

Organisation of Primary Care Services for patients suffering from Common Chronic Conditions

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Common Chronic Conditions

that can be managed in primary care on its own or under supervision of higher levels of care

- HT, DM, heart failure, gout, OSA [obstructive sleep apnea]
- obesity, MSDS*/osteo-arthritis, constipation, GERD*
- asthma and COLD [chronic obstructive lung disease]
- epilepsy
- chronic psychoses
- HIV/AIDS and PTB*

* MSDS = musculo-skeletal distress syndrome, GERD = gastro-oesophageal regurgitation disease, PTB = pulmonary tuberculosis

Organisational principles

- affordable, accessible, area-based service
- pleasant, welcoming ambience
- comprehensive one-stop care
- continuity of care
- co-ordination across levels, settings and categories of care *
- team approach
- internal consistency
- admin and clinical guidelines - evidence-based and updated
- in-service CME/CPD
- monitoring and evaluation
- grievance resolution
- patient-centred
- patient satisfaction
- mutual trust and loyalty
- patient education
- patient register
- standardised records
- sustained, regular follow-up
- defaulter tracing
- patient and staff compliance
- patient & family participation
- efficient and effective care
- household, work-place, and community outreach
- co-ordination across facilities, communities and time *
- disease surveillance *

* as recommended by WHO's ICCC (Innovative Care for Chronic Conditions)

Affordable service

service provider:

good house-keeping

well-maintained premises and stock levels

efficient, motivated, well-trained, happy staff

preferential deployment of entry-level staff

re-usable point of care tests [scale, tape measure, BP machine, ...]

patient:

frequency of visits [affected by service policy, effectiveness of care, ...]

cost of service and medication

cost of transport to and from facility

opportunity cost [time lost travelling, wage/salary deductions, ...]

Accessible area-based service

- accessible – convenient open hours
- accessible – non-threatening size
- accessible – culture and language
- accessible – distance from home and/or work-place

Access is best when staff and patients relate well to each other, interact freely, belong to the same community, and live and work close to a small, local primary care facility to which they are committed and which they “own”.

Pleasant supporting ambience

- patient-centred
- clean, comfortable and homely
- warm in winter, cool in summer
- no noise, muzak, or loud aggressive talk
- colourful furnishings and posters - relevant and regularly renewed
- accessible relevant hand-outs
- stream-lined service with no queue jumping
- waiting time used for discussion & exercise
- access to water and wholesome food & drinks - prepared by patients or community members x prn

Comprehensive one-stop care

- primary and secondary disease prevention
- chronic disease diagnosis and monitoring
- inter-current disease diagnosis & management
- patient education
- non-drug advise* and monitoring
- drug prescription and issuing
- referral to higher levels of medical care x prn
- referral to social agencies x prn

not a walk-in, take it or leave it supermarket

Continuity and co-ordination of care

- within primary care setting [one dedicated care provider]
- to and from other levels of medical care
[secondary, tertiary/specialist and in-patient referral]
- across settings [referral to other clinical disciplines and institutions]
- across categories of service [referral to social agencies]

this implies

- a co-ordinating role for a dedicated personal care provider
- similar organisational structures and administrative and clinical protocols among service providers at all levels

Transitions of Care

between in-patient and out-patient settings

“Communication among providers and with the patients and their families arose as a clear priority. Medication discrepancies, pending tests, and unknown diagnostic or treatment plans have an immediate impact on patients' health and outcomes. ... The dire need for coordination of care or a coordinating clinician/medical home became a clear theme ... Most importantly, the role of the patients and their families/caregivers in their continuing care is apparent, and it was felt this must be an integral part of any principles or standards for transitions of care.”

Team approach

members:

clinical clerks as primary care providers*

primary care clinician as consultant

patient educator*

supportive clerical and domestic staff

no dispensers or nurses – their duties to be performed by clinical clerks during the consultation

manager – as best suits each situation:

pre-determined by policy, rotating, elected, joint, ...

internally consistent messages

all to sing the same song

• entry-level nurses, in-service trained lay persons or a new category of service provider
[see Health Educators poster in Human Resources]; number and/or separation of duties depends on facility size

Scope of practice & job description of clinical members of team

clinical clerks:

eliciting and recording clinical symptoms and signs, performing point of care tests, collecting lab specimens, recommending and re-enforcing non-drug programme, confirming and issuing repeat medicine prescriptions, referring patients x prn – based on disease-specific protocols and guidelines

primary care clinician:

MP/Dr, PHCN or PCC* - diagnosis and treatment [on admission and reviewed every 12 – 24 weeks, annually & prn] using patients records

patient educator:

all aspects of patient education, administering and reviewing clinical questionnaire, re-enforcing and interpreting advise from clinical clerks and clinicians, and help all round - Girl Friday.

* PCC = primary care clinician – see Medical Care Providers poster in Human Resources

Mutual trust and loyalty

staff self-confidence derived from knowledge, competence, and efficiency and an enabling environment determine attitude and behaviour of patients and staff

Staff should:

- be good role models
- have good communication and learning skills
- understand their patients and respect their opinions
- be sensitive to patients' current and historical reality
- be patient-oriented, supportive, tolerant, and caring
- be committed to patient empowerment and advocacy
- be accountable to patients and colleagues

Operating within a democratic culture with staff and patient participation in decision-making

Efficient service

- staff competence, motivation, and morale
- staff compliance with guidelines
- monitoring and evaluation of service
- co-ordinated time schedules across meal-breaks and patient transport arrangements
- co-ordination - team members, other services
- stream-lined service
- appropriate grievance resolution mechanisms
- effective and sustained support from supervisors
- community support and ownership

Effective care

- control of primary disease/s
- prevention of complications
- patient satisfaction

determining factors:

- competent, efficient, knowledgeable staff
- up-dated evidence-based clinical protocols
- patient adherence to prescriptions and advise
- record-keeping, monitoring, and evaluation

nothing succeeds like success

Administrative and clinical guidelines

- uniform national framework
 - with flexibility to accommodate local needs
- based on evidence and experience
- regularly reviewed – locally and nation-wide
- staff trained in their use and up-dated
- strictly observed
- compliance monitored on an on-going basis
- regularly evaluated internally and externally

Patient register

essential, accurate, up-to-date

computerised where possible - with back-up

data to be verified and corrected x prn at every encounter

old data NOT to be erased or discarded

- name – surname, first name/s, nick name
- numbers – PHC facility, ID or pass-port
- addresses with area codes
 - residential, work, postal for both
- phone/cell numbers – own, 2 significant others
- medical aid details
- occupation
- literacy level [English + other x prn]

Standard structured records

1. clinic-retained

- real-time non-intrusive data entry
- data retrievable for analyses and service evaluation
- formatted with date in columns and data in rows –
- easy real-time secular trend scrutiny
- coded alpha-numeric entries and numbers in cells
- customised per individual or clustered diagnosis
- pencil entries – easy to correct/change in real-time
- referenced free-hand entries on another entry sheet

not to be computerised in the absence of appropriate equipment and programmes for real-time non-intrusive entries [eg. tablet screen]

A CR example - HT

HYPERTENSION MONITORING RECORD

NAME _____ sex _____ date of birth _____ MSNO _____

RISK FACTORS: family _____ obesity _____ W/H ratio _____ sloth _____ alcohol _____ year of onset _____

COMPLICATIONS: IRF _____ retina _____ CCF _____ CVA _____ PVD _____ IHD _____

OTHER FINDINGS: height _____ IBM _____ cholesterol _____ bld sugar _____ uric acid _____ PCV _____

visit number	history		1	2	3	4	5	6	7	8	9	10
	level or rate	onset date										
headache												
dizziness												
weakness or tiredness												
shortness of breath												
cough												
chest pain												
palpitations												
poor vision												
nocturia/polyuria												
impotence/date of LMP												
other symptoms												
weight												
time BP measured												
systolic blood pressure												
diastolic blood pressure												
pulse rate												
pulse rhythm												
swollen ankles												
LVH												
retina												
other signs												
urine protein												
serum urea [point of care]												
serum creatinine												

A CR example – HT (continued)

serum creatinine															
serum K															
other tests															
other diagnosis 1															
other diagnosis															
time last meal															
no. meals/day															
salt intake															
sugar intake															
other carbohydrates/day															
vegetables/day															
vegetable oil/bran															
legumes/week															
meat and fish/week															
packaged drinks/day															
other packaged food/week															
alcohol/week															
tobacco/day															
exercise/day															
stress															
compliance:															
attendance [days early or late]															
K/Mg salts															
pill count HCT															
time last HCT taken															
pill count reserpine															
pill count other anti-HT drug															
time last taken															
pill count other drug/s															
total daily dose prescribed															
K/Mg salts															
HCT 12.5mg															
reserpine 0.125mg															
other anti-hypertension drug															
method of contraception															
other drug/s															
date next visit															

Standard structured records

2. patient-retained

purpose:

- patient information and as a reminder
- reference to clinic-retained record
- data for other care providers or 3rd party when needed, especially in an emergency

minimum essential data — regularly up-dated:

- patient — as in register but without occupation and literacy
- PHC facility — name & address, phone/cell number/s, name of care provider
- visit — date, diagnoses, Rx, DNV [date of next visit]

sized and shaped to fit into a top pocket of a shirt or a hand-bag

Example - patient-retained record

showing minimum requirements
can contain more detail
data can even be set out in a booklet

PRIMARY HEALTH CARE CENTRE			
phone number: 011 123-5896		care provider's name:	
patient name:		patient's number:	
date of visit	diagnosis	treatment	date of next visit

First clinical visit

preferably by appointment

made when clinical questionnaire issued and tests ordered

- history-taking – completion and discussion of clinical questionnaire
- physical examination and point of care tests
- special investigations – review of results
- diagnosis – clinical assessment
- initiation of management [ND* and drug/s x prn]
- referral x prn

+

* ND = non-drug education, education, education

Clinical questionnaire

structured with tick-boxes for easy filling
self-administered or assisted by a health educator

components of questionnaire:

- personal medical history – symptoms, use of medicines, sexuality & age-related matters, disabilities, past illnesses and their management,
- family medical history – illnesses and causes of death
- life-style – diet [quantity, sugar, salt, fat, vegetables, meat, cold drinks] physical activity, tobacco use, abuse of alcohol and other substances,
- education and occupation
- working conditions and income
- marital status, accommodation, & domestic arrangements
- family, occupational, and social networks

Treatment – management

Non-drug [ND] management*

- diet, physical activity, tobacco use, alcohol, prescription drug and other substance abuse, rest and sleep, stress management, ...

Drug management

- be sensitive to cost and affordability
- ensure sustained drug availability - for patient and care provider
- follow drug protocol or prescription of referred higher care
- use lowest effective dose and least effective number of drugs
- clinician to prescribe 4 weeks supply and 2 - 5 repeats
- clinical clerk to authorise a repeat when warranted
- prescribe and issue the right amount to last until the next visit
- never stop drugs abruptly
- advise patients when and how to take their drugs
- try to accommodate patient drug preferences

Change prescription for non- or poor response
only if compliance with ND and drug prescription is perfect and
in the absence of mental and physical stress including hunger and lack of sleep

Patient education

- nature of index disease – features, risks, prognosis
- non-drug programme, self-care of common acute diseases
- prescribed medication – expected and untoward effects
- attendance – keeping appointments, emergency

education is a 2-way process – teaching and learning
not didactic but shared and participatory
in group discussions and during personal encounters
at every patient visit – most importantly on admission

content up-to-date, culturally accessible, consistent
supported by customised printed material and posters
no video or audio presentations

dedicated trained educator as member of team
+ every member of team an educator

information empowers

Compliance/adherence

- attendance:
 - by appointment - day last pill to be used on appointment day
 - by appointment – by hour or am/pm to reduce queue stress
- non-drug programme:
 - 100% compliance is best, but less - even very little - also works
- prescribed medication:
 - strive for perfect 100% compliance with dosage and timing
 - < 100% results in inadequate response, drug tolerance & resistance

Compliance is more dependent on care-providers than on patients. Blaming patients for non-compliance is doomed to failure. In view of the cost in time and money involved, consideration should be given to not prescribing drugs unless at least near-excellent compliance with drug-taking can be secured.

Without compliance, intervention may be useless, counter-productive, or even iatrogenic

Improving patient compliance

attendance:

a pleasant visit experience, efficient service
effective care, privacy, adequate duration of consultation

non-drug recommendations:

feasible, affordable, culturally and personally acceptable,
supply of food supplements [salt substitute, artificial sweetener, ...]
meticulous, empathetic and informed monitoring

prescribed drugs:

re-enforce perfect compliance with dosage and timing
forewarn and advise patients on potential drug side-effects
provide printed material with directions about use - text, diagram, ...
packaging with dose compartments, bubble packs, ...
sms reminders to take drugs, other cues
pill counts with exploration of short-falls and remainders

Follow-up and defaulter tracing

- regular follow-up is essential
- date of next visit – interval is policy determined but can be negotiated with patient
- non-attendance to be detected on missed day
- defaulter to be contacted within < 3 days of default
- new appointment to be arranged – note urgency x prn
- reason for non-attendance to be discussed
- future non-attendance to be prevented

Defaulters can be contacted by phone/cell, letter, telegram as affordable, or by home visit/message from care provider, neighbour, family member or friend. It helps if PHC facility is area-based.

A well-maintained register, appointment book/list and clinic-retained records facilitate defaulter tracing

Beyond a primary care facility

- coordination across health care settings,
categories of conditions, communities and time*
 - other primary care facilities, clinics and outlets
 - higher levels of care,
 - other care agencies
- participation of family members, friends, and
work-place colleagues - in support of the patient,
the facility, and the programme
- outreach to household, work-place, and community
 - health promotion
 - disease prevention and management
 - disease surveillance *
 - action on the causes of common chronic conditions **

* as recommended by WHO's ICC (Innovative Care for Chronic Conditions)

** see [poster](#) "Non-Drug Management of Common Chronic Conditions" by Effie Schultz