

British Journal of Psychiatry Supplement

Integration of mental health into primary care in low- and middle-income countries: The PRIME mental healthcare plans

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INTRODUCTION

The PRogramme for Improving Mental health carE (PRIME) has recently published findings in a supplement to the British Journal of Psychiatry. The supplement presents district mental healthcare plans from five low- and middle-income countries participating in PRIME.

The country-specific articles focusing on the mental healthcare plans are accompanied by a number of cross-country papers describing design, evaluation and costing methodologies. The data emanate from diverse cultural, social and economic settings, but the overall framework for district mental health plans is shared by all settings, as are the methodologies for design, costing and evaluation.

The supplement is the culmination of more than three years of work and collaboration between a range of academic institutions, non-governmental organisations, Ministries of Health and the World Health Organization.

We share our findings in order to stimulate engagement from a range of local, national and international agencies, wishing to commit themselves to narrowing the enormous treatment gap for mental healthcare in low- and middle-income countries.

The purpose of the articles in the supplement is to answer questions regarding the implementation and scaling up of packages of care for mental disorders in low- and middle-income countries. This is the first time that a variety of low- and middle-income countries have devised detailed district level mental healthcare plans for the integration of mental health into primary care, using a common implementation and design framework. This is a significant step forward in answering challenging questions regarding how evidence-based mental health interventions can be delivered in an integrated and culturally sensitive manner.

PRIME's goals are to:

- (1) Develop evidence on the implementation & scaling-up of mental health treatment in primary & maternal health care, in low resource settings
- (2) Enhance the uptake of its research evidence amongst key policy partners and relevant stakeholders



The PRIME mental healthcare plans

The development and evaluation of the PRIME mental healthcare plans (MHCPs) is a response to calls to scale up mental health services in low- and middle-income countries (LMIC), expressed by researchers, practitioners, service users and policy makers from around the world.

In this policy brief we briefly describe the district mental healthcare plans from the five countries participating in PRIME. These are accompanied by summaries of the articles relating to the design, evaluation and costing methodologies for the mental healthcare plans across all five countries.

The MHCPs were developed in the inception phase of

PRIME where we set out to develop an integrated mental healthcare plan comprising packages of mental health care focusing on four mental disorders which contribute to the greatest overall burden of disease. These are alcohol abuse, depression (including maternal depression), psychosis (notably schizophrenia) and epilepsy (the latter covered by Ethiopia and Uganda only).

In the current Implementation phase we are evaluating the feasibility, acceptability and impact of these packages of care in primary health care and maternal health care. In the final Scaling Up phase, we will evaluate the scaling up of these packages of care at the level of administrative health units. *View the full article of the Editorial introducing the BJP Supplement by Lund et al¹ [here](#).*

The PRIME mental healthcare plan matrix

The PRIME mental healthcare plan matrix illustrates the components of the PRIME mental healthcare plans across all countries and the four delivery platforms: healthcare organisation, specialist mental health, primary care facility and community.

There are five domains of intervention i.e. awareness, detection, treatment, recovery and enabling.

	Awareness	Detection	Treatment	Recovery	Enabling
Healthcare organisation	Engage and mobilise district stakeholders				Programme management, HMIS, Capacity Building
Specialist mental health services			Provision of specialist care to complex cases	Provision of case reviews for complex cases	Ensure specialist mental health care interfaces with PHC
Primary Care Facility	Increase awareness of service users and providers	Detect/carry out screening and assessment for priority disorders	Provide psychotropic medication and basic psychosocial interventions	Ensure continuing care	Build capacity of facility staff to deliver facility level packages
Community	Improve awareness and decrease stigma	Improve case detection in the community	Provide basic psychosocial interventions and peer support	Promote rehabilitation & recovery	Build capacity of community to support mental health care

Above: The PRIME mental healthcare plan matrix

Overviews of the PRIME mental healthcare plans in each country

India

Shidhaye et al² present the mental healthcare plan for Sehore district in Madhya Pradesh, which can be broadly divided into enabling and service delivery packages. The enabling packages such as Programme Management, Capacity-building and Community mobilization essentially focus on establishing the foundation for facilitating the service delivery packages which in turn focus on awareness for mental disorders, identification, treatment and recovery. The Indian piloting experience revealed that; (a) mental health service delivery can be strengthened only with strong facilitation by an external resource team such as PRIME team; (b) an additional human resource in the form of a case manager is essential to establish true collaborative models of care; and (c) enabling packages need to be installed as a foundation prior to the implementation of service delivery packages. Shidhaye and colleagues show the importance of introducing a 'vertical' component in the form of a mental health case manager at Community Health Centre level, in order to support the horizontal integration of mental health services in primary care, using a collaborative model of care. *View full article [here](#).*

Uganda

Kigozi et al⁴ describe the development of the mental healthcare plan in the Kamuli district, which included a situation analysis, qualitative formative research, Theory of Change workshops and the costing tool. As with other countries, the mental healthcare plan is structured according to 3 levels: healthcare organisation, health facility and community level. In Uganda's case, epilepsy is added to the PRIME priority disorders of depression, alcohol use disorders and psychosis. Packages of care focus on the adapted WHO mhGAP Intervention Guide, which is being used to train primary care workers in the detection, treatment and referral of these disorders. In a similar manner to other countries, the piloting experience revealed reluctance to taking on new mental health tasks on the part of primary healthcare workers, and a request for more extensive mental health training and more frequent supervision for mental healthcare. *View full article [here](#).*

South Africa

Petersen et al⁶ present the mental healthcare plan for the Dr Kenneth Kaunda District in the North West Province. The PRIME-South Africa plan leverages the emerging Integrated Chronic Disease Management service delivery platform for the integration of mental health. The team engaged in an extensive formative research and consultation process to develop the plan and built on existing tools developed by the Department of Health and PRIME partners, such as the Primary Care 101, an integrated set of clinical guidelines for multi-disease management of chronic conditions, including mental disorders for primary healthcare workers, as well as targeted psychosocial interventions delivered by community counsellors. Piloting of the plan in one facility revealed a number of challenges which were addressed through quality improvement processes and incorporated into the revised plan. These include change management workshops for district managers and service providers; strengthening the mental health component of the PC101 clinical and training guidelines; clarifying the roles of primary care nurses and community counsellors; and strengthening the role of community health workers in tracking and supporting service users. *View full article [here](#).*

plans in each country

Ethiopia

Fekadu et al³ describe the mental healthcare plan for Sodo district in the Guraje zone. The mental health plan was developed through extensive consultations with local and national stakeholders, a situational analysis, qualitative formative research, asset mapping, and Theory of Change workshops. It is presented at three levels: the service organisation, facility and community levels. Key to the implementation of this plan is both the provision of awareness raising and training for staff at all levels, and the establishment of ongoing support and supervision structures to enable sustainability of the plan over time. An important feature of the work in Ethiopia is continued interaction with the wider national Ministry of Health strategic plan for mental health, which envisages major scale up of mental health services in the coming years. *View full article [here](#).*

Nepal

Jordans et al⁵ present the mental healthcare plan for the southern district of Chitwan. The plan consists of twelve packages of care, delivered across service organisation, facility and community platforms. In addition to core features that enhance detection, culturally appropriate treatment and recovery, there are a number of unique features to the Nepal plan. These include the development of a Community Informant Detection Tool, for use by lay community informants to detect alcohol use disorders, depression, epilepsy and psychosis, using locally validated case vignettes; the provision of focused psychological treatments by community counsellors, who operate in conjunction with primary health care workers who do not have the time to offer these relatively time-intensive therapeutic services; and the development and piloting of a tool to assess competency of general primary healthcare workers in delivering psychological treatments and basic mental healthcare: the Task Sharing Competence Rating Scale. *View full article [here](#).*

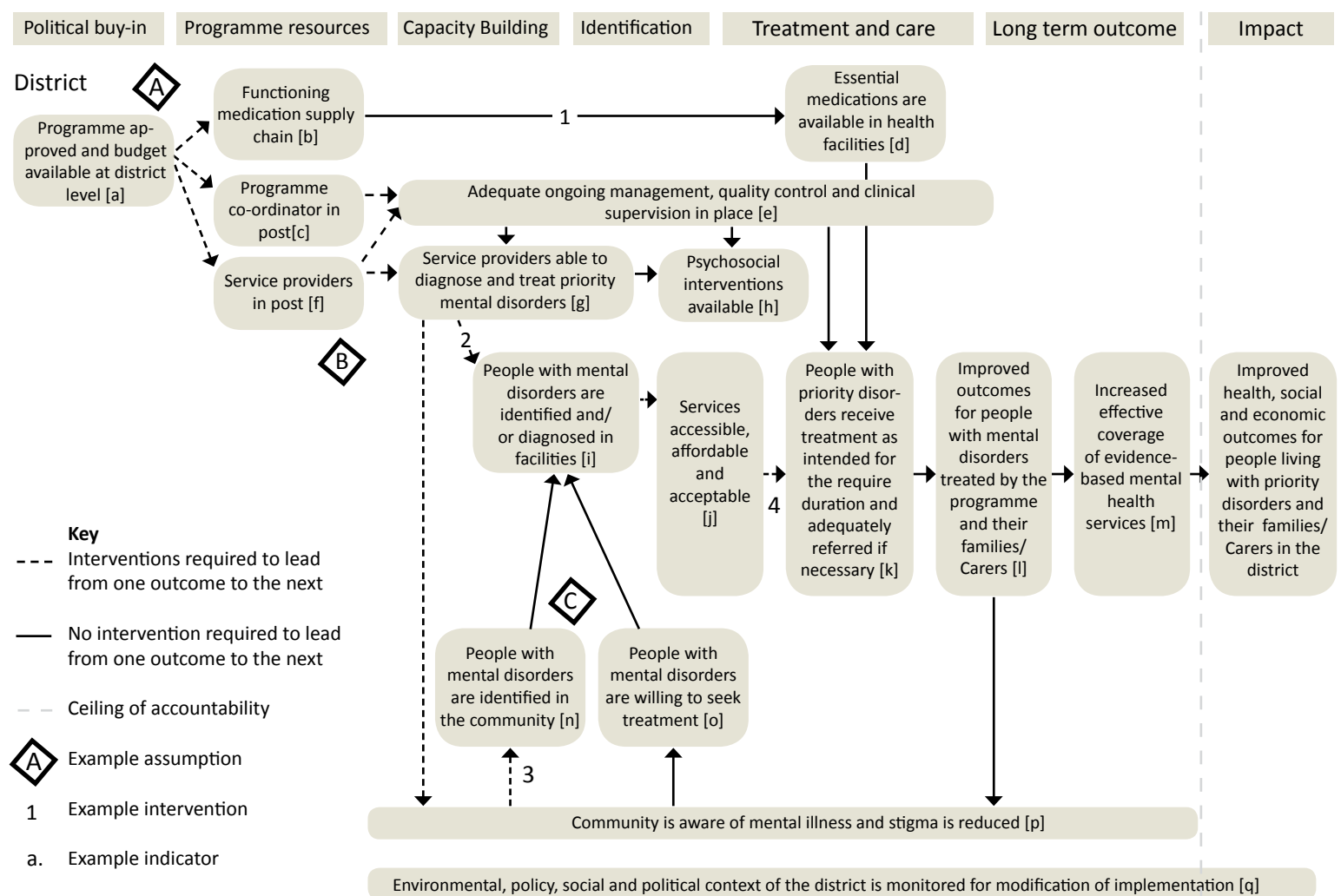
The big picture: PRIME's research spanning all five LMIC countries

1. Planning and evaluating mental health services in low- and middle-income countries using Theory of Change (ToC)

Breuer et al⁷ describe the process of developing the PRIME cross-country ToC, and its adaptation and further development in each country setting. The authors document the use of ToC not only as a planning tool, but also as an evaluation tool, by describing the way in which the causal pathway set out in the ToC map enables the identification of key indicators for the successful implementation of a mental health plan. This then provides

an overall framework for the evaluation design of PRIME. The ToC approach offers a novel method for both the design and evaluation of mental health plans in low- and middle-income countries, and the template developed by PRIME may be used by other countries or districts wishing to implement and scale up mental healthcare for a range of disorders. *View full article [here](#).*

The PRIME Cross-Country Summary ToC



Example Assumptions
 A. Committed leadership at national, state and/or district level
 B. Trained staff remain in post and new staff are trained
 C. Complimentary healers are open to working collaboratively with government and NGO services

Example Functions of MHCP Interventions and rationale
 1. Ensure medication supply chain is functioning
 2. Detect / carry out screening and assessment for priority MNS disorders
 3. Improve case detection in the community
 4. Provide basic psychosocial interventions

Example Indicators
 k. Increased no. of people correctly receiving evidence-based treatment
 l. Improved health, social and economic outcomes of people living with priority mental disorders
 m. Increased coverage of evidence based mental health services

2. District Mental Health Care Plans for five low- and middle-income countries: commonalities, variations and evidence gaps

Hanlon et al⁸ synthesize the country plans, documenting the common elements and the country specific adaptations of the plans in these diverse settings. This is an important element of the work, as it allows policy makers, researchers and implementers to distil key lessons that may be applicable in other diverse LMIC settings. Many of the differences between countries are driven by the resource context, with similarities emerging most prominently between the low-income countries (Ethiopia, Nepal and Uganda) and between the middle-income countries (India and South Africa). Despite these

differences, there are many elements that are shared between countries. These include shared objectives and a common overall planning framework; the high level of participation and engagement with local stakeholders; the focus on community, health facility and health organisation levels; challenges of over-burdened primary healthcare systems; and the limited impact of training without systemic changes in the form of new mental health resources, referral pathways, improved medication supply and re-orientation of health facility managers. *View full article [here](#).*

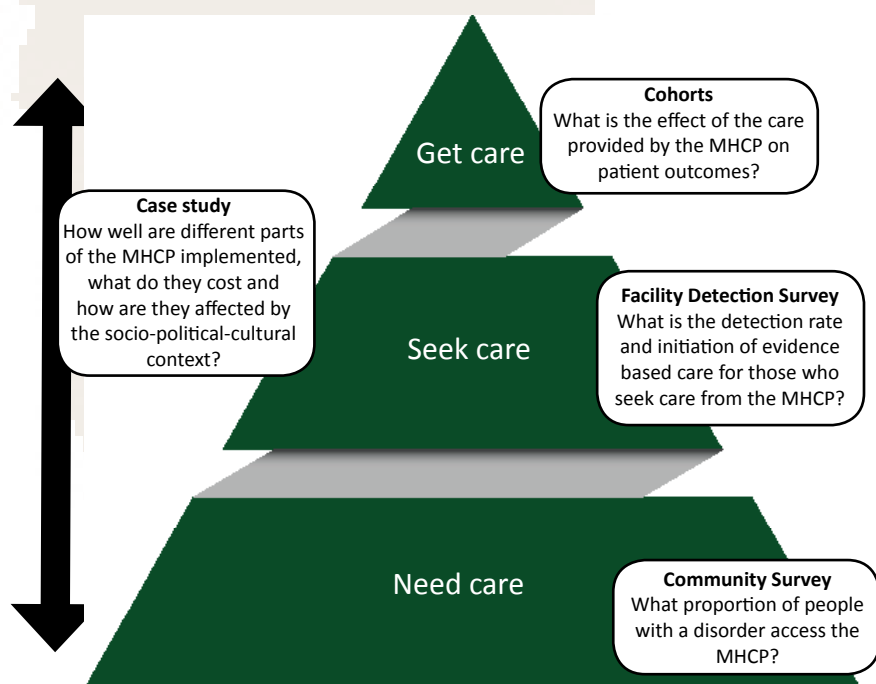
3. Estimating the cost of implementing district mental healthcare plans in five low- and middle-income countries: the PRIME study

Chisholm et al⁹ report on the method for and findings from an assessment of the expected cost of implementing the mental healthcare plan in each country, over a 5-15 year scale-up period. Information on the target population, prevalence of the priority disorders, resource quantities (including human resource needs and essential psychotropic medications), prices or unit costs, and coverage are used to estimate costs of the mental healthcare plan for each country site. The estimated cost of scaled-up provision in non-specialist healthcare settings of an evidence-based package of care ranges from US\$ 0.20-0.60 per capita in four out of the

five districts. However, in South Africa, an upper-middle income country where the prevailing price and quantity of healthcare service inputs are much higher, the cost per capita of delivering the specified care packages at target coverage levels approaches US\$ 2 per capita. These findings can inform policy makers about the financial and human resource implications of implementing the mental healthcare plans in these diverse settings. They also provide a methodology for estimating the cost of implementing integrated mental healthcare packages in other LMIC. *View full article [here](#).*

4. Evaluation of district mental healthcare plans: the PRIME consortium methodology

De Silva et al¹⁰ outline the evaluation designs for the implementation of the mental healthcare plans across the five country sites. These include repeat community-based cross-sectional surveys to measure change in population-level contact coverage; repeat facility-based surveys to assess change in detection of disorders; disorder-specific cohorts to assess the effect on service user outcomes; and multi-level case studies to evaluate the process of implementation. The combination of these methods will allow us to answer questions that are not possible with single methods. For example, combining findings regarding contact coverage from the community surveys with clinical outcomes from the cohort studies will allow us to estimate the effective coverage of the MHCPs. *View full article [here](#).*



POLICY RECOMMENDATIONS

The articles in the British Journal of Psychiatry supplement help to draw global attention to the importance of mental health as a health and development policy issue. They provide guidance to other countries and their health authorities in the following areas:

- Developing evidence-based district level mental health care plans which can be adapted and integrated into different contexts using a common implementation framework
- Adapting mental health care plans with similar objectives for different contexts and regions
- Presenting methods for evaluating the mental healthcare plans across five diverse contexts
- Guiding implementation and evaluation efforts to others seeking to integrate mental health into primary health care web appendices, which include country-specific Theory of Change maps

The next stage of PRIME research will include evaluation of the implementation of the mental healthcare plans. This will include assessing changes in detection rates for depression and alcohol use disorders, changes in treatment coverage for these disorders in the district populations, and the clinical, social and economic outcomes for service users who receive care for depression, alcohol use disorders, psychosis and epilepsy. Further research is needed on the scaling up of such treatment packages for larger populations, and the implementation of treatment packages for other priority disorders, for example disorders of childhood and adolescence.

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About PRIME

PRIME is a Research Programme Consortium (RPC) led by the Centre for Public Mental Health at the University of Cape Town (South Africa), and funded by the UK government's Department for International Development (UKAID). The programme aims to develop world-class research evidence on the implementation, and scaling-up of treatment programmes for priority mental disorders in primary and maternal health care contexts, in low resource settings.

Partners and collaborators include the World Health Organization (WHO), the Centre for Global Mental Health (incorporating London School of Hygiene & Tropical Medicine and King's Health Partners, UK), Ministries of Health and research institutions in Ethiopia (Addis Ababa University), India (Public Health Foundation of India), Nepal (TPO Nepal), South Africa (University of Kwazulu-Natal) and Uganda (Makerere University & Butabika Hospital); and international NGOs such as BasicNeeds, Healthnet TPO and Sangath.

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