local guidelines are not available, please refer to the following guideline:

INITIATION OF TREATMENT FOR HYPERTENSION IN OLDER PEOPLE



Source: British Cardiac Society; British Hyperlipidaemia Association; British Hypertension Society; British Diabetic Association. Joint British recommendations on prevention of coronary heart disease in clinical practice. *Heart*. 1998;80(suppl 2):S1-29. and World Health Organization, International Society of Hypertension Writing Group. 2003 World Health Organization (WHO)/International Society of Hypertension (ISH). Statement on management of hypertension. *J Hypertens*. 2003;21:1983-1992

STABILISATION, MAINTENANCE AND FOLLOW-UP AFTER INITIATION OF ANTIHYPERTENSIVE DRUG THERAPY



Source: British Cardiac Society; British Hyperlipidaemia Association; British Hypertension Society; British Diabetic Association. Joint British recommendations on prevention of coronary heart disease in clinical practice. *Heart*. 1998;80(suppl 2):S1-29, and World Health Organization, International Society of Hypertension Writing Group. 2003 World Health Organization (WHO)/International Society of Hypertension (ISH). Statement on management of hypertension. *J Hypertens*.2003;21:1983-1992

Table 1 – Important factors influencing prognosis and assessment of CVD risks

Risk factors for cardiovascular disease (CVD)	Target Organ Damage (TOD)	Associated Clinical Conditions (ACC)
<p>I Used for risk stratification</p> <ul style="list-style-type: none"> ▪ Systolic and diastolic blood pressure (mild, moderate or severe) ▪ Age >55 (men) >65 (women) ▪ Smoking ▪ Total cholesterol >6.5mmol/l or TC/HDL ratio >5.0 ▪ Diabetes ▪ Family history of CVD 	<ul style="list-style-type: none"> ▪ Left ventricular hypertrophy (ECG or echo) ▪ Proteinuria and/or creatinine >150 µmol/l ▪ Atherosclerotic plaque (X-ray or ultrasound evidence in carotid, iliac, or femoral arteries or aorta) 	<ul style="list-style-type: none"> ▪ Cerebrovascular disease ▪ Ischaemic stroke ▪ Haemorrhagic stroke ▪ Transient ischaemic attack ▪ Vascular dementia ▪ Cardiovascular disease ▪ Myocardial infarction ▪ Congestive cardiac failure ▪ Renal disease ▪ Peripheral vascular disease ▪ Aortic aneurysm ▪ Retinopathy
<p>II Other Factors adversely influencing prognosis</p> <ul style="list-style-type: none"> - Reduced HDL cholesterol - Raised LDL cholesterol - Microalbuminuria in diabetics - Impaired glucose tolerance - Obesity 		

Source: British Cardiac Society; British Hyperlipidaemia Association; British Hypertension Society; British Diabetic Association. Joint British recommendations on prevention of coronary heart disease in clinical practice. *Heart*. 1998;80 (suppl 2):S1–29.

Table 2 – Stratification of CVD risk to quantify prognosis

Blood pressure (mm Hg)			
Other risk factors and disease history	Mild hypertension SBP 140-159 or DBP 90-99	Moderate hypertension SBP 160-179 or DBP 100-109	Severe hypertension SBP ≥180 or DBP ≥110
No other risk factors	LOW RISK*	MEDIUM RISK	HIGH RISK
1-2 risk factors	MEDIUM RISK	MEDIUM RISK	VERY HIGH RISK
3 or more risk factors Or TOD or	HIGH RISK	HIGH RISK	VERY HIGH RISK

diabetes			
Presence of associated clinical conditions	VERY HIGH RISK	VERY HIGH RISK	VERY HIGH RISK

**Risk category refers to the risk of a cardiovascular event within 10 years: low risk: <15 %, medium: 15-20%, high: 20-30%, very high: >30%*

Source: British Cardiac Society; British Hyperlipidaemia Association; British Hypertension Society; British Diabetic Association. Joint British recommendations on prevention of coronary heart disease in clinical practice. *Heart*. 1998;80(suppl 2):S1-29, and World Health Organization, International Society of Hypertension Writing Group. 2003 World Health Organization (WHO)/International Society of Hypertension (ISH). Statement on management of hypertension. *J Hypertens*.2003;21:1983-1992

Guidelines for management of hypertension

Assessment

- A full assessment of cardiovascular risks should be carried out for all hypertensive patients
- Blood pressure measurement is critical to the management of hypertension. Validated equipment should be used and national guidelines or the guidelines above should be followed.
- The normal range for home blood pressure measurements and ambulatory blood pressure monitoring is lower than “normal” surgery or clinic values.
- Accelerated phase (malignant) hypertension requires urgent hospital admission for investigation and treatment.

Thresholds and targets for treating hypertension in older people

- Both systolic and diastolic hypertension require treatment.
- Thresholds for antihypertensive therapy and targets for treatment should be set and should take into account both the level of blood pressure and other risk factors.
- The decision to start treatment should be based on a structured assessment of cardiovascular risk.
- A target blood pressure of <140/90 mmHg is recommended for older hypertensive patients.
- Even a small reduction in blood pressure is worthwhile if absolute targets prove difficult to achieve.
- Hypertensive patients with diabetes or with renal disease should be considered for specialist referral. Some patients may require further investigation and lower target blood pressures may be desirable.
- Accelerated phase (malignant) hypertension requires urgent hospital admission for investigation and treatment.

Lifestyle modification

- Lifestyle measures aimed at controlling hypertension should be recommended in all cases.
- Overweight and obese hypertensive patients ($BMI \geq 25.0$) should be encouraged to lose weight.
- Alcohol intake should be reduced when it exceeds 21 units per week for men and 14 units per week for women.
- Sodium intake should be reduced towards a target of $< 5g/day$.
- Fruit and vegetable consumption should be increased to a total of five portions/day, and saturated fat consumption reduced.
- Increase physical activity by taking regular exercise.
- All patients should be actively discouraged from smoking.

Drug treatment/optional

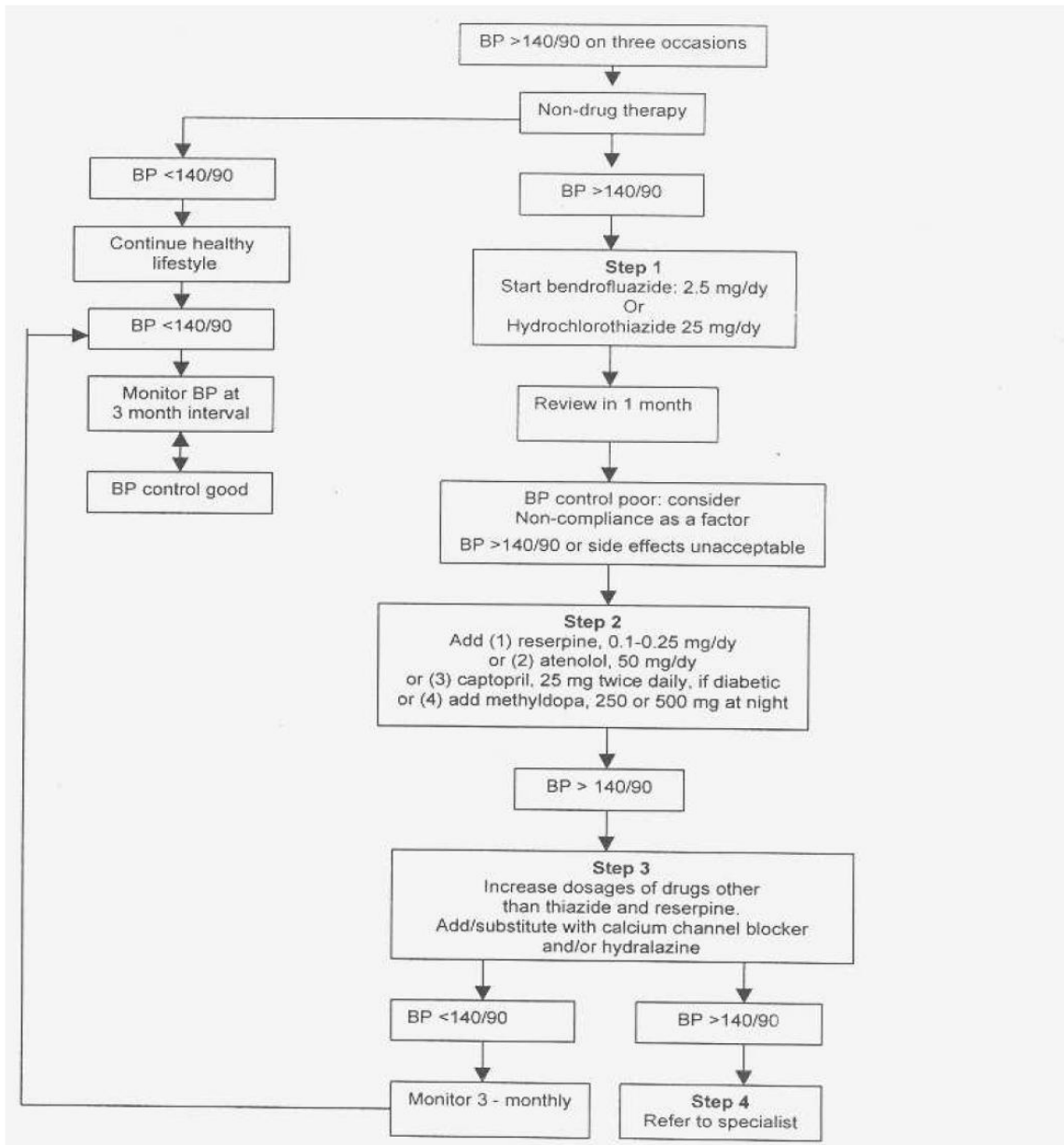
- **Thiazide diuretics** are recommended as first line therapy for drug of hypertension in older patients.
- Low doses of thiazide should be used as there is clear evidence that this minimizes potential adverse biochemical and metabolic disturbance.
- **β -blockers** can be used as alternative or supplementary therapy to thiazide diuretics in older patients.
- **Long-acting dihydropyridine calcium antagonists** can be used as alternative therapy to thiazide diuretics or supplementary to other therapy, particularly in patients with isolated systolic hypertension.
- **Short-acting dihydropyridine** calcium antagonists should be avoided.
- **ACE inhibitors** are specifically indicated as first line therapy for hypertension in patients with type 1 diabetics, proteinuria, or left ventricular dysfunction.
- In most other hypertensive patients, ACE inhibitors are recommended as alternative or supplementary therapy in the absence of renal artery stenosis. α -blockers may be used as supplementary therapy.
- **Intake of aspirin** 75mg a day is recommended for older hypertensive patients who have:
 - no contraindication to aspirin,
 - blood pressure controlled to $< 150/90$ mm Hg. and any of the following:
 - cardiovascular complications
 - TOD
 - cardiovascular event risk $\geq 2\%$ per year (20% over 10 years)
 - coronary event risk $\geq 1.5\%$ per year (15% over 10 years).
- Single daily dosing of drugs (or, when this is not available, twice daily) should be encouraged.

Guidelines for annual blood pressure (BP) review for all patients

MONITOR	INTERVENTION
General <ul style="list-style-type: none"> ▪ Smoking and alcohol ▪ Diet review ▪ BP ▪ Treatment check 	<ul style="list-style-type: none"> ▪ Advise against smoking and alcohol ▪ Advise against salt and fats ▪ Maintain regular blood pressure checks ▪ Adjust where relevant
Feet <ul style="list-style-type: none"> ▪ Peripheral sensation ▪ Foot pulses ▪ Oedema (swelling) 	<ul style="list-style-type: none"> ▪ Readjust medication as appropriate
Eyes <ul style="list-style-type: none"> ▪ Visual acuity ▪ Fundoscopy ▪ Pallor or mucous membrane 	<ul style="list-style-type: none"> ▪ Refer patients with deteriorating vision or serious retinal lesions ▪ Anaemia may indicate chronic renal disease, therefore renal check is needed
Kidneys <ul style="list-style-type: none"> ▪ Urine protein and electrolytes ▪ Serum creatinine 	<ul style="list-style-type: none"> ▪ Improve BP control and avoid long-acting sulfonylurea drugs in patients with renal involvement
Heart <ul style="list-style-type: none"> ▪ BP ▪ ECG ▪ Glycaemia control ▪ Body weight ▪ Diet ▪ Exercise ▪ Alcohol ▪ Smoking ▪ Symptoms 	<ul style="list-style-type: none"> ▪ Improve control, regular BP checks ▪ Refer to the cardiologist if not available at PHC centre ▪ Improve control of blood glucose ▪ Maintain average weight ▪ Low salt and low fat intake ▪ Regular exercise ▪ Moderate alcohol intake ▪ Stop smoking ▪ Refer where appropriate

Protocol for the Management of Hypertension, Jamaica: Annual review for All Patients. Health Services Planning and Integration Division, Ministry of Health, Jamaica, 2005.

**Example of treatment scheme algorithm
(For Persons <60 years of age)
Note: Refer to national guidelines if available**



Protocol for the Management of Hypertension, Jamaica: Annual review for All Patients. Health Services Planning and Integration Division, Ministry of Health, Jamaica, 2005.

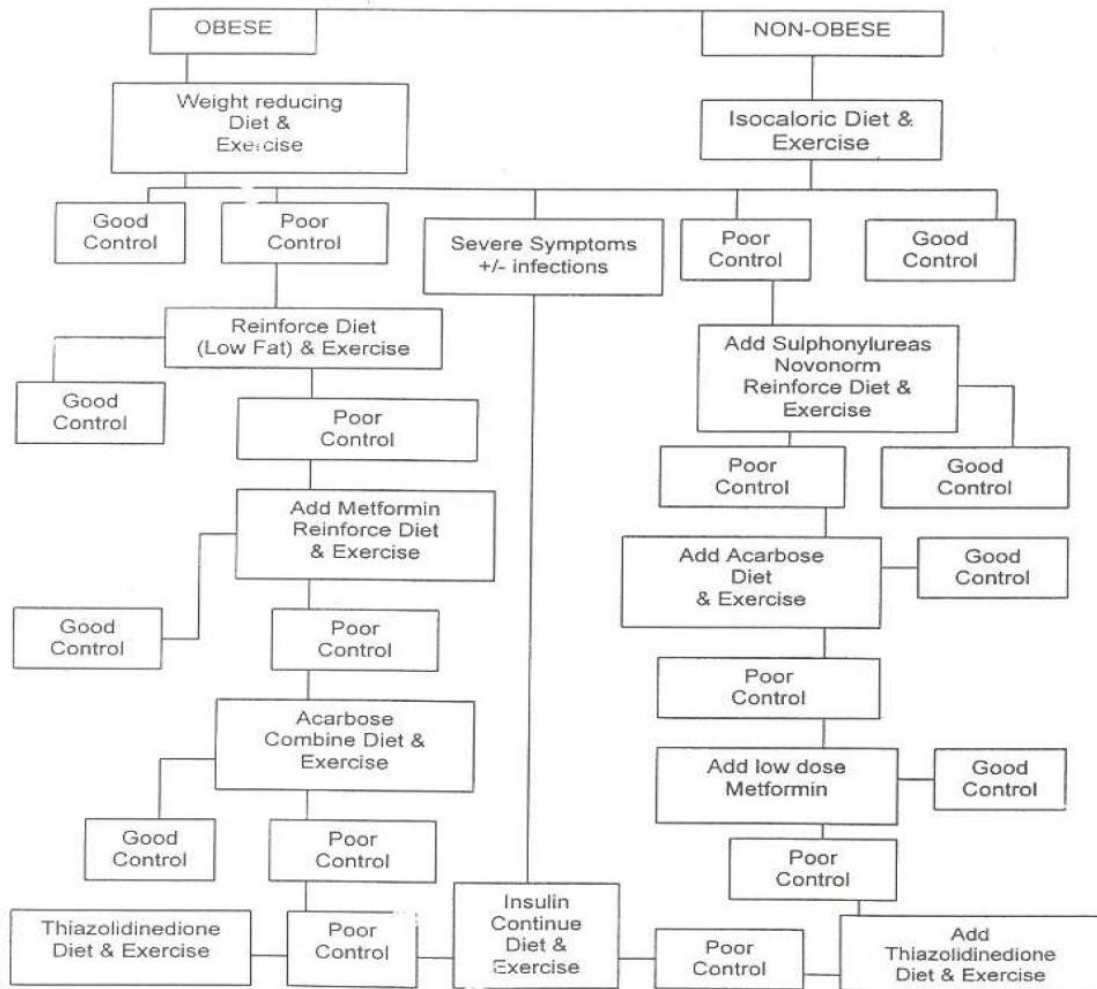
Management of diabetes

Refer to national guidelines for management of diabetes if available. If there are no national guidelines, please refer to the guidelines below.

Guidelines for annual diabetes review for all patients

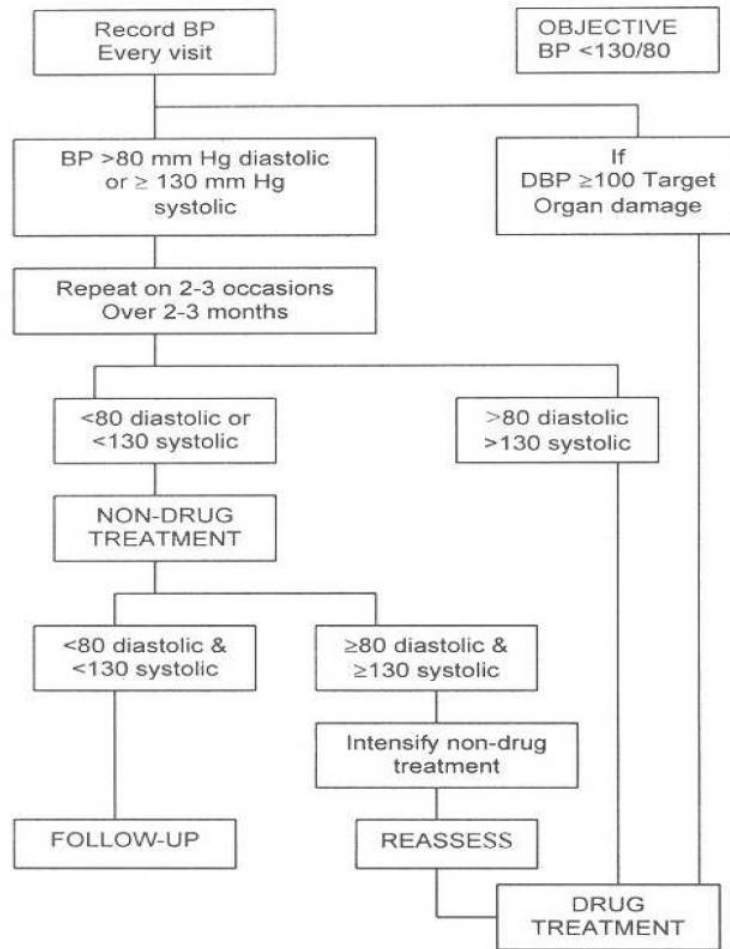
MONITOR	INTERVENTION
General <ul style="list-style-type: none"> ▪ Smoking and alcohol ▪ Diet review ▪ Blood sugar and glycosylated haemoglobin (Hb A_{1c}) ▪ Treatment check 	<ul style="list-style-type: none"> ▪ Advise against smoking and alcohol, restrictions ▪ Refer to diabetes educator/nutritionist/dietitian ▪ Manage according to national protocol guidelines ▪ Adjust where appropriate
Feet <ul style="list-style-type: none"> ▪ Foot inspection ▪ Peripheral sensation ▪ Foot pulses 	<ul style="list-style-type: none"> ▪ Advise on care of feet/refer to chiropodist if available
Eyes <ul style="list-style-type: none"> ▪ Visual acuity and fundoscopy 	<ul style="list-style-type: none"> ▪ Refer patients with deteriorating vision or serious retinal lesions
Kidneys <ul style="list-style-type: none"> ▪ Urine protein ▪ Serum creatinine 	<ul style="list-style-type: none"> ▪ Improve BP and BG control and avoid long-acting sulfonylurea drugs in patients with renal involvement
Heart <ul style="list-style-type: none"> ▪ Glycaemia control ▪ BP ▪ Body weight ▪ Diet and exercise ▪ Smoking ▪ Alcohol ▪ Symptoms 	<ul style="list-style-type: none"> ▪ Improve control of BG ▪ Regular BP checks ▪ Maintain average weight ▪ Consult diabetes educator/nutritionist/dietitian ▪ Stop smoking ▪ Moderate alcohol intake ▪ Refer where appropriate

Stepwise therapeutic management of Type 2 diabetes common to all approaches: diabetes mellitus education, diet and exercise



Source: Protocol for the Management of Diabetes, Jamaica. Stepwise Therapeutic Management of NIDDM Common to all Approaches: Diabetes Mellitus Education, Diet and Exercise. Health Services Planning and Integration Division, Ministry of Health, Jamaica, 2005.

BP management in persons with diabetes



Source: Protocol for the Management of Diabetes, Jamaica. Blood pressure Management in Persons with Diabetes. Health Services Planning and Integration Division, Ministry of Health, Jamaica, 2005.

Complications of diabetes

Blindness, limb amputations and stroke are leading causes of adult disability. Prevent complications, detect them early and treat before major problems develop

MONITOR	INTERVENTION
<ul style="list-style-type: none"> ▪ Fasting BG ▪ Urine glucose every visit 	<ul style="list-style-type: none"> ▪ Diet and physical exercise readjustment
<ul style="list-style-type: none"> ▪ Home testing and recording ▪ Drug compliance 	<ul style="list-style-type: none"> ▪ Assess ▪ Oral hypoglycemic drugs ▪ Readjustment of insulin
<ul style="list-style-type: none"> ▪ BP every visit ▪ Visual symptoms ▪ Fundoscopy 	<ul style="list-style-type: none"> ▪ Aim at $\leq 130/80$ ▪ Refer to ophthalmologist
<ul style="list-style-type: none"> ▪ Foot examination ▪ Loss of sensation ▪ Signs of injury ▪ Deformity 	<ul style="list-style-type: none"> ▪ Advise on foot care or refer to chiropodist
<ul style="list-style-type: none"> ▪ Test for proteinuria at each visit 	<ul style="list-style-type: none"> ▪ Treat hypertension $>130/80$ ▪ Control BG
<ul style="list-style-type: none"> ▪ Blood urea and creatinine yearly 	<ul style="list-style-type: none"> ▪ If elevated assess kidney function
<ul style="list-style-type: none"> ▪ Blood glucose ▪ BP ▪ Body weight ▪ Diet and exercise ▪ Smoking and alcohol 	<ul style="list-style-type: none"> ▪ Control BP and BG, reduce weight, increase fitness, stop smoking and allow moderate alcohol consumption only
<ul style="list-style-type: none"> ▪ Glycosylated haemoglobin 	<ul style="list-style-type: none"> ▪ Do at least once in 6 months
<ul style="list-style-type: none"> ▪ Weight every visit ▪ Adherence to diet 	<ul style="list-style-type: none"> ▪ Prescribed individual diet ▪ Prescribe exercise ▪ Counselling ▪ Refer to diabetes educator/nutritionist/dietician
<ul style="list-style-type: none"> ▪ Activity patterns 	
<ul style="list-style-type: none"> ▪ Smoking habits ▪ Drinking habits 	

Protocol for the Management of Diabetes, Jamaica. Blindness, limb amputations and stroke are leading causes of adult disability in the Caribbean. prevent complications, detect them early and treat before major problems arise. Health Services Planning and Integration Division, Ministry of Health, Jamaica, 2005.

Overall examination

Overall exam sheet

Note: If there are national forms, please use.

PART 1 – CAN BE DONE BY NURSE OR TRAINED HEALTH CARE WORKER

Date: _____ Name: _____ Age: _____

Sex: Male Female

Vital Sign:

BP: _____ Pulse: _____ Temperature: _____ Weight: _____ Height: _____

Social History:

Marital Status: _____ Who are you living with ? _____

Native language: _____

Do you have any children ? Y / N How often do you see them ? _____

Who assists you ? _____ Is it sufficient ? Y / N

In which type of housing do you live ? _____

Are there stairs ? Y / N

Family History

- Hypertension Diabetes Dementia
 Heart disease Others _____

Past Medical History (check positives)

- | | | |
|---------------------------------------|---|--------------------------------------|
| <input type="checkbox"/> hypertension | <input type="checkbox"/> cardiovascular disease | <input type="checkbox"/> thyroid |
| <input type="checkbox"/> cholesterol | <input type="checkbox"/> stroke | <input type="checkbox"/> neuropathy |
| <input type="checkbox"/> diabetes | <input type="checkbox"/> hepatitis | <input type="checkbox"/> head injury |
| <input type="checkbox"/> alcohol | <input type="checkbox"/> depression | <input type="checkbox"/> seizures |
| <input type="checkbox"/> hear, vision | | <input type="checkbox"/> cancer |

ROS (do appropriate to complaint include psychiatric history)

Level of Function (ADL-Tool 7):

- Independent Need assistance Dependent

PART 2 – TO BE DONE BY DOCTOR (do sections appropriate to exam)

Eyes normal conjunctiva & lids

Pupils pupils symmetrical, reactive

ENT-External no scars, lesions, masses

Otosopic normal canals & timpanic membranes

Ant. Oral normal lips, teeth, gums
Oropharynx normal tongue, palate

Neck palp. symmetrical without masses
Thyroid no enlargement or tenderness

Resp.

Respiratory rate : _____ per min

Chest percuss. no dullness or hyper resonance

Auscultation normal bilateral breath sounds without rales

Heart palp. normal location, size

Cardiac ausc. no murmur

Carotids normal intensity without bruit

Pedal pulses normal posterior tibial & dorsalis pedis

Breasts normal I inspection & palpation

Abdomen no masses or tenderness

L/S no liver/spleen

Hernia no hernia identified

Genitourinary male external genitalia normal without lesions

Prostate normal size without nodularity

Genitourinary female

Int. inspection normal bladder, urethra, & vagina

Cervix normal appearance without discharge

Uterus normal size, position, without tenderness

Adnexa no masses or tenderness

Additional description of positive findings (including behavioural changes):

Preliminary diagnostic assessment (impairment level, co morbid health conditions, potential treatable elements):

Recommendations/plan:

Diagnosis

investigations

Lab:

Electrolytes Ca TSH B₁₂ others

Imaging (type, history)_____

Last EKG: date_____ Description_____

Management

-Treatment:

-Referrals:

-Follow-up:

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ENVIRONMENTAL ASSESSMENT

SECTION IV

General Objectives

Global ageing has resulted in older people living longer with higher risk for chronic conditions that often lead to disabilities. The commonest disabilities are: reduced vision, hearing and mobility. Many older persons require a wheelchair for mobility, either temporarily or permanently. Older people, whether disabled or non-disabled need PHC facilities for their health care especially in developing countries. These PHC centres should facilitate an environment where older people can move around independently, actively, safely and securely.

The following services are also essential for PHC centres for older people:

- accessible transport
- assistive devices – mostly wheelchairs
- personal assistance

This section includes resources on how to make the physical environment of a PHC centre more age-friendly.

Contents:

1 Universal design – design for user-friendly PHC centre

.2 Guidelines for signage inside and outside the PHC centre

Universal design – design for an user-friendly PHC centre

The Principles of Universal Design

The principles of universal design are presented in the following format:

- name of the principle,
- definition of the principle,
- brief description of the principle's primary directive for design,
- Guidelines – a list of the key elements that should be present in an age-friendly design.

Note: all guidelines may not be relevant to all designs.

PRINCIPLE 1: Equitable use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- a. Provide the same means of use for all users; identical whenever possible, equivalent when not.
- b. Avoid segregating or stigmatizing any users.
- c. Provisions for privacy, security, and safety should be equally available to all users.
- d. Make the design appealing to all users.

PRINCIPLE 2: Flexibility in use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- a. Provide a choice in methods of use.
- b. Accommodate right- or left-handed access and use.
- c. Facilitate the user's accuracy and precision.
- d. Provide adaptability to the user's pace.

PRINCIPLE 3: Simple and intuitive use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- a. Eliminate unnecessary complexity.
- b. Be consistent with user expectations and intuition.
- c. Accommodate a wide range of literacy and language skills.
- d. Arrange information consistent with its importance.
- e. Provide effective prompting and feedback during and after task completion.

PRINCIPLE 4: Perceptible information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.

- b. Provide adequate contrast between essential information and its surroundings.
- c. Maximize "legibility" of essential information.
- d. Differentiate elements in ways that can be described e.g. make it easy to give instructions or directions.
- e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

PRINCIPLE 5: Tolerance for error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- a. Arrange elements to minimize hazards and errors.
- b. Provide warnings of hazards and errors.
- c. Provide fail safe features.
- d. Discourage unconscious action in tasks that require vigilance.

PRINCIPLE 6: Low physical effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

- a. **Allow** user to maintain a neutral body position.
- b. Use reasonable operating forces.
- c. Minimize repetitive actions.
- d. Minimize sustained physical effort.

PRINCIPLE 7: Size and space for approach and use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- a. Provide a clear line of sight to important elements for any seated or standing user.
- b. Make reach to all components comfortable for any seated or standing user.
- c. Accommodate variations in hand and grip size.
- d. Provide adequate space for the use of assistive devices or personal assistance.

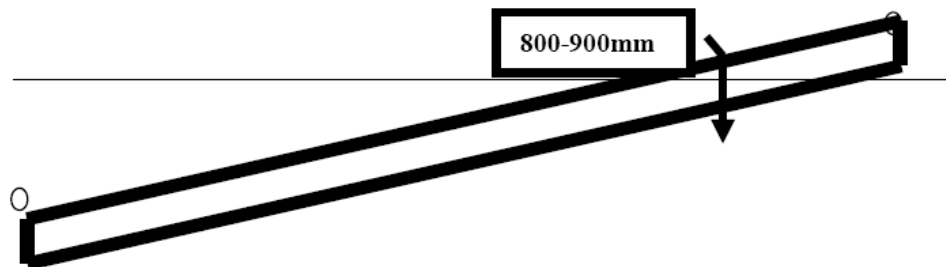
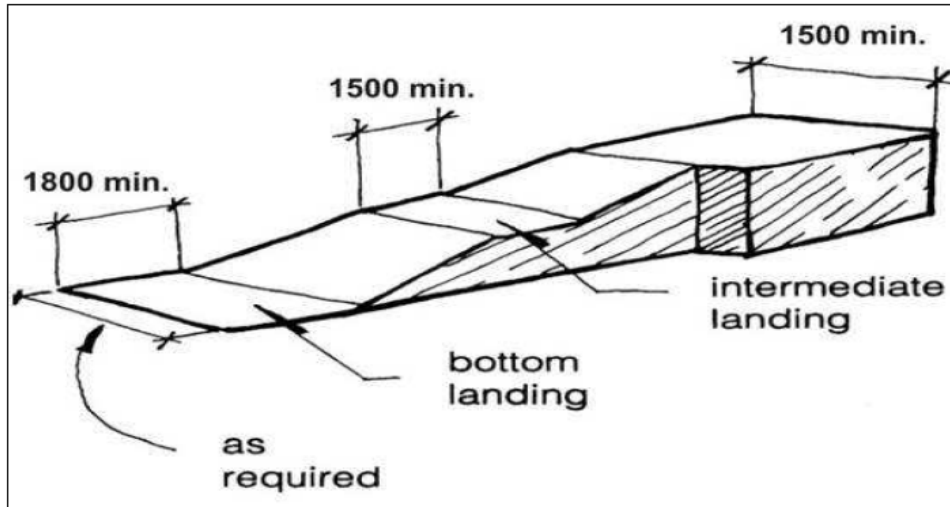
Please note that the Principles of Universal Design address only universally usable design, while the practice of design involves more than consideration for usability. Designers must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental concerns in their design processes. These principles offer designers guidance to better integrate features that meet the needs of as many users as possible.

Design considerations (14-16)

Ramps

If the entrance has steps it also needs to have a ramp. The ramp needs the following features:

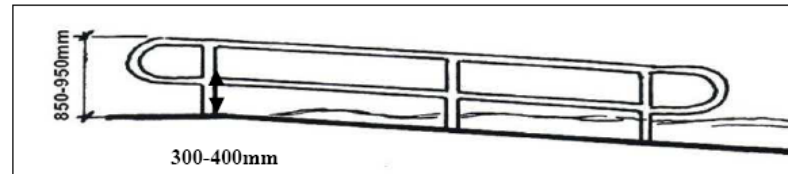
- Gentle slope (1:12 minimum - 1:14 or 1:16 are much better) which means for 10 mm height to cover, one needs to have 120 mm long slope.
- Landings (every 750 mm of vertical rise).
- Width (1200 mm or more).
- Surfaces (ramp + landing) should be slip resistant
- Hand rails (preferably at two layers) on the side at the height of 800-900 mm above the floor level at top and 300-400 mm at bottom



Handrails or grab bars

It helps person to walk/move around safely and independently. Ideally, it should be of two layers. Spin offs – it protects the wall especially the painting part. Common features are as follows:

- Preferably of steel pipe (GI) circular in section with a diameter of 45-50mm; at least 45mm clear of the surface to which they are attached.
- Upper one – both sides at a height of 850mm-900mm.
- Lower one – both sides at a height of 300mm-400mm.
- Both ends to be rounded and grouted.
- Extend 300mm beyond top and bottom of ramp and stairs.
- Color of the handrail needs to be contrast to the wall.



Floor plans

The most important areas to make an optimum use of PHC facilities. Rooms should be organized in such a manner that it requires an older person to access the service without much stress and moving around. Some common features are:

- Reception counter near the entrance and easily identifiable.
- Sitting arrangements needs to be comfortable enough.
- Floor needs to be non-slippery and well maintained.
- Level differences should be beveled.
- Furniture and fittings needs to be well organized to reduce possible fall or injuries.
- Corridors should have an unobstructed width of 1200-1500mm.
- Eating place is accessible and easy to reach.
- Rooms and corridors have enough light and ventilation.

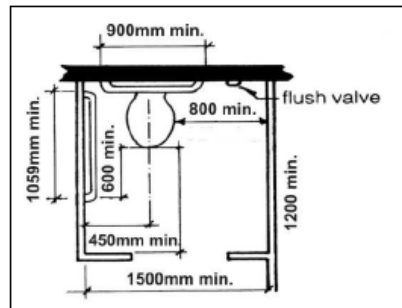
Doors

The doors need to be wide enough without any threshold to ensure easy movement of everyone. Some common features are:

- Doors to be with a clear opening of 900mm.
- Preferably with D-handles of circular section.
- Door color needs to be contrast with the surrounding wall.
- Preferably sliding should not be too heavy – easy to operate.

Toilets

One of the most important areas of any PHC centre but often neglected. Pay special attention to ensure that it is roomy and toilet doors are nearly as big as other doors. Some common features:



- Door preferably sliding with a clear opening of 900mm.
- Slip resistant flooring.
- With a horizontal pull bar.
- Have a back support.
- Grab bars at the rear and the adjacent wall – preferably folding.
- On the transfer side better to have swing up grab bars.
- Easy to use fittings and wash facilities.

Steps, stairs and lift

Usually most of the PHC facilities have one ground floor, but in case there is two or more, then stairs with handrails, steps and lift have to be provided. Some common features are:

- Uniform risers: 150 mm and tread: 300 mm.
- The maximum height of a flight between landings will be 1200mm.
- Landing should be 1200mm deep, clear of any door swing.
- The steps should have an unobstructed width of at least 1200mm.
- Stair edges need to have bright contrasting colors.
- Accessible path leading to the lift/elevator.
- Clear door opening width more than 900 mm.
- Needs to be easily identifiable – contrast colour to the surrounding wall.
- Friendly to disabled persons.

Access audit Before occupying the building, do a simple evaluation of the facilities with a checklist which is commonly known as "access audit" (please see Page 52) It allows you to check how well a PHC centre performs in terms of access and ease of use by potential users including older people. The evaluation gives a snapshot of a building and can be used to highlight areas for improvements. Access audits can guide you to check the age friendliness in a systematic way and can also help in prioritizing either renovation or alteration of existing infrastructure.

Conclusion The demographic structure is rapidly changing because the older population is increasing all over the world. Changes in family lifestyles show that more older people live on their own. They will need health-care support and assistance from PHC centres and other health facilities. Many of them will use these facilities more frequently than now. It is important to think about the future and start to plan for the changing of the demographic situation. The care of older people will be tomorrow's challenge. A barrier-free PHC will be a milestone in that direction.

PHC access audit checklist

This audit may be conducted annually by a trained nurse or PHC worker in order to plan improving actions for the coming year.

Name of the PHC:

Date of audit: ___/___/_____

Name of the head of PHC:

Address:

A	ACCESSIBILITY FROM PUBLIC TRANSPORTATION	
	Is the centre served by public transportation ?	Yes/No
	Is the closer station less than 50 meters from the centre's entrance ?	Yes/No
	If No, how far is it ?	Distance:
B	ENTRANCE	
1	Before main entrance	
	Are there steps?	Yes/No How many?
	Do the steps have railings or grab bars?	Yes/No one/both sides
	Is there a ramp? Does the ramp have railings or grab bars?	Yes/No
	Does it have a gentle slope (1:10/12/14/16)	Ratio:
2	Entrance	
	Is the width of the entrance greater than or equal to 900 mm?	Yes/No Width:
	Type of door	Swing/Sliding

	Is the entrance accessible to wheelchair-users?	Yes/No
	Is the entrance landing area free of obstacles?	Yes/No
	Are emergency exits easily identifiable and accessible?	Yes/No
C	PARKING	
	Is there a dedicated parking lot for the disabled/older person near the main entrance?	Yes/No
	Size of parking lot.(Min. Size: 4800 mm x 3600 mm)	Dimension:
D	LIFT – in case PHC centre has more than one floor	
	Is the lift accessible to every floor?	Yes/No
	Is there an accessible path leading to the lift/elevator?	Yes/No
	Is the elevator door easy to identify?	Yes/No
	Is the clear door opening width more than 900 mm?	Yes/No Width:
E	PUBLIC TELEPHONE	
	Is there a public telephone near the entrance or waiting hall?	Yes/No
F	FLOOR PLANS	
	Is the reception counter near the entrance and easily identifiable?	Yes/No
	Are the rooms have been organized in logical manner so the user will be less stressed?	Yes/No
	Are all doors width greater than or equal to 900 mm?	Yes/No
	Are the sitting arrangements comfortable enough for	Yes/No

	the user?	
	Is the floor non-slippery and well maintained?	Yes/No
	Are the furniture and fittings well organized to reduce possible falls or injuries?	Yes/No
	Are staff supportive to the clients?	Yes/No
	Is there spare wheelchairs available?	Yes/No
	Are the rooms and corridors have enough light and ventilation?	Yes/No
G	TOILETS	
	Are toilets near the waiting hall?	Yes/No
	Is the entrance to the public toilet accessible to wheelchair users?	Yes/No
	Is there at least one accessible shower?	Yes/No
	Are there grab bars around the toilet?	Yes/No
	Are all the fittings easy to use and are of appropriate height?	Yes/No
	Is there any alarm system in case of emergency?	Yes/No
H	EATING PLACE	
	Is there an eating outlet located within the building?	Yes/No
	Is the eating outlet generally accessible – easy to reach?	Yes/No
	Is the water tap and basin easily accessible?	Yes/No
I	STAIRCASE – in case PHC has more than one floor	

	Are the steps friendly to elderly people – are these uniform and clearly identifiable?	Yes/No
	Are there handrails or grab bars ?	Yes/No
	Are the handrails or grab bars continuous?	Yes/No
	Is the height of hand rails or grab bars between 800and 900 mm from the floor?	Actual height:
J	CORRIDORS	
	Does the corridor have the minimum unobstructed width for wheelchair users?	Yes/No
	Is the corridor pathway obstruction-free?	Yes/No
	Are there handrails or grab bars?	Yes/No
	Remarks/Suggestions:	
	Name of the team leader and signature	

Guidelines for inside and outside signage for a PHC centre

The principles of signage

Designing signage:

1. Characters and backgrounds of signs should be of an eggshell, matte or other non-glare finish.
2. Characters and symbols must contrast with their background – light background with dark letters or dark background with light letters.
3. Letters should be large enough and not overcrowded so that those from a distance can read them – use as few words and numerals as possible.
4. The visual display should be simple and easy to understand. Use only key words and phrases, simple shapes and lines, and a few well-chosen words. Do not crowd the display.
5. Use pictures whenever possible, preferably pictures that are common and familiar to the community in order to increase recognition for those with cognitive impairment.
6. Use colour as often as possible to increase the effectiveness of a picture and emphasize key points. Colour combinations or contrasts are important – the colours that attract most attention are red and blue.
7. When making signs by hand, use a heavy black felt-tip pen on a white, off-white, or light yellow non-glossy background.
8. Use non-glare glass for building directories mounted behind glass.
9. Provide Braille signage in line with local regulations.
10. Pay attention to the “tone” of the sign messages. Messages should be welcoming and cordial, inserting “please” and “thank you for your cooperation” where appropriate.

Placement of signage:

1. Place all signs at eye level, with large lettering.
2. Outside the building to identify buildings with accessible facilities.
3. At main lobbies or main traffic routes to indicate location of centre.
4. At specific areas of the building that are accessible and not only at specially designed toilets.
5. Develop a consistent room numbering system that is easy for the user to understand, and consider adding the floor number to reinforce locations in multi-floor buildings.
6. Directional signs should be displayed at places where there is a change of direction
7. Mark emergency exits clearly.

Size of letters in signage:

As a general rule it is suggested that the letter height should be at least 1% of the distance at which the message will usually be read, subject to a minimum height of 22mm. Table 1 below gives a general appreciation of this rule:

Table 1: Size of letters in signage according to the distance at which the message is to be read.

Viewing distance	Symbol size
3-6m	40mm
6-9m	60mm
9-12m	80mm
12-15m	100mm
15-18m	120mm
18-24m	160mm
24-30m	200mm
30-36m	240mm
36-48m	320mm
48-60m	400mm
60-72m	480mm
72-90m	600mm

Source: Improving Transportation Information: Design Guidelines for Making Travel More Accessible, Transport Canada, Montreal, Canada, 1996

Identifying personnel:

1. PHC centre staff should be easily identifiable using name badges and name boards.
 - Name badges should be large letters on contrasting background and should state name and job title.
 - Name badges can be colour-coded e.g. nurses green, doctors blue etc so that people who cannot read can identify staff categories with their job titles.
2. Name of boards should include all staff's names and job titles – including the receptionist – on duty that day.
3. If possible, name of doctor/nurse on duty that day should be displayed on consultation room door.
4. Staff should initiate an introduction to a patient who is blind, deaf-blind, or visually impaired by addressing the patient's name. They should always identify themselves by name and function and the reason why they are there as name badges or uniforms may not be seen by a visually impaired patient.

PHC signage audit checklist

This audit may be conducted annually by a trained nurse or PHC worker in order to plan improving actions for the coming next year.

Name of the PHC centre:

Date of audit: ___/___/_____

Name of the head of PHC:

Address:

Characters and backgrounds of signs are of an eggshell, matte or other non-glare finish.	Yes / No
Characters and symbols do contrast with their background – light background with dark letters or dark background with light letters.	Yes / No
The visual display is simple and easy to understand: only key words and phrases, simple shapes and lines, and a few well-chosen words.	Yes / No
Common and familiar pictures to the community are used whenever possible – in order to increase recognition for those with cognitive impairment.	Yes / No
Color are used as often as possible to increase the effectiveness of a picture and emphasize key points	Yes / No
When making signs by hand, heavy black felt-tip pen on a white, off-white, or light yellow, non-glossy background is used	Yes / No
Non-glare glass for building directories mounted behind glass is used.	Yes / No
Braille signage in line with local regulations is provided	Yes / No
The tone of the sign messages is welcoming and cordial	Yes / No

A	DESIGNING SIGNAGE
B	PLACEMENT OF SIGNAGE

	All signs are placed at eye level	Yes / No
	There are signs outside the building to identify buildings with accessible facilities	Yes / No
	There are signs at main lobbies or main traffic routes to indicate location of centre	Yes / No
	There are signs at specific areas of the building that are accessible and, not only, at specially designed toilets	Yes / No
	A consistent room numbering system – with added floor number in multi-floor buildings – that is easy for the user to understand is provided	Yes / No
	Directional signs are displayed at places where there is a change of direction	Yes / No
	Emergency exits are clearly marked	Yes / No
C	SIZE OF LETTERS IN SIGNAGE	
	Sizes of letters of all signs follow indications provided in table 1, Page 57	Yes / No
D	IDENTIFYING PERSONNEL	
	PHC centre staff are easily identifiable using name badges and name boards**	Yes / No
	There is a name board that includes all staff with job title on duty – including receptionist.***	Yes / No
	Staff initiates an introduction to a patient who is blind, deaf-blind, or visually impaired by addressing the patient's name. Staff have to always identify themselves by name and function and the reason why they are there, as name badges or uniforms may not be seen by a visually impaired patient	Yes / No
	Remarks/Suggestions:	

Name of the team leader and signature

* Cf. See section on Size of letters in signage, page?

** Name badges should be large letters on contrasting background and state name and job title. Badges can be colour-coded e.g. nurses green, doctors blue, etc. so that people who cannot read can identify staff categories.

*** If possible, name of doctor/nurse on duty that day should be displayed on consultation room door.

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