WHAT WE DO

The Programme for Improving Mental Healthcare (PRIME) is a consortium of research institutions and Ministries of Health in five countries in Asia and Africa (Ethiopia, India, Nepal, South Africa & Uganda), with partners in the UK and the World Health Organization (WHO).

PRIME is supported by the UK government’s Department for International Development (DFID), and is an eight-year programme which was launched in May 2011. Our aim is to generate high quality research on the implementation and scaling up of mental health care in low resource primary care settings.

Working closely with Ministries of Health, health care providers, academic institutions and civil society organisations, PRIME teams have set up ‘district demonstration sites’ in each of the five countries.

WHY WE DO IT

More than 13% of the global burden of disease is due to mental illness (includes mental, neurological and substance abuse disorders).

Although the vast majority of people affected by mental illness live in low and middle-income countries (LMICs), most mental health care resources are located in high-income countries.

This lack of resources for effective treatment has contributed to a large ‘treatment gap’, i.e. up to 4 out of every 5 people with mental illness in LMIC go without mental health care.

By generating research evidence aimed at integrating mental health care into primary and maternal health systems, PRIME aims to make a direct contribution to reducing the ‘treatment gap’ not only in the five PRIME countries, but also in other low resource settings.

During the course of its work PRIME has also developed several practical tools that are intended to equip Ministries of Health to deliver mental health services at the primary health care level.
PARTNERS
PRIME is made up of an international group of mental health researchers and policy makers who are committed to improving mental health in low resource settings. PRIME is led from the University of Cape Town’s Alan J Flisher Centre for Public Mental Health. Partners from around the world make up this diverse consortium.

These include the World Health Organization, the Centre for Global Mental Health (incorporating London School of Hygiene & Tropical Medicine and King’s College London, UK), the Ministries of Health and research institutions in Ethiopia (Addis Ababa University), India (Sangath), Nepal (TPO Nepal), South Africa (University of Cape Town, University of KwaZulu-Natal) and Uganda (Makerere University) as well as Harvard University in the United States.
PRIME is creating high quality research evidence on how best to implement and expand the coverage of mental health treatment programmes in low-resource settings. The research was conducted in the following stages:

**INCEPTION PHASE**
During the inception phase (Year 1-2), PRIME developed integrated mental health care plans (MHCPs) comprising packages of mental health care for delivery in primary health care and maternal healthcare suited to each study country’s unique setting:

<table>
<thead>
<tr>
<th>Healthcare Organisation</th>
<th>Awareness</th>
<th>Detection</th>
<th>Treatment</th>
<th>Recovery</th>
<th>Enabling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engage and mobilise district stakeholders</td>
<td></td>
<td></td>
<td></td>
<td>Programme management, HMIS &amp; capacity building</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialist mental health-care services</th>
<th>Awareness</th>
<th>Detection</th>
<th>Treatment</th>
<th>Recovery</th>
<th>Enabling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td>Ensure specialist MH care interfaces with PHC</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary healthcare facilities</th>
<th>Awareness</th>
<th>Detection</th>
<th>Treatment</th>
<th>Recovery</th>
<th>Enabling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase awareness of service users and providers</td>
<td>Detect, screen and assess for priority disorders</td>
<td>Provide psychosocial interventions and psychotropic medication</td>
<td>Ensure continuing care</td>
<td>Build capacity of facility staff to deliver facility level packages</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community</th>
<th>Awareness</th>
<th>Detection</th>
<th>Treatment</th>
<th>Recovery</th>
<th>Enabling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improve awareness and decrease stigma</td>
<td>Improve case detection in the community</td>
<td>Provide basic psychosocial interventions and peer support</td>
<td>Promote rehabilitation &amp; recovery</td>
<td>Build capacity of community to support mental health care</td>
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</tbody>
</table>
IMPLEMENTATION PHASE
During the implementation phase (Years 2-5), PRIME implemented these MHCPs in 5 country district sites and evaluated the feasibility, acceptability and impact of the packages of care in primary health care and maternal health care with four separate studies:

SCALE-UP PHASE
In the scale-up phase (Years 5-7), PRIME scaled up to 94 facilities across the five study countries. The scale-up phase was also evaluated using a case study.

EXTENSION PHASE
During the extension phase (Years 7-8), PRIME is writing up and disseminating its findings, and partnering with other countries beyond the PRIME network. A main goal of PRIME during this final phase is to help make a significant ongoing contribution to a broader investment in mental health and mental healthcare.

We are working hard to refine the intervention packages for each country and this will include strengthening maternal mental health intervention delivery where required. A key challenge has been ensuring adequate quality of care, and PRIME teams are implementing robust Quality Improvement (QI) measures in all countries. PRIME teams are also actively working with partners in additional LMICs to assist in implementing PRIME’s approach in other countries. This assistance takes on various forms, including presenting workshops, taking part in meetings to share the tools and manuals PRIME has developed.
Findings from our evaluation of the implementation of the district mental health care plans show that it is feasible to integrate mental health into primary care in low resource settings. But this requires substantial investment in training, supervision, and health system strengthening.

We found a substantial increase in uptake of services, with over 20,000 primary care visits during the implementation phase. However, the impacts across the countries were varied.

In Ethiopia contact coverage for people with severe mental disorders was estimated at 81.7% (300/361) and being restrained in the past 12 months reduced from 25.3% to 10.6%. We found no improvement in treatment coverage, no increase in facility detection, but significant improvements in clinical and functioning outcomes for individuals with depression, psychosis and epilepsy who received care.

In India we found no improvement in treatment coverage, a small improvement in facility detection and modest improvement in clinical outcomes for individuals with depression and AUD who received care.

### IMPACTS

<table>
<thead>
<tr>
<th></th>
<th>Ethiopia</th>
<th>India</th>
<th>Nepal</th>
<th>South Africa</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment coverage</strong>: Depression</td>
<td>☒</td>
<td>☒</td>
<td>☑</td>
<td>N/A</td>
<td>☒</td>
</tr>
<tr>
<td><strong>Treatment coverage</strong>: AUD</td>
<td>☒</td>
<td>☒</td>
<td>☑</td>
<td>N/A</td>
<td>☑</td>
</tr>
<tr>
<td><strong>Facility detection</strong>: Depression</td>
<td>☒</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td><strong>Facility detection</strong>: AUD</td>
<td>N/A</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td><strong>Individual clinical</strong></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td><strong>Individual functioning</strong></td>
<td>☑</td>
<td>☒</td>
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*Not sustained.
In Nepal we found moderate to large improvements in treatment coverage, moderate to large improvements in facility detection and initiation of treatment, and small to moderate improvements in clinical symptoms and functioning for individuals with depression, AUD and psychosis who received care.

In South Africa we found a significant improvement in detection of depression and AUD and a significant improvement in clinical outcomes for individuals with depression who received care.

In Uganda we found a small non-significant improvement in treatment coverage, a significant improvement in facility detection of depression and AUD (which was not sustained over the longer term) and improvements in clinical symptoms and functioning in individuals with depression and epilepsy and improvements in functioning in individuals with psychosis who received care.
Semakula, a UPDF soldier, was initially diagnosed with high blood pressure and received medication to treat this while he was on duty. He eventually stopped taking the blood pressure medicine and his symptoms improved briefly.

Upon his return after three years of service and finding the situation at home to be dire, his symptoms returned. When visiting the Kamuli District Hospital where he was receiving treatment, a new doctor referred him to speak to a mental health nurse. Through counseling he was educated about depression and learned practical ways to manage his stress. He was also prescribed some medication. “Overall, the tablets I was prescribed plus the counseling were the most helpful.”

Ma Agnes lives in the North-West Province in South Africa. After the death of her husband she gradually developed depression. During a routine visit to the local clinic, a nurse screened Ma Agnes for depression as she was refereed for talk therapy.

Using the PRIME counseling manual for depression, her assigned counselor assisted Ma Agnes to work through her depression. “The people who counseled me enlightened me about depression and helped me remove all these things inside me one by one.” The PRIME intervention has empowered Ma Agnes to improve her life significantly. “Before I couldn’t go to church. Now I can go to church.”
Bipan is a counselor at the Dibyanagar health post in Chitwan, Nepal and helps the many people living with mental illness who visit the clinic. She has helped persons living with AUD disorder recover by practicing motivational interviewing as part of PRIME’s intervention in Nepal. Bipan has found that psychosocial counseling is very effective in most of the cases she has dealt with.

One of the biggest challenges Bipan and her colleagues experience is the stigma and misinformation rife in the Chitwan community. Female volunteer health workers use the PRIME-developed Community Informant Detection Tool (CIDT) to screen community members for possible mental illness. Besides referring people to receive care, this helps educate and reduce stigma.

Dr Sheila Ndyanabangi, Principal Medical Officer in charge of Mental Health and Substance Abuse in the Uganda Ministry of Health and PRIME Uganda partner passed away in 2018 after a losing her battle with cancer. Dr Ndyanabangi was involved with the PRIME Uganda team since its inception in 2011.

“Sheila was a great champion for mental health in Uganda and across the African continent. It was a privilege to work with her, from the days of the WHO Mental Health Policy and Service Guidance Package in the early 2000s, to the Mental Health and Poverty Project to PRIME. She made a huge contribution to mental health policy and service development in Uganda and beyond. And her warm generous personality and passion for mental health will be sorely missed,” says PRIME CEO, Prof Crick Lund.
OUTCOME DATA (CONTINUED)

**DETECTION**

**OUTCOMES**

**COVERAGE**

**INDIA**

- Depression
- AUD

**NEPAL**

- Depression
- AUD

Impaired functioning over time, by cohort

Level of functioning (WHO-DAS)

Baseline | Midline | Endline
**Outcome Data (Continued)**

**South Africa**

**Detection**
- Depression: Baseline 10, Endline 20
- AUD: Baseline 5, Endline 15

**Outcomes**
- Depression Psychosis: 0%
- Impaired functioning over time, by cohort
- Level of functioning (WHO-DAS)

**Uganda**

**Detection**
- Depression: Baseline 5, Endline 10
- AUD: Baseline 2, Endline 4

**Outcomes**
- Depression Psychosis: 0%
- Impaired functioning over time, by cohort
- Level of functioning (WHO-DAS)

**Coverage**
- Depression: Baseline 20, Endline 10
- AUD: Baseline 5, Endline 1
LESSONS LEARNED

1. It is feasible to improve clinical and functioning outcomes of people living with depression, AUD, epilepsy and psychosis, using primary care systems in low resource settings.

2. Participatory development of district level mental health care plans is vital, and approaches such as Theory of Change are essential tools for collaboration, buy-in and evaluation design.

3. Integrating mental health into primary care in low resource settings is not possible through training primary care practitioners alone. Further substantial investments are needed to strengthen health systems and provide ongoing supervision and support for general health practitioners. Continuous quality improvement is a vital tool in this regard.

4. If we are to make an improvement in population level treatment coverage we need demand-side interventions as well as supply-side interventions. Demand-side interventions at the community level should include pro-active community case detection (as shown in the Community Informant Detection Tool using community health workers in Nepal), stigma reduction activities, and community education programmes.

5. 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.
RECOMMENDATIONS (CONTINUED)

RECOMMENDATION 1: DEVELOP EVIDENCE-BASED DISTRICT LEVEL MENTAL HEALTH CARE PLANS

Use the Theory of Change (ToC) process to develop MHCPs. ToC is a powerful planning and evaluation tool, which facilitates participation of local stakeholders. The causal pathway set out in the ToC map enables the identification of key indicators for the successful implementation of a MHCP and can be adapted to different settings.

PRIME’s planning templates and ToC maps can be adapted and used by other countries or districts.

RECOMMENDATION 2: MAKE BUDGETARY ALLOWANCE FOR MENTAL HEALTH CARE PLAN IMPLEMENTATION

To make the necessary financial and human resource provisions to implement the MHCPs, estimate the cost of implementing MHCPs by utilising the cost-calculation methodology developed by PRIME.

Key parameters for calculating the costs of implementing the MHCP per country, over a 5- to 15-year scale-up period, include: target population, prevalence of the priority disorders, resource quantities (including human resource needs and essential psychotropic medications), prices or unit costs and coverage.

As an indication, the estimated cost of scaled up provision in non-specialist healthcare settings of an evidence-based package of care, over a 5- to 15-year scale-up period, ranges from US$ 0.20-0.60 per capita in India, Nepal, Uganda and Ethiopia.

In South Africa, an upper-middle income country, the cost nears US$ 2 per capita.
Recommendations (continued)

Recommendation 3: Implement comprehensive monitoring and evaluation of the scale-up

Use the following measures to evaluate scale up:

- **Scale up implementation logs**: to assess the resources needed.
- **Facility profiles**: to determine the drivers and constraints and how to address these.
- **Quality of care study**: to understand whether people are being given the appropriate evidence-based treatment corresponding to their diagnosis.
- **Assessment of training quality**: to find out the extent and quality of training delivered.
- **Assessment of supervision quality**: to understand the extent and quality of supervision delivered.
- **Routine health management information systems**: to record the number of service users by diagnosis, age and gender.
GUIDE TO PRIME TOOLS

Below you’ll find links to the various tools, manuals and publications developed and made available at www.prime.uct.ac.za:

TOOLS www.prime.uct.ac.za/prime-tools

MANUALS www.prime.uct.ac.za/prime-manuals

POLICY BRIEFS www.prime.uct.ac.za/policy_briefs

THEORY OF CHANGE MAPS www.prime.uct.ac.za/toc

MENTAL HEALTHCARE PLANS www.prime.uct.ac.za/mhcp

PUBLICATIONS www.prime.uct.ac.za/prime-publications

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