

Data supplement to Hanlon et al. District mental healthcare plans for five low- and middle-income countries: commonalities, variations and evidence gaps. Br J Psychiatry doi: 10.1192/bjp.bp.114.153767

Table DS1 Components of intervention packages for mental healthcare plans in five low- and middle-income countries: health service organisation

 Immediate implementation
  Delayed implementation
  Enabling packages

Goal of package	Components of packages	Nepal	Ethiopia	Uganda	India	S. Africa
Health Service Organisation						
Increase political will to support implementation and secure adequate budget allocation	Information kits for stakeholders					
	Awareness-raising/anti-stigma workshops					
	Follow-up meetings with key policy-makers/service planners					
	Establish community advisory board					
Coordinate mental health service planning	Orientate mental health coordinator to implementation guideline					
	Support district health administration/mental health coordinator					
	PRIME to provide coordination					
Ensure a reliable supply of psychotropic medication	Orientate to authorised procurement and supply chain procedures					
	Support with implementing drug supply chain procedures					
	PRIME carrying out initial procurement with plan to hand over					
Mechanisms for monitoring implementation	Orientate to authorised implementation guidelines for HMIS					
	Engage and strengthen work of HMIS records officer					
	Establish a PRIME database for mental, neurological and substance use disorders cases seen in primary healthcare					
Build capacity of district trainers in mental healthcare	Train trainers and supervisors with PC101+ materials					
	Train trainers and supervisors with mhGAP materials					
Processes for quality improvement	Integrated into quality control for chronic disorders					
	Use summarised HMIS data linked to target-setting					
	Supervision feedback, summarised case data, site visits & meetings					
Resource mobilisation	Establish partnerships with funders/implementing organisations					
To promote multisectoral collaboration	Integrate into existing multisectoral meetings					
	Establish means for multisectoral collaboration					
Service user involvement	Increase service users/ caregivers involvement in service monitoring					

PRIME: PRogramme for Improving Mental health care; HMIS: health management information system; MNS: mental, neurological and substance use disorders; PC101+ = Augmented primary care 101 guidelines; mhGAP: mental health gap action programme.

Table DS2 Components of intervention packages for mental healthcare plans in five low- and middle-income countries: health facility level

Immediate implementation
 Delayed implementation
 Enabling packages

Goal of package	Components of packages		Nepal	Ethiopia	Uganda	India	S. Africa
Specialist mental health services							
Specialist IP/OP care	primary healthcare workers trained in referral criteria						
Interface with primary healthcare	Specialist clinics by mental health specialists in primary healthcare						
	Training of mental health professionals in new role						
	Mechanism for primary healthcare consultation with specialists						
Health facility							
Supervision of primary healthcare workers	Supervision by non-mental health specialists						
	Time-limited supervision by mental health specialists ¹						
	Ongoing supervision by mental health specialists ¹						
Well-being of primary healthcare workers	Employee wellness programme and stress management training						
Raise awareness in <u>primary healthcare staff</u> and reduce stigma	Training session for all primary healthcare facility staff/managers						
	Training session for primary healthcare facility clinical staff only						
Raise awareness in <u>patients</u> attending primary healthcare	Leaflets, posters, audiovisual						
	Talks with people attending facility						
Identification and assessment	Training using adapted mhGAP/PC101+						
Medication management	Training using adapted mhGAP/PC101+						
Basic psychosocial management	Training using adapted mhGAP/PC101+						
	Additional training in basic counselling techniques						
Advanced psychosocial management	Evidence-based psychological interventions for depression						
	Motivational interviewing for alcohol use disorders						
	Advanced psychosocial interventions for maternal depression						
	Psychosocial groups for people with schizophrenia						
Continuing care	Training using adapted mhGAP/PC101+						
	Establish register + community-based health workers for outreach						
	Mental health specific, patient-held appointment card						

S. Africa = South Africa; IP = in-patient; OP = out-patient care; ¹A person with more than two months of specialist training in mental healthcare

Table DS3 Components of community-level intervention packages for mental healthcare plans in five low- and middle-income countries

Immediate implementation
 Delayed implementation

Goal of package	Components of packages	Nepal	Ethiopia	Uganda	India	S. Africa
Raising awareness and reduce stigma, discrimination and abuse	Directly train community health workers (CHWs)					
	Disseminate media, posters, audiovisual materials					
	Case manager to work with CHW supervisors					
	Direct organisation of population mass sensitisation campaign					
	Organise targeted stigma reduction campaign					
Detection and referral from community	CHWs trained to detect and refer					
	Cascade training of community by CHWs					
	Direct training of community leaders and members					
Basic psychosocial support	Train CHWs					
Advanced psychosocial support	Counselling/behavioural activation for depression					
	Motivational interviewing for AUDs					
	Family support for psychosis and epilepsy					
	'Thinking healthy' programme for maternal depression					
Outreach/adherence support	Facility-based case managers provide outreach/adherence support					
	CHWs provide outreach/adherence support to people dropping out					
	CHWs proactively carry out home visit					
Rehabilitation and reintegration	NGO working with community volunteers					
	Community-based rehabilitation with new cadre of workers					
	Refer to facility-linked rehabilitation groups					
	Link to community organisations providing rehabilitation					
Peer support groups	Refer to facility-linked peer support groups					
	Establish community-based peer support groups					
Service user mobilisation	Establish community-based service user/caregiver groups					

CHW: community health workers; AUDs: Alcohol use disorders; PRIME: PRogramme for Improving Mental health carE; S. Africa = South Africa

Table DS4 Human resource mix for the mental healthcare plans in five low- and middle-income countries

Task	Low-income (fragile)	Low-income		Lower middle-income	Upper middle-income
	Nepal	Ethiopia	Uganda	India	South Africa
Health service organisation (HSO)					
Advocating and awareness raising to gain political commitment	PRIME team ^a	PRIME psychiatrists mentoring PRIME psychiatric nurse	District health officer, district mental health coordinator supported by PRIME team ^c	PRIME Team ^d and District Mental Health Programme (DMHP) psychiatrist	PRIME team working with district and facility managers
Overall coordination of district mental healthcare	PRIME team	PRIME team ^b working with district health administration, and mental health coordinator (general nurse)	District mental health coordinator (psychiatric clinical officer)	District administration, district mental health team, supported by PRIME team	PRIME team working with district administration
Coordination of human resource planning	PRIME team working with district health administration	PRIME psychiatrist working with district head and mental health coordinator (general nurse)	District health administration and mental health coordinator		PRIME team working with district administration
Coordination of medication supply in primary healthcare	PRIME team working with district health administration	PRIME team working with district head and facility managers	District health officer, district mental health coordinator, district pharmacist and facility managers	District administrators and facility managers, supported by PRIME team	District and facility managers
Coordination, collection and collation of data on cases treated in primary healthcare	PRIME team	PRIME team working with district administration, facility managers and facility HMIS worker	HMIS Records Officer	District and facility administrators working with mental health case manager (general health worker), supported by PRIME team	District managers Information managers and facility-level information officers
Coordination of monitoring, evaluation and quality improvement	PRIME team	PRIME team working with facility managers and mental health coordinator	District health management team	PRIME team	District health management team
Multisectoral coordination	-	Through PRIME CAB	District health officer, mental health coordinator and PRIME team	-	District managers
Capacity-building HSO (trainers and supervisors)	-	PRIME psychiatrists	National and regional mental health trainers	PRIME Psychiatrist, with district psychiatrist	PRIME clinical psychologist/ District

			(MoH)	providing support	trainers
Specialist mental healthcare					
Capacity-building of specialists for new role	-	PRIME psychiatrists	Psychiatrists at National level and PRIME clinical psychologists	-	PRIME clinical psychologist
In-patient psychiatric care	Psychiatrist Private psychiatrist	Out of district psychiatrists and psychiatric nurses	Psychiatric Clinical Officers and Psychiatric Nurses within the district	DMHP Psychiatrist,	Psychiatrist, clinical psychologist, psychiatric nurses, occupational therapists and clinical social workers
Review of complex cases after referral	Psychiatrist	Out of district psychiatric nurse	District Psychiatric Clinical officer/Psychiatric Nurse	DMHP Psychiatrist	Psychiatrist
Providing specialist interventions after referral	Psychiatrist	Out of district psychiatrist	Psychiatrist, Clinical Psychologist, psychiatric social workers	DMHP Psychiatrist	Psychiatrist, clinical psychologist, psychiatric nurses, occupational therapists
Consultation over complex cases	PRIME Psychiatrist	PRIME psychiatric nurse	Psychiatrist at regional referral hospital	DMHP Psychiatrist	Psychiatrist
Specialist clinics in primary healthcare	-	-	Psychiatric clinical officer and psychiatric nurses	DMHP team psychiatrist and psychologist	-
Facility-based (General hospital)					
Crisis admission	-	-	General doctor	-	General doctor
In-patient alcohol detoxification	-	Out of district general doctors or psychiatric nurse	General doctor, psychiatric clinical officer	-	General doctor
Facility-based (primary care)					
Capacity-building primary healthcare facility workers for mhGAP core packages	PRIME psychiatrist/ PRIME psychologist	PRIME psychiatrists mentoring PRIME psychiatric nurse and district health administration trainers (general nurses/mid-level health workers)	PRIME psychiatrists / clinical psychologists; and National, regional and district mental health trainers (psychiatrist, clinical psychologist, health tutors, and psychiatric clinical officers)	DMHP Psychiatrist	PC101 master trainer (general nurse) mentoring district trainers

Capacity-building primary healthcare facility workers for additional psychosocial interventions	PRIME psychologist/ PRIME community counsellor	PRIME psychologist	-	DMHP psychologist	PRIME clinical psychologist with district primary healthcare psychologist/intern community service psychologist
Supervising primary healthcare-based health workers delivering mhGAP core	PRIME psychiatrist	PRIME psychiatric nurse being compared to non-physician health worker (health officer)	District hospital psychiatric clinical officers, psychiatric nurses and PRIME team: Clinical psychologist and psychiatrist	DMHP psychiatrist	Facility manager / PC101+ facility trainer (nurses)
Supervising primary healthcare-based psychosocial interventions	PRIME community counsellor	PRIME psychologist (non-clinical)	-	DMHP psychologist	Intern/community service psychologist/district primary healthcare psychologist
Awareness raising amongst primary healthcare staff	PRIME intervention coordinator/ PRIME community counsellor	PRIME psychiatrist mentoring PRIME psychiatric nurse and HSO master trainer	District mental health coordinator	Mental health case manager (non-doctor, non-mental health specialist)	District/facility trainers/facility manager
Awareness raising amongst patients attending primary healthcare	Non-prescribing primary healthcare workers	Nurses or health educator	General clinical officers, nurses and midwives	Mental health case manager (non-doctor, non-mental health specialist)	Health promoter Lay counsellor
Diagnose psychosis	Mid-level primary healthcare workers (prescribers)	Mid-level primary healthcare workers and nurses (prescribers)	Mid-level primary healthcare workers and nurses (prescribers)	General doctors, mental health case manager (non-doctor, non-mental health specialist)	primary healthcare doctors
Diagnose depression					General doctors and nurses
Diagnose AUDs					General doctors and nurses
Diagnose epilepsy				-	
Diagnose maternal depression	Mid-level primary healthcare workers (prescribers)	Mid-level primary healthcare workers and nurses (prescribers),	Midwives, mid-level primary healthcare workers and nurses	General doctor, mental health case manager (non-doctor,	General doctors, nurses

		Midwives	(prescribers)	non-mental health specialist)	
Prescribing emergencies	Mid-level primary healthcare workers (prescribers)	Mid-level primary healthcare workers and primary healthcare nurses (prescribers)	Mid-level primary healthcare workers and primary healthcare nurses (prescribers)	General doctors	General doctors, nurses
Initiating non-emergency prescriptions				General doctors	General doctors
Continuing and/or reviewing prescriptions				General doctors	General doctors
Basic psychosocial, facility-based (primary healthcare)	primary healthcare workers (prescribing and non-prescribing)	Mid-level primary healthcare workers and primary healthcare nurses (prescribers)	Mid-level primary healthcare workers, primary healthcare nurses and midwives	Mental health case manager (non-doctor, non-mental health specialist)	Nurses
Advanced psychosocial, facility-based (primary healthcare)	Non-prescribing primary healthcare workers	PRIME psychologists	-	-	Lay counsellor
Advanced psychosocial, facility-based (maternal)	Non-prescribing primary healthcare workers involved in maternal healthcare	-	-	-	-
Community					
Capacity-building for trainers of community workers	PRIME psychologist/ PRIME intervention coordinator (psychiatric nurse)/PRIME community counsellor	PRIME psychiatrists mentoring primary healthcare trainer	National trainers: psychiatrists, clinical psychologists, psychiatric clinical officers, and mental health tutors	DMHP and PRIME team	District trainers
Capacity-building community health workers/volunteers	PRIME intervention coordinator/PRIME community counsellor	primary healthcare facility-based trainers (general nurses/mid-level health workers), supported by PRIME psychiatrists	District psychiatric clinical officers and nurses	DMHP and PRIME team	District trainers
Supervision of community health workers/volunteers	PRIME community counsellor	primary healthcare facility supervisors	District mental health coordinator (psychiatric clinical officer)		
Awareness raising and anti-stigma in community	Community health workers	Community health workers, Health volunteers	Health volunteers	Mental health case manager working with CHWs and health	NGOs and service user groups

				volunteers	
Identification and referral for assessment	Community health workers, community leaders, mother's groups	Community health workers, community leaders, health volunteers	Health volunteers, community members	Mental health case manager working with CHWs and health volunteers	Community health workers
Basic psychosocial support	-	Community-based health workers	Health volunteers	Mental health case manager	Community health workers
Advanced psychosocial support*	PRIME community counsellor	-	-	-	-
Community outreach for loss to follow-up	Community health workers	Community health workers, health volunteers	primary healthcare workers, midwives, health volunteers	Mental health case manager working with CHWs and health volunteers	Community health workers
Rehabilitation and reintegration	-	PRIME/RISE community-based rehabilitation workers	NGO workers working with health volunteers	Mental health case manager working with CHWs and health volunteers	Auxiliary social workers
Accessing disability benefits	-	-	-	-	Social workers
Peer support groups / service user mobilisation	PRIME community counsellor and service users	-	NGO workers working with health volunteers,	-	Auxiliary social workers from NGOs and health promoters
Multi-sectoral linkage	PRIME community counsellor	Community health workers	Community development officers and extension workers	-	Community health workers

PRIME: programme for improving mental health care; DMHP: district mental health programme; PHC = primary health care; CHW = community health worker; RISE = Rehabilitation for people with schizophrenia in Ethiopia; NGO: non-governmental organisation;

^aNepal PRIME team: psychologists, psychosocial counsellors, consulting psychiatrist; ^bEthiopia PRIME team: psychiatrists, social worker (Masters level), epidemiologist (PhD), demographer (MSc); ^cUganda PRIME team: psychiatrists, clinical psychologists, psychiatric nurse; ^dIndia PRIME team: psychiatrist, general physician, psychologist, case managers (psychosocial counsellors)

^eSouth Africa PRIME team: psychologists, registered counsellors (B.Psych); Public health specialist(Master's level); medical doctor with specialisation in primary healthcare (PhD)

*as defined and indicated within WHO's mhGAP

	ENABLING						
Health organisation (HSO)	Engage, mobilise and sensitise	Planning and co-ordinating	Medication supply	Monitoring & Evaluation	HSO capacity-building	Quality improvement	Service user involvement
	Awareness	Detection	Treatment	Recovery			
Specialist mental health services	Awareness of primary care integration and new role in system		Management of complex or treatment-resistant cases	Case review		Interface with primary care	
PHC health facility	Service provider awareness-raising and antistigma Service user awareness-raising and antistigma	Screening and assessment	Psychotropic medication	Continuing care	Health facility staff capacity-building		
			Basic psychosocial support			Emotional support for primary care workers	
			Advanced psychosocial support			Supervision for primary care workers	
Community	Community awareness-raising, antistigma and mobilisation	Community detection	Basic psychosocial support	Outreach and adherence support	Community capacity-building		
			Advanced psychosocial support	Rehabilitation and reintegration			
			Peer support groups	Service user mobilisation		Inter-sectoral linkages	
	Stigma reduction and community mobilisation						

ENABLING

MHCP packages:		New evidence generation underway		Evidence base for implementation
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