Strengthening Human Resources Through Development of Candidate Core Competencies for Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Workshop Summary

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STRENGTHENING HUMAN RESOURCES THROUGH DEVELOPMENT OF CANDIDATE CORE COMPETENCIES FOR MENTAL, NEUROLOGICAL, AND SUBSTANCE USE DISORDERS IN SUB-SAHARAN AFRICA

WORKSHOP SUMMARY

A Collaboration of the Forum on Neuroscience and Nervous System Disorders
and the African Science Academy Development Initiative

Diana E. Pankevich, Theresa M. Wizemann,
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Rapporteurs

Board on Health Sciences Policy

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Willing is not enough; we must do."
—Goethe

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Reviewers

This workshop summary has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published workshop summary as sound as possible and to ensure that the workshop summary meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We wish to thank the following individuals for their review of this workshop summary:

Jonathan Burns, University of KwaZulu-Natal
Marcelo Cruz, Global Network for Research on Mental and Neurological Health
Natalia Kanem, The Lloyd Best Institute of the West Indies
Ana-Claire Meyer, University of California, San Francisco
Angelina Kakooza Mwesige, Makerere University School of Medicine

Although the reviewers listed above have provided many constructive comments and suggestions, they did not see the final draft of the workshop summary before its release. The review of this workshop summary was overseen by **Donald Silberberg,** The University of Pennsylvania Medical Center. Appointed by the Institute of Medicine, he was responsible for making certain that an independent examination of this workshop summary was carried out in accordance with in-

stitutional procedures and that all review comments were carefully considered. Responsibility for the final content of this workshop summary rests entirely with the authors and the institution.

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Strengthening Human Resources Through Development of Candidate Core Competencies for Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa

Workshop Summary

INTRODUCTION[1]

Sub-Saharan Africa (SSA) has one of the largest treatment gaps for mental, neurological, and substance use (MNS)[2] disorders in the world. An estimated four out of five people with serious MNS disorders living in low- and middle-income countries do not receive needed health services (WHO, 2004, 2006, 2011a). The ability to provide adequate human resources for the delivery of essential interventions for MNS disorders has been identified as a critical barrier to bridging the treatment gap (Kakuma et al., 2011).

In 2009, the U.S. Institute of Medicine (IOM) Forum on Neuroscience and Nervous Systems Disorders and the Uganda National Academy of Sciences (UNAS) Forum on Health and Nutrition convened

[1] This workshop was organized by an independent planning committee whose role was limited to identification of topics and speakers. This workshop summary was prepared by the rapporteurs as a factual summary of the presentations and discussions that took place at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants, and are not necessarily endorsed or verified by the Institute of Medicine and they should not be construed as reflecting any group consensus.

[2] The phrase "MNS disorders" is used throughout this summary to refer broadly to the wide range of mental, neurological, and substance use disorders. This terminology was first adopted by the participants at the 2009 IOM workshop on reducing the treatment gap for MNS disorders in SSA (IOM, 2009) and has been retained for the current workshop.

an international workshop to bring together stakeholders from across SSA and to foster discussions about improving care for people suffering from MNS disorders and what steps, with potential for the greatest impact, might be considered to bridge the treatment gap. The development of a diverse, well-trained network of MNS health care workers in SSA was identified during the workshop and in subsequent stakeholder conversations as a feasible step toward meeting the needs of the people in the region.

Given the broad interest to further examine this particular treatment gap; the IOM Forum convened a second workshop in Kampala, Uganda, on September 4 and 5, 2012. The goal of the workshop was to bring together key stakeholders to discuss candidate core competencies that providers might need to help ensure the effective delivery of services for MNS disorders (see Box 1, Statement of Task). The workshop focused on candidate competencies for four MNS disorders that account for the greatest burden in low- and middle-income countries: depression, psychosis, epilepsy, and alcohol use disorders (Collins et al., 2011). Some high burden disorders identified at the workshop and in 2009 (IOM, 2009), but not addressed at this workshop, that have a significant burden include mental disorders such as bipolar depression, anxiety, and attention deficit hyperactivity disorder; neurological disorders such as stroke, dementia, Alzheimer's disease, and Parkinson's disease; and other substance use disorders such as cocaine addiction.

Organization of the Workshop and Report

In addition to a series of overview presentations, the workshop was organized around a series of breakout sessions (Appendix E, Agenda). The breakout sessions were designed for participants to discuss a series of draft materials that were prepared, and distributed, before the meeting. The materials included a set of templates that identified candidate core competencies, with one template for each disorder (depression, psychosis, epilepsy, alcohol use), listing characteristics for the different provider types to be discussed, including treatment environments; candidate core competencies relative to screening and identification, diagnosis, and treatment and care; and relationship roles with other providers. Prior to the workshop, these draft templates were shared with individual members of the working groups assigned to facilitate workshop discussions (Appendix F). Following the workshop, working group members checked the updated templates for clarity and to ensure

BOX 1
Statement of Task

- Assess the future needs of MNS health care workers based on provider type, treatment environment, and MNS disorder.
  - Examine human resource needs for effective delivery of treatments in a typical African district health care system.
  - Consider core competencies and performance requirements necessary to improve human resource capabilities for MNS disorders (e.g., diagnosis, prescribing of medicines, patient monitoring).
- Discuss potential mechanisms for task shifting and task sharing among human resources and across treatment locations.
- Explore education and training opportunities for acquiring and maintaining core competencies.
  - Consider existing and potential partnerships for:
    - Developing programs to train current providers to reach core competencies.
    - Implementing training programs.
- Consider tangible next steps for the dissemination of identified human resource core competencies and performance requirements.

that all candidate core competencies discussed by workshop participants were included. Finally, the templates were edited again to ensure consistency.

The following report summarizes the presentations and discussions by the expert panelists and participants during the plenary sessions of the workshop. Included is a summary table of candidate core competencies for providers treating patients with depression, psychosis, epilepsy, or alcohol use disorders (Appendix A). It is based on an expanded list of candidate core competencies discussed by the working groups (Appendix B). These candidate core competencies, as discussed by workshop participants, could potentially apply to the general population; however, specific populations (e.g., children, adolescents) were not discussed. It is important to note that the workshop was not designed or conducted as a consensus process, and the candidate core competencies described in this report and appendixes are not a formal consensus product of the workshop or the working groups. Rather, they are a compilation of all comments by workshop participants, and should be attributed to the rapporteurs of this summary as informed by the workshop.

Throughout the workshop, many speakers and participants employed the phrase “mental health” in reference to health care systems, treatment

and care, and candidate competencies. Many of the same speakers and participants commented that their use of the term "mental health" as it related to the workshop discussions and how care is delivered in SSA, could be broadened to include mental *and* neurological *and* substance use disorders.

STRENGTHENING HUMAN RESOURCES

The human resource shortage spans the entire range of providers involved with mental health care in SSA and throughout the developing world. Meeting this critical need involves not only increasing the number of providers involved in health care of individuals with MNS disorders, but also increasing the capabilities of providers, explained Vikram Patel of the London School of Hygiene and Tropical Medicine and workshop co-chair. This includes both specialized and non-specialized providers working within a task-sharing environment, each with the competencies needed to deliver on those tasks.

In health care, competency is an attribute of an individual human resource that is engaged in the delivery of an intervention, Patel explained. It is the ability of the individual worker, based on his or her acquired knowledge and skills, to deliver an intervention to a desired performance standard.

The first step toward defining human resources core competencies for MNS disorders, Patel said, is to understand the tasks necessary for delivering evidence-based interventions. What does it take, for example, to assess a patient, or to prescribe a particular drug therapy, or to deliver a psychological treatment? The next step is to define the candidate core competencies needed to perform those tasks to an expected standard, acknowledging that there might be certain limits to what a particular human resource category may be able to do, or is permitted to do in a particular context. The last step is to define how individual health care workers can acquire and maintain these competencies and how to evaluate them.

General competencies are needed to be an effective health care worker, along with specific competencies for addressing MNS disorders. Some mental health care–specific competencies may be common across the many human resource categories that deliver health care interventions. Patel suggested that basic candidate competencies could include, for example, engaging patients, assessing mental and neurological health and suicide risk, providing accurate information, making appropriate treatment decisions, and knowing when to refer to a higher

level of care. Other more advanced candidate competencies may vary by MNS disorder or within a particular treatment context. Patel noted that this distinction is useful when considering task sharing because certain tasks may only be relevant to specific categories of human resources due to the advanced nature of the competencies that those tasks entail. Task sharing or task shifting involves taking a complex intervention (e.g., psychological treatment) and breaking it down into smaller skill sets that have sequential levels of mastery. When a provider masters a basic competency, he or she can build upon that to acquire more sophisticated levels of competency. In a collaborative framework, more complex competencies might need to be handled by more specialized providers. Depending on context, competencies may require different sets of skills, knowledge, and attitudes.

Competency-based education is focused on the knowledge and skills of providers, with the ultimate goal of improving patient outcomes. Medical education is, by and large, competency based, Patel noted. He emphasized that moving from a knowledge-based approach to a competency-based approach requires the application of more diverse forms of evaluation. In knowledge-based education, evaluation is often in the form of a written examination, but assessment of competencies requires a more mixed-methods approach.

WHY FOCUS ON DEPRESSION, PSYCHOSIS, EPILEPSY, AND ALCOHOL USE?

The focus of workshop discussions was depression, psychosis, epilepsy, and alcohol use disorders, explained Seggane Musisi, professor of psychiatry at Makerere University and workshop co-chair. Together, these disorders affect about 10 percent of the population at any point in time, and have a significantly negative socioeconomic impact, accounting for about 13 percent of disability-adjusted life years (DALYs) (Collins et al., 2011).[3] Another reason to focus on these four conditions to start is that they are treatable, and in some cases are preventable. Musisi provided a brief overview of each disorder (see Box 2).

[3] DALY is a measure of the overall burden of a disease or condition, calculated as the sum of years of life lost to premature mortality (YLL) plus years of life living in a state of disability (YLD). As defined by the World Health Organization, "one DALY can be thought of as one lost year of 'healthy life' and 'the sum of these DALYs across the population … can be thought of as a measurement of the gap between current health status and an ideal health situation.'" See http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/index.html for further information.

BOX 2
MNS Disorders with the Greatest Disease Burden in Low- and Middle-Income Countries

Depression

- The most common mental disorder in low- and middle-income countries with a lifetime prevalence of 11 percent (Kessler and Bromet, 2013).
- Complicates treatment of other disorders and increases morbidity and mortality (e.g., HIV/AIDS, diabetes, cancer, heart disease, posttraumatic stress disorder).
- Often unrecognized and untreated.
- Resources can be wasted in unnecessary testing and treatment before the patient gets to a mental health professional.
- Causes premature deaths through suicides and homicides or through increased mortality with other disorders.
- Associated with low socioeconomic production through decreased work output and increased absenteeism.
- Responds well to treatment (pharmacological, psychological, social).
- Many of the causes are preventable.

Psychosis

- Affects up to 1 percent of the general population, regardless of social class, race, ethnicity, or religion.
- Gradual deterioration to chronicity, downward shift in social class, numerous social deficits.
- Third most disabling condition worldwide.
- Accounts for 1 percent of DALYs and 3 percent of YLDs in low- and middle-income countries (Farooq, 2013).
- The most costly psychiatric disorder to treat is schizophrenia; most psychiatric hospital beds are occupied by patients with schizophrenia.
- Associated with premature death via suicide or decreased life expectancy.
- When diagnosed and treated early, prognosis is better.
- Most modern drugs (e.g., atypical antipsychotics) are too expensive for routine use in developing countries; older drugs often have significant side effects (e.g., tardive dyskinesia).

Epilepsy

- The most common brain disorder in the general population.
- Highly stigmatized in low- and middle-income countries.
- Untreated, it can cause brain damage or lead to early death from asphyxia, drowning, burns, or accidents.

Alcohol Use

- Most commonly abused substance in low- and middle-income countries.
- Accounts for 2 percent of deaths and 4 percent of DALYs worldwide.
- Causes extensive end organ damage (e.g., liver, pancreas, brain).
- Increases morbidity and mortality, especially through suicide.
- Cost of care can be very high.
- Associated with other health problems (e.g., cancer, domestic violence).
- Increasingly a problem of youth.
- Negatively impacts human capital.
- Difficult to treat, but is preventable.

SOURCE: Musisi presentation.

OVERVIEW OF THE 2009 JOINT IOM AND UNAS WORKSHOP

As background, Edward Kirumira, deputy principal of the College of Humanities and Social Sciences at Makerere University, provided an overview of the 2009 workshop, *Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Reducing the Treatment Gap, Improving Quality of Care* (IOM, 2009) (see Box 3). It was noted at the 2009 workshop that MNS disorders produce a very substantial disease burden in the developing world, but much of the focus has been on infectious diseases (e.g., HIV/AIDS, malaria, tuberculosis). Many discussions at the 2009 workshop emphasized the need for sustainable and feasible strategies for lasting change, multidisciplinary collaborations, research to guide evidence-based policies and practices, and engagement of the public and policymakers through advocacy and communication. Among the opportunities discussed for decreasing the treatment gap was increasing the number of trained professionals with expertise in MNS disorders. The 2012 workshop was designed to expand the discussion further.

PROGRESS SINCE 2009

Pamela Collins, director of the Office for Research on Disparities and Global Mental Health at the U.S. National Institute of Mental Health (NIMH) and workshop co-chair, noted that over the 3 years since the 2009 workshop, much has happened to highlight MNS disorders around

the world and to educate the global health community on the importance of addressing these disorders.

WHO *mhGAP Intervention Guide*

The publication in 2011 of the World Health Organization (WHO) *mhGAP Intervention Guide*, Collins noted, provided guidelines for implementing evidence-based interventions for several MNS disorders in low- and middle-income countries (WHO, 2011b). Also in 2011, as part of its Global Health Series, the *Lancet* published its second article series focused on global mental health (Eaton et al., 2011; Kakuma et al., 2011; Patel et al., 2011; Raviola et al., 2011). These papers highlighted, among many other topics, the status of the workforce in low- and middle-income countries and progress on scaling up interventions to reduce the treatment gap.

BOX 3
Highlights from the 2009 Workshop Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Reducing the Treatment Gap, Improving Quality of Care

Workshop Topics

- Need to consider all nervous system disorders
- Benefits through leveraging skills, expertise, and networks of other health fields (e.g., HIV/AIDS, malaria)
- Include a focus on treatment *and* prevention
- Improve the available medication formulary
- Expand the use of high-quality, community-based care, and the training of community health workers

Opportunities for Decreasing the Treatment Gap

- Recognize the interconnected nature of MNS disorders
- Establish comprehensive policies
- Promote high-quality research that will provide evidence to inform health policy
- Improve the integration of basic diagnosis and treatment into primary care
- Leverage established infrastructures
- Increase the number of trained professionals with expertise in MNS disorders
- Formalize community health care providers as an integral component of the health system
- Improve the formulary of medications to treat MNS disorders

Next Steps

Sustainable and Feasible Strategies

- To make lasting change, a system of supervision and support may be necessary
- Improving care for MNS disorders in SSA will require a strategic plan

Collaboration

- Cooperation with researchers and health care providers around the continent and across disease specialties
- Integration of MNS care into programs that support other diseases (e.g. HIV/AIDS, malaria, tuberculosis)

Research

- Need for data that would help guide the development and implementation of MNS policies (e.g., cost-effectiveness)

Advocacy and Public Communication

- Increase the audience that is aware of issues related to treating and caring for patients with MNS disorders
- Engagement and involvement of policy makers

NOTE: These statements are based on individual participant comments at the 2009 workshop and do not reflect group consensus.
SOURCE: IOM, 2009, as summarized in Kirumira presentation.

Grand Challenges in Global Mental Health

The Grand Challenges in Global Mental Health Initiative, launched by NIMH and collaborators, identified priorities for research on MNS disorders and highlighted 25 research priorities needing immediate attention to help reduce the treatment gap (Collins et al., 2011). Collins noted that the top five challenges ranked by disease-burden reduction, impact on equity, immediacy of impact, and feasibility are

1. Integrate screening and core packages of services into routine primary health care.
2. Reduce the cost and improve the supply of effective medications.
3. Provide effective and affordable community-based care and rehabilitation.
4. Improve children's access to evidence-based care by trained health providers in low- and middle-income countries.
5. Strengthen the mental health component in the training of all health care personnel.

Provider Education

Education is receiving greater attention, with regard to both increasing the number of educated health professionals and examining how training is provided. Collins highlighted a report from the Commission on Education of Health Professionals for the 21st Century. It concluded that professional education courses have not kept up with the increasing complexity of health systems around the world, rapid demographic and epidemiologic transitions, and the need to diminish major inequities in health care around the world, both within and between countries (Frenk et al., 2010). The report also emphasized the importance of balancing individual patient care with population health. Collins summarized some of the issues with professional education highlighted in the report, including a mismatch between competencies and patient or population needs; poor teamwork among providers; narrow technical focus of training that does not afford providers with an understanding of the broader context in which they work; a focus on hospital-based care over primary care; and a focus on episodic encounters with the health care system instead of continuity of care. These issues are relevant to the delivery of MNS health services in many parts of the world, she added.

Collins charged workshop participants to discuss the draft candidate core competencies for the management of depression, epilepsy, alcohol use disorders, and psychosis, focusing on candidate competencies that might be needed for each kind of provider to be able to manage MNS disorders, from community health workers through psychiatrists and neurologists, and all other levels. "What is at stake," Collins emphasized, "is alleviating suffering for the many people who experience these disorders."

STATUS OF MNS HUMAN RESOURCES IN SUB-SAHARAN AFRICA

Daniel Chisholm, a health economist at the WHO, shared data from the WHO *Mental Health Atlas 2011* on the state of mental health human resources in SSA (WHO, 2011a). SSA has a total population of approximately 800 million. The WHO survey identified that there are approximately 20,000 mental health workers across all SSA countries, with a staff-to-population ratio of about one mental health worker for 40,000 people. This can also be expressed as 2.5 mental health workers

or "full-time equivalents" (FTEs)[4] per 100,000 population. For perspective, Chisholm noted that the WHO estimates the minimum number of health workers across all specialties required in order to deliver on the goals and commitments of the health-related Millennium Development Goals (MDGs) to be 2.5 health workers per 1,000 population, which means that current levels are 100 times below what is needed. The total mental health workforce count varies by country. South Africa and Botswana each report around 11 or 12 FTE per 100,000 population, however, close to half of SSA countries report one or less FTE per 100,000 population (see Figure 1). Nurses make up the vast majority of the mental health workforce in SSA at 75 percent, while psychiatrists and psychologists combined comprise only a small fraction at 6 percent (see Figure 2).

Defining the Gap

Efforts have been made over the years to estimate the number of health workers needed to provide comprehensive mental health services in SSA. Chisholm described one case study for South Africa, which estimated full coverage as 38.4 mental health workers per 100,000 people and 13 workers as the minimal number for acceptable coverage (Petersen et al., 2012).

Another study by Chisholm and colleagues considered workforce resources for eight key disorders included in the *WHO mhGAP Intervention Guide*[5] across 58 low- and middle-income countries around the world, including 8 SSA countries[6] (Bruckner et al., 2011). They attempted to map out services and staffing that would be needed for different populations with various demographic and epidemiological characters. For this particular study, the authors looked specifically at nurses, psychosocial care providers, and psychiatrists.

First, service need was calculated based on the population of the country, the prevalence of the eight key disorders, coverage or the proportion of people in need who will actually receive care, and the typical care package provided. The number of health workers needed in each country was then calculated using the estimated service need and staffing ratios.

[4] Full-time equivalent is the number of working hours corresponding to one full-time employee during a fixed year.

[5] "Depression, schizophrenia and other psychotic disorders, suicide, epilepsy, dementia, disorders due to use of alcohol, disorders due to use of illicit drugs, and mental disorders in children" (WHO, 2008).

[6] Benin, Burundi, Congo, Eritrea, Ethiopia, Nigeria, South Africa, and Uganda.

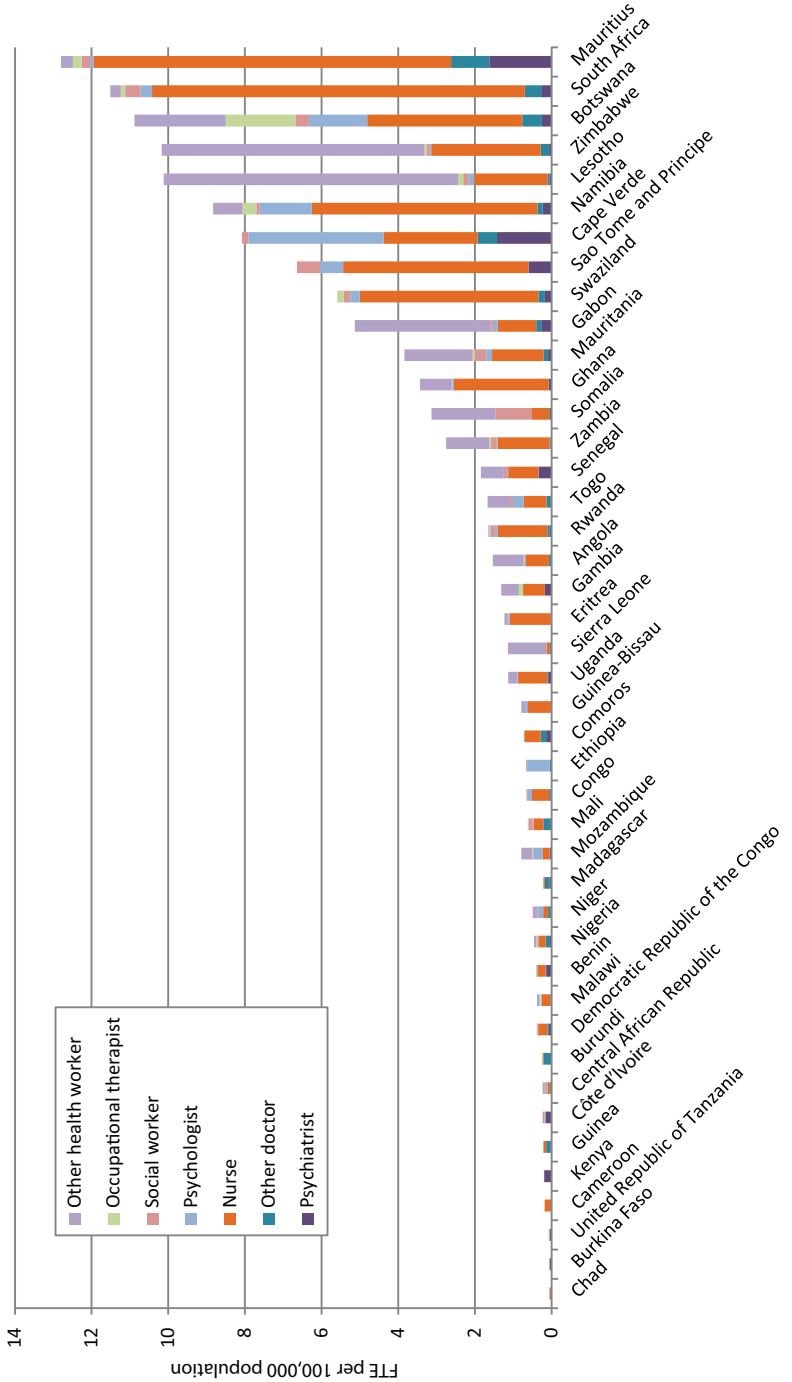

FIGURE 1 Current mental health worker head count across sub-Saharan Africa (expressed as total full-time equivalent per 100,000 population).
SOURCE: Chisholm presentation, citing WHO, 2011a.

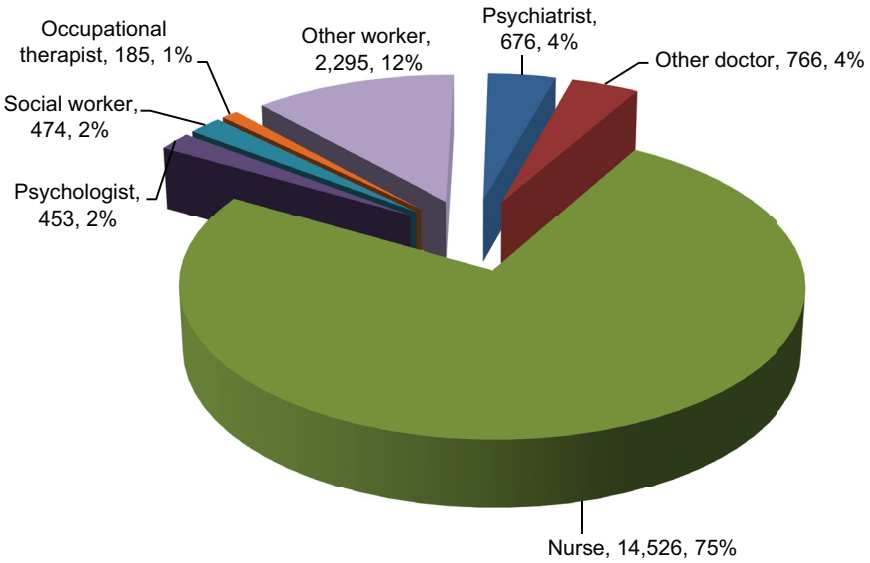

FIGURE 2 Current mental health workers in sub-Saharan Africa by profession (expressed as total number and percent of total).
SOURCE: Chisholm presentation, citing WHO, 2011a.

To provide a modest level of care, but not full coverage, for most of the eight SSA countries contained in the analysis, the psychiatrists needed were calculated to be about 1 per 100,000 people. Nurses and broader psychosocial care providers (e.g., social workers, community health workers) needed was around 7 or 8 per 100,000 people for each category. The authors calculated that the total gap is around 15 of these health workers missing for every 100,000 people. Chisholm noted that modeling current levels of providers is useful for human resource planning, and can provide information about different scenarios for scaling up the workforce and predicting the budgetary implications.

Bridging Human Resources Gaps for MNS Disorders

One approach to bridging the human resources gap for MNS disorders is to strengthen the health system from within by mobilizing financial resources, establishing a plan for monitoring and evaluation, and developing intervention packages. A second approach is to develop strategies to address human resource issues across different diseases area

(e.g., cardiovascular disease, diabetes). Chisholm pointed out that most fields have chronic shortages of health workers and it is important to think not just about the shared competencies within MNS disorders, but also to look for shared competencies with other non-communicable diseases. In addition, because many of the same issues that impact mental health resources have been extensively studied and reviewed in other fields, Chisholm suggested that there are lessons to be learned by looking to other areas of health care.

CHALLENGES FACING MNS CARE PROVIDERS IN SSA

Using alcohol use disorders as a case example, Muthoni Mathai, a psychiatrist from the Department of Psychiatry at the University of Nairobi in Kenya, suggested that two of the biggest challenges in SSA are delayed diagnosis and misdiagnosis. Patients may carry on for years before a correct diagnosis is made. Denial is a significant hindrance to seeking help, which is compounded by the social stigma related to MNS disorders. In the primary health care system, stigmatizing attitudes among health workers are common, she said.

Many people with MNS disorders do not know where to go to find help, Mathai continued. There is lack of public knowledge that these disorders are treatable conditions. Economic priorities of families and communities may also have a negative influence on whether patients seek treatment. For those that are diagnosed and do seek care, Mathai expressed concern about inadequate provider skills for disorder management, lack of specialized facilities, and no funding for treatment. Health workers may feel a sense of helplessness, she noted.

Sebolelo Tseeke, a senior social worker with the South African National Council on Alcoholism and Drug Dependence (SANCA), concurred, adding that a particular challenge for substance use disorders is the limited number of registered rehabilitation centers. In addition, an increasing number of community-based organizations lack properly trained personnel. Tseeke observed that professionally trained personnel usually handle high caseloads, and there is often confusion by some treatment professionals with regard to referral protocols. For example, medical staff often refer comorbid patients to social workers before stabilization of their MNS disorder. Tseeke also expressed concern about delayed diagnosis, noting that a challenge for the treatment of substance use is that many patients seek interventions in the late stages of addiction.

Gerald Vitus Kihwele, a nursing officer at the Mirembe National Mental Hospital in Tanzania, explained that MNS care in Tanzania is provided free of charge but adequate financial support for the costly treatments and facilities is needed from governments and other sources. Kihwele noted that sometimes patients might experience unfriendly therapeutic environments that contribute to physical problems and negatively impact both the general health and mental status of patients. Health facilities are often a "dumping place" for MNS patients, he added, and family members sometimes do not come to retrieve patients when they are in remission.

Anthony Mulenga Zimba, a clinical officer in Zambia and vice president of the International Bureau for Epilepsy, Africa Region, noted that many challenges are the result of the lack of defined programs to care for patients with these conditions, despite the high prevalence of MNS disorders in SSA countries. Another challenge from a treatment perspective is that many patients suffer from the extrapyramidal side effects (i.e., movement disorders) associated with antipsychotic drugs. In addition, many health care workers lack the skills to handle the unpredictability of the actions and behavior of MNS patients. Challenges highlighted by Zimba and others are summarized in Box 4.

BOX 4
Challenges of Caring for Patients with MNS Disorders in SSA

Treatment Challenges

- Delayed diagnosis and/or misdiagnosis
- Stigma and discrimination
- Self-denial
- Lack of public awareness about MNS disorders and treatment options

Resource Challenges

- Insufficient resources allocated to MNS disorders
- Mental health professionals are mainly concentrated in urban areas hindering treatment of patients in rural areas
- Limited diagnostic tools (e.g., advanced imaging technologies)
- Lack of specialized facilities

BOX 4 Continued

- Poor and inadequate infrastructure for MNS disorders, lack of funds to repair existing facilities or build new ones
- Lack of access to affordable medicines

Training Challenges

- Shortage of trained human resources to manage MNS disorders
- Resistance in some countries for the training of mid-level providers (e.g., clinical officers)
- Inadequate provider skills for disorder management, including skills to handle the unpredictable behavior of MNS patients
- Confusion about referral protocols, problematic or non-existent referral systems
- Lack of training in leadership, advocacy, and fundraising

Systems-Level Challenges

- Lack of space and resources within hospitals for the provision of MNS services
- Integrating MNS services into existing health systems
- Lack of policy, legislative framework, and strategic plans for the management of MNS disorders in many SSA countries
- Lack of plans for monitoring and evaluation of MNS disorder programs
- Lack of evidence-based information on the extent of the MNS disorder burden in many SSA countries
- Lack of political commitment to addressing MNS disorders in many SSA countries
- Concerns by leadership that new or revised core competencies will lead to the expectation to be paid more

SOURCES: Adapted from Kihwele, Mathai, Tseeke, and Zimba presentations and participant discussion.

Developing Candidate Core Competencies

In preparation for the breakout sessions, panel participants discussed a variety of questions to consider when developing candidate core competencies (see Box 5). Kihwele suggested that capacity building around competencies be based on the needs of MNS patients and emphasized a

BOX 5
Questions to Consider When Developing MNS Provider Candidate Core Competencies

- What types of treatment and care are available?
- Do existing guidelines and policies address treatment and care?
- How could new guidelines and policies be developed?
- What type of training is currently available?
- Would it be cost-effective in developing and training around core competencies?
- What is achievable?
- What is sustainable?
- What priorities have been integrated by key stakeholders (e.g., government, donors, and community members)?
- Could MNS treatment and care be integrated into primary health care programs?
- What providers are available in different treatment environments?
- How could a wide array of community members be trained to identify those who need care?

SOURCES: Adapted from Kihwele, Mathai, Tseeke, and Zimba presentations and participant discussion.

community approach. MNS health care is applicable everywhere, including maternity settings, home, school, social settings, and elsewhere.

Tseeke noted that providers could benefit from being aware of legislation and policies governing prevention and treatment of MNS disorders. Regular in-service training for social workers and other professionals is important to keep abreast of new developments. Some community-based organizations do not have social workers and rely on lay counselors and volunteers. Tseeke also noted that it could be helpful if the government provided information for community members about services and resources available in the area.

Tseeke suggested that participants consider how patients might benefit from multidisciplinary team approaches and comprehensive treatment plans that include skill development for patients, to occupy them after treatment and help prevent relapse.

Mathai noted that a variety of providers and community members can play a role in getting patients into care including pharmacy technicians and drug dispensers, because many patients first visit a pharmacist or dispenser when they have a medical problem. Others who might help

to identify individuals with MNS disorders include teachers; grassroots administrators, including chiefs and subchiefs, who are often approached when there is a disorderly type of behavior in the community; religious leaders; and law enforcement agents, probation officers, and correctional officers.

MNS DISORDER PROVIDERS

For discussion and for purposes of providing a summary of the candidate core competencies, the various providers who care for patients with MNS disorders were grouped into four main categories: (1) community/lay workers; (2) non-specialized, non-prescribing practitioners; (3) non-specialized prescribing practitioners; and (4) specialized practitioners (see Table 1). Definitions for each type of provider were modified from the WHO health worker classification chart[7] based on various participant comments throughout the plenary and breakout sessions (Appendix C). The definitions include potential relationship roles with other providers as discussed by workshop participants. Workshop discussions also included potential treatment environments where providers might be found in SSA. The list of treatment environments was compiled by the workshop rapporteurs based on individual participants comments during the breakout sessions and is not meant to be comprehensive (see Table 2).

Traditional and Faith Health Practitioners

Workshop discussions included the role of traditional and faith health practitioners in the treatment and care of patients with MNS disorders. Unlike other provider types, traditional health practitioners were not able to participate in all breakout sessions, and no faith health practitioners were able to attend the workshop. Without this voice represented more widely during the discussions, many participants were concerned that inclusion of candidate core competencies for traditional and faith health practitioners would be inappropriate. Therefore, these providers have not been included in the list of candidate competencies presented in this summary.

[7] See http://www.who.int/hrh/statistics/Health_workers_classification.pdf.

TABLE 1 Provider Classifications and Abbreviations

Provider Category	Type	Abbreviation
Community/Lay Worker	Peer/service user	PR
	Community health care worker/health extension worker	CHW
Non-specialized, Non-prescribing	Pharmacist	PH
	Social Worker	SW
	Occupational Therapist	OT
Non-specialized, Prescribing	Clinical/health officer	CO
	Nurse	RN
	Medical doctor/general practitioner	MD
Specialized	Psychiatric Nurse	PRN
	Psychologist	PY
	Neurologist	NE
	Psychiatrist	PS

Several participants emphasized that these providers play an important health care role throughout SSA but that no formal relationship between the health system and traditional health practitioners currently exists. The need to engage traditional health practitioners, and the need for functional referral pathways in all directions between the peer/service users, community health workers, and traditional practitioners was stressed by many participants. A large number of participants, including Lydia Matoka, a traditional health practitioner from Kenya, noted that in SSA, most rural area patients turn to traditional health practitioners first.

It was noted by several participants that traditional health practitioners can play an important role in encouraging treatment-seeking behaviors by providing community members with examples of how treatment has been helpful. For epilepsy, these providers might be able to offer counseling to help patients deal with perceived supernatural elements they may believe have a role in their disease (e.g., through mediation with ancestors).

Elliot Makhatini, a participant from South Africa, said one of the tertiary institutions in his area holds an annual forum for doctors, specialists, and traditional health practitioners to interact and give presentations

TABLE 2 Provider Treatment Environments Compiled Based on Suggestions from Individual Workshop Participants[a]

Treatment Environment	PR	CHW	PH	SW	OT	CO	RN	MD	PRN	PY	NE	PS
Provincial hospital, clinic, ward	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
District/state hospital, clinic, ward	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sub-district/state hospital, clinic, ward	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Psychiatric hospital, clinic, ward	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Community clinic[b]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Community-based settings[c]	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Nursing homes	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
Private practice				✓	✓	✓	✓	✓	✓	✓	✓	✓
Rehabilitation centers					✓		✓	✓		✓		✓
Criminal justice system			✓	✓	✓	✓	✓	✓	✓	✓		✓
Military settings			✓	✓	✓	✓	✓	✓	✓	✓		✓
Mobile clinics or outreach centers		✓	✓	✓		✓	✓	✓				
Out-patient treatment centers[d]	✓	✓										

Home setting	✓	✓		✓	✓							
Military setting			✓				✓	✓				
Pharmacies			✓									
Free-standing chemists/dispensaries			✓									
Independent drug stores			✓									
Market places			✓									
Refugee camps						✓	✓	✓				

[a] This table presents provider treatment environments discussed by one or more workshop participants. During the workshop, all participants engaged in active discussions of treatment environments. In some cases, participants expressed differing opinions. However, because this is a summary of workshop comments and not meant to provide consensus recommendations, workshop rapporteurs endeavored to include all provider treatment environments discussed by workshop participants. This table and its content should be attributed to the rapporteurs of this summary as informed by the workshop.

[b] Providers may work full time or in a supportive role in this environment.

[c] Examples include, but are not limited to, faith-based facilities/groups, mental health society buildings, rehabilitation centers, schools, halls, nongovernmental organization (NGO) facilities, and community-based organization facilities.

[d] With or without a dispensary.

on different kinds of illnesses. This helps to foster communication, mutual understanding, and respect. Another participant noted that in his experience, traditional health practitioners want to work with clinicians. To improve patient care, Matoka urged participants to integrate traditional medicine into the management of MNS disorders in SSA.

CANDIDATE CORE COMPETENCIES FOR MNS DISORDERS

A summary table of candidate core competencies can be found in Appendix A. During the breakout sessions, all participants engaged in active discussions of the candidate core competencies. In some cases, participants expressed differing opinions whether a particular core competency could be useful and included in the list of candidate competencies. However, because this is a summary of workshop comments and not meant to provide consensus recommendations, workshop rapporteurs endeavored to include all candidate core competencies discussed by workshop participants across providers and disorders. As previously mentioned the candidate core competencies discussed are a compilation of all workshop participant comments and should be attributed to the rapporteurs of this summary as informed by the workshop.

For each provider type, candidate competencies are listed for screening/identification (SI), formal diagnosis/referral (DR), and treatment/care (TC), relative to each of the four MNS disorders discussed. An expanded view of the candidate core competencies can be found in Appendix B. This table also includes additional comments by participants specific to disorders and provider types.

During the workshop breakout group discussions many participants commented that there appeared to be some candidate competencies that might be applied across providers and another group of candidate competencies that might be applied to providers who prescribe or are specialized. In addition, numerous participants noted that these subsets of candidate competencies might apply beyond the four disorders discussed during the workshop to all MNS disorders. Based on the candidate core competencies presented here, the following two tables highlight candidate competencies for all providers (see Table 3) and for non-specialized prescribing and specialized providers (see Table 4) across MNS disorders.

TABLE 3 Candidate Core Competencies Discussed for All Provider Types Across MNS Disorders[a]

Screening/Identification (SI)
SI.1 Demonstrates awareness of common signs and symptoms
SI.2 Recognizes the potential for risk to self and others
SI.3 Demonstrates basic knowledge of causes
SI.4 Provides the patient and community with awareness and/or education
SI.5 Demonstrates cultural competence
SI.6 Demonstrates knowledge of other mental, neurological, and substance use (MNS) disorders
Formal Diagnosis/Referral (DR)
DR.1 Demonstrates knowledge of when to refer to next level of care/other provider/specialist
DR.2 Demonstrates knowledge of providers for specialized care within the community
Treatment/Care (TC)
TC.1 Provides support for patients and families while in treatment and care
TC.2 Identifies and assists patients and families in overcoming barriers to successful treatment and recovery (e.g., adherence, stigma, finances, accessibility, access to social support)
TC.3 Demonstrates ability to monitor mental status
TC.4 Demonstrates knowledge of how to offer emergency first aid
TC.5 Initiates and/or participates in community-based treatment, care and/or prevention programs
TC.6 Demonstrates knowledge of treatment and care resources in the community
TC.7 Promotes mental health literacy (e.g., to minimize impact of stigma and discrimination)
TC.8 Communicates to the public about MNS disorders
TC.9 Monitors for adherence to and/or side effects of medication
TC.10 Practices good therapeutic patient interactions (e.g., communication, relationship, attitude)
TC.11 Provides links between patients and community resources
TC.12 Identifies available resources to support patients (e.g., rehabilitation, medication supplies)

TABLE 3 Continued

TC.13 Promotes activities that aim to raise awareness and improve the uptake of interventions and the use of services
TC.14 Protects patients and identifies vulnerabilities (e.g., human rights)
TC.15 Demonstrates respect, compassion, and responsiveness to patient needs
TC.16 Demonstrates knowledge and skills to use information technology to improve treatment and care

[a] This table presents candidate core competencies discussed by one or more workshop participants. During the workshop, all participants engaged in active discussions of candidate competencies. In some cases, participants expressed differing opinions about whether a particular competency could be useful and included in the list. However, because this is a summary of workshop comments and not meant to provide consensus recommendations, workshop rapporteurs endeavored to include all candidate core competencies discussed by workshop participants across providers and disorders. This table and its content should be attributed to the rapporteurs of this summary as informed by the workshop.

TABLE 4 Candidate Core Competencies Discussed for Non-Specialized Prescribers and Specialized Providers Across MNS Disorders[a]

Screening/Identification (SI)
SI.1 Demonstrates awareness of common signs and symptoms
SI.2 Recognizes the potential for risk to self and others
SI.3 Demonstrates basic knowledge of causes
SI.4 Provides the patient and community with awareness and/or education
SI.5 Demonstrates cultural competence
SI.6 Demonstrates knowledge of other mental, neurological, and substance use (MNS) disorders
SI.7 Demonstrates the ability to screen for and use screening tools
SI.8 Demonstrates knowledge and skills in taking patient history
SI.9 Demonstrates the ability to conduct a mental status exam
SI.10 Recognizes patients who are relapsing and require inpatient care
Formal Diagnosis/Referral (DR)
DR.1 Demonstrates knowledge of when to refer to next level of care/other provider/specialist

TABLE 4 Continued

Formal Diagnosis/Referral (DR)
DR.2 Demonstrates knowledge of providers for specialized care within the community
DR.3 Demonstrates skills in assessment of relative levels of social, cognitive, and physical functioning
DR.4 Demonstrates knowledge of required information for effective referral
DR.5 Demonstrates skills in using various functional assessment tools
DR.7 Demonstrates an understanding of and ability to apply contextually appropriate diagnostic systems (e.g., DSM, ICD)[b]
DR.8 Demonstrates knowledge and skills to make a formal diagnosis and formulation of differential diagnosis
DR.9 Demonstrates ability to determine severity level
DR.10 Demonstrates ability to make a diagnosis according to an algorithm (not considered a clinical diagnosis)
Treatment/Care (TC)
TC.1 Provides support for patients and families while in treatment and care
TC.2 Identifies and assists patients and families in overcoming barriers to successful treatment and recovery (e.g., adherence, stigma, finances, accessibility, access to social support)
TC.3 Demonstrates ability to monitor mental status
TC.4 Demonstrates knowledge of how to offer emergency first aid
TC.5 Initiates and/or participates in community-based treatment, care, and/or prevention programs
TC.6 Demonstrates knowledge of treatment and care resources in the community
TC.7 Promotes mental health literacy (e.g., to minimize impact of stigma and discrimination)
TC.8 Communicates to the public about MNS disorders
TC.9 Monitors for adherence to and/or side effects of medication
TC.10 Practices good therapeutic patient interactions (e.g., communication, relationship, attitude)
TC.11 Provides links between patients and community resources

TABLE 4 Continued

Treatment/Care (TC)
TC.12 Identifies available resources to support patients (e.g., rehabilitation, medication supplies)
TC.13 Promotes activities that aim to raise awareness and improve the uptake of interventions and the use of services
TC.14 Protects patients and identifies vulnerabilities (e.g., human rights)
TC.15 Demonstrates respect, compassion, and responsiveness to patient needs
TC.16 Demonstrates knowledge and skills to use information technology to improve treatment and care
TC.17 Demonstrates ability in general counseling skills
TC.19 Demonstrates ability to select appropriate treatment based on an understanding of diagnosis
TC.21 Provides brief advice on symptom management
TC.28 Demonstrates knowledge of and ability to apply relevant legislation and policies and access to appropriate services
TC.34 Reports information to relevant health management systems
TC.36 Assists patients with access to other providers and helps coordinate efforts
TC.38 Documents medical records
TC.39 Demonstrates knowledge and skills to consult with other providers in the treatment/care team
TC.40 Demonstrates knowledge and skills to provide proactive follow-up and monitors outcomes of care
TC.41 Demonstrates knowledge of standard drug regimens
TC.42 Provides mentoring and support to other health care providers

[a] This table presents candidate core competencies discussed by one or more workshop participants. During the workshop, all participants engaged in active discussions of candidate competencies. In some cases, participants expressed differing opinions about whether a particular competency could be useful and included in the list. However, because this is a summary of workshop comments and not meant to provide consensus recommendations, workshop rapporteurs endeavored to include all candidate core competencies discussed by workshop participants across providers and disorders. This table and its content should be attributed to the rapporteurs of this summary as informed by the workshop.

[b] DSM: *Diagnostic and Statistical Manual of Mental Disorders*; ICD: International Statistical Classification of Diseases and Related Health Problems.

Participant Comments from Breakout Group Discussions

Following the small group breakout sessions, the subsequent plenary sessions provide an opportunity for group facilitators to provide brief reviews of each discussion. The plenary session discussions focused on commonalities and differences across all four MNS disorders, the treatment roles of different providers and review of some of the candidate core competencies. All breakout group facilitators reported having spirited discussions and participants were eager to share their experiences and comments.

Overall a large number of workshop participants who spoke agreed that the treatment and care of patients with MNS disorders would benefit from cooperative and collaborative relationships among all providers. Many participants raised concerns about the probability that a provider might be able to perform any or all of the candidate competencies discussed given limits on time and resources. Instead, several participants proposed that providers might not actively engage in performing specific candidate competencies, although training about and knowledge of the indicated candidate competency could still be considered.

Facilitators noted that several questions reoccurred across the different breakout group discussions. First, how can strategies for incorporating MNS programs be developed to address country and/or regional differences? What are mechanisms for governments and nongovernment organizations to increase funding for MNS programs? For countries with competencies already integrated into government plans, how can additional implementation occur with low availability of human resources?

Also discussed were mechanisms for determining current provider competencies and developing training programs to increase competency levels across all providers. One participant noted that it is not sufficient to simply train people and then expect them to be able to exercise additional core competencies without supervision, evaluation, and continuing education. Several participants reiterated that some of the specialist provider candidate competencies were discussed based on an understanding that these providers already have years of specific medical training including knowledge of MNS disorders. Many participants indicated that health systems would need to change, such as making use of tools such as telemedicine and eHealth technologies for training and supervision.

Many participants commented on referral pathways; who refers to whom and at what level? Pathways can differ from country to country

and depend on the combination of human resources available. There can be both upward referral and downward referral. For example, specialists can refer patients for management at the community level while community health workers can refer patients to the hospital level for specialized care. Several participants noted that patients at remote centers would need appropriate screening and referral early to a specialist, before treatment and care becomes too complicated to be treated at these health care centers.

It was recognized that the candidate core competencies discussed may not necessarily be applicable to all countries' current laws, policies, and practices, but many participants expressed hope that candidate core competencies could be used as benchmarks, contextualized to suit each county.

The section that follows highlights some of the main topics of conversation from the breakout group discussions as reported by the facilitators.

Community/Lay Workers

Adesola Ogunniyi, professor of medicine at the University of Ibadan in Nigeria and group facilitator, noted that providers in this category might be trained to detect probable cases of MNS disorders, provide early interventions, and handle case management including monitoring, follow up, and continuity of care, such as adherence to treatment regimens and recognition of side effects of medicines. Community/lay workers could refer patients to the next level of care. A few breakout group participants discussed that addressing stigma through support groups, raising awareness, and providing psychosocial education might also be important roles for this group of providers. These providers could convey to the community that MNS disorders are true medical conditions. Ogunniyi said many participants discussed that basic prerequisites for a community or lay worker might include literacy and cultural competency.

Community health care workers and health extension workers generally will have a more clinical approach to management of MNS disorders than peer/service users. A few participants noted that, although they might not provide a formal diagnosis, community health workers could do some level of screening. For psychiatric disorders, these providers could detect and recognize psychosis and perform a mental status examination. Community health care workers would likely need supervision from a higher level of provider.

Many participants noted that the role of peer/service users is mainly supportive and not generally clinical, but that basic recognition of MNS diseases is important. Peer/service users have personal experience with MNS disorders and would need support, but not supervision, from the community health care workers. Ogunniyi summarized the relationship of these community agents to patients and other providers in four words: support, engage, integrate, and complement.

Non-Specialized, Non-Prescribing Providers

One issue that was the topic of spirited discussion in this breakout and other breakouts was prescribing, noted Musisi as facilitator of this group. Currently, the legality of a provider to prescribe medications varies by country; in some countries there are no laws governing nurses and thus many nurses will prescribe medications, while in other countries it is illegal for a nurse to prescribe any medications. Pharmacists dispense, and although they do not usually prescribe, a few participants noted that sometimes pharmacists will dispense medications without a prescription. Pharmacists can also give advice on what medicines they are dispensing. Several participants raised questions regarding who could be allowed to prescribe in emergency situations.

Many participants noted that non-specialized, non-prescribing providers could be able to recognize, identify, and refer individuals needing further evaluation for MNS disorders. Pharmacists, for example, might be able to recognize patterns of drug use and be alert to signs of addiction. Social workers interacting with families could recognize signs of alcohol use. One participant suggested that more technical screening might be done by social workers. Several participants indicated that formal diagnoses would need to be made with care by those qualified, as an MNS diagnosis has long-term implications.

Non-specialized, non-prescribing providers work in various treatment settings, for example, in a rehabilitation center or inpatient wards. Social workers and occupational therapists often work in concert, both working toward recovery. One somewhat controversial topic of discussion was the extent to which non-specialists could administer certain specific treatments if they had specialized training, for example, electroconvulsive therapy (ECT). A few participants asked whether administration of such therapies would need to be restricted to medical doctors.

Many participants noted that a potentially important role for social workers could be to demystify and reduce the stigma of MNS disorders

in the community, in particular, epilepsy. Social workers could also support clients through advocacy and human rights protection and through other services such as helping patients in obtaining specialized care.

Non-Specialized Prescribing Providers

Communication between non-specialized prescribing providers and other providers for consultation and management of complex patients is key, whether by physical outreach or by telephone or other technology, noted Sylvia Kaaya, head of the Department of Psychiatry and Mental Health at the Muhimbili University College of Health and Allied Sciences in Tanzania and group facilitator. Like other groups, participants in this group discussed the importance of developing bidirectional referral systems. Such a system could allow efficient referral of complex cases to the next level of care, but once the patient is adequately managed referral back to non-specialists for follow-up and monitoring could occur. Many participants suggested that guidelines could be valuable tools for developing strong relationships between non-specialists and specialists and that these guides might be developed jointly.

Kaaya noted that many participants discussed that disorders in which the outcome is critically dependent upon early intervention (e.g., psychosis, some forms of epilepsy) would need early referral to specialists, with generalists potentially assuming a leadership role in long-term care. Less complex disorders (e.g., depression, substance use disorders, non-refractory epilepsy) might remain in the purview of generalists and only be referred to specialists for crisis management.

Another focus of discussion was task shifting among non-specialized providers, whether prescribing, non-prescribing, or lay workers. Evidence-based psychosocial interventions, for example, might be shifted to community health workers because they can often spend more time with patients and their families, and face less cultural dissonance. Similarly, follow-up care could be shifted to community health workers. However, several participants stressed that such task shifting would require support via regular communication, monitoring, guidance, and other tools developed together with specialists and prescribing generalists. Supportive supervision of non-specialized, non-prescribing providers, particularly at the community level, could be by non-specialized prescribing providers, assisted by specialists.

In all relationships, teamwork was identified as being extremely important for the recognition, treatment, and management of MNS disorders. Participants discussed how a team approach could include joint training of nurses, clinical officers, and medical officers. Participants highlighted the importance of having clarity about roles among the different providers to ensure that nothing is overlooked in patient care. Guidelines and performance indicators could be employed to incentivize, monitor, and ensure quality improvement.

In considering relationships among non-specialized prescribing providers themselves, it was pointed out that prescribing practices are likely to evolve over time. General nurses are performing a significant portion of patient care. Some participants suggested that access to care would benefit from the empowerment of nurses to allow initial prescribing, emergency prescribing, and re-prescribing. This would entail training of nurses by specialists, ensuring appropriate access of nurses to medical or clinical officers for consultation, and developing of a supporting legal framework. A participant pointed out that there is a precedent in prescribing of antiretroviral therapy (ART) where there is training and accreditation for practitioners who generally do not prescribe so they can prescribe ART. It was suggested that in-service training with accreditation of specific nurses to be able to prescribe for MNS disorders would be a more timely process than training and bringing nurse practitioners to a region.

Specialized Providers

Pamela Collins, who served as the group facilitator, said the discussion stressed the importance of defining both immediate needs, including stop-gap measures and long-term aspirations. There is an inherent tension between what to do now and what to aim for over the long term, she said.

Supervisory structure for specialized practitioners is context dependent. In general, specialists can be involved in the administrative and clinical supervision of other specialists in training, as well as general practitioners, clinical officers, and nurses. A psychiatric nurse, for example, might supervise and train other psychiatric nurses as well as general nurses, and might also be involved in the training of clinical officers, social workers, community health workers, and peer/service users. Several participants noted that any of the specialized providers could be responsible for designing, setting up, or running a service. Many participants who spoke agreed there would need to be some

minimum level of experience and expertise for a provider to assume a leadership role, but a leader need not necessarily be a psychiatrist or medical doctor; any person within the framework who has enough experience and knowledge could serve in a leadership role.

One participant suggested that to achieve the goal of providing patients with the best access to care, a tiered system could be used in which specialists use their time to address situations that are beyond the ability of generalists. A specialist spending a lot of time seeing routine cases might not be an effective use of human resources. Specialists could be much more effective if they are influencing the care provided by 10 or 100 medical officers. Similarly, community workers instead of the busy generalists or specialists could address the day-to-day concerns of many patients. Several participants emphasized that for the delivery of psychosocial interventions, community health workers may be better positioned, more culturally in tune with the community, more skilled, and may have more time for the patient.

It was suggested that a challenge to securing buy-in for core competencies is the shift in the type of work specialists may be doing. Several participants noted that many specialists enjoy direct contact with patients, but specialists are finding themselves doing less and less direct care, and more training, developing standards of care and standard operating procedures, and supervision. Some participants expressed concern about taking specialists away from their medical practice to do administrative work and noted a need for an additional group of individuals with expertise in managing health systems in SSA.

THE PROCESS OF UPDATING AND INTEGRATING CORE COMPETENCIES

Lessons Learned from Integrating Mental Health and HIV Care

Integrating new or revised core competencies into the current system is one of the challenges facing mental health care that was highlighted by many participants. Lessons can be learned from training and capacity building in other global health programs, specifically lessons from the HIV/AIDS field. Ruben Sahabo, country director for the International Center for AIDS Care and Treatment Programs (ICAP)[8] in Swaziland,

[8] Established in 2004 by the Mailman School of Public Health at Columbia University, ICAP is funded by the U.S. government under the President's Emergency Plan for AIDS Relief (PEPFAR) and other U.S. government sources, in association with private

shared his experiences in integrating new competencies at the district hospital level in Rwanda. The ICAP mission is to ensure the wellness of families and communities by strengthening health systems around the world. ICAP supports Ministries of Health and other in-country organizations in achieving national AIDS control program goals and other public health goals through central, provincial/district, health facility, and community-level support.

The rationale for the integration of HIV care and mental health care is clear, Sahabo said. MNS disorders are associated with other health conditions. For example, Sahabo noted that there is a high rate of depression among patients with HIV and an increased risk of HIV acquisition in patients with depression. Depression is associated with HIV disease progression and increases mortality. Depression is also associated with poor adherence to antiretroviral treatment, and HIV treatment outcomes are improved when depression is treated.

The first step in the process of updating competencies was to conduct a needs assessment, Sahabo explained. Based on that assessment, an integration framework concept was drafted and used in the advocacy efforts and negotiations with the government of Rwanda and the U.S. government agencies involved in funding, to convince them to shift or allocate HIV funds into mental health programs. This was followed by education of those who would be the trainers of others for integrating mental health into HIV counseling and testing.

A framework was also created for the development and implementation of a national plan for mental health and HIV care integration. As part of the process, a technical working group was established, institutional roles and responsibilities were defined, and a focal person in each institution was designated. The technical working group helped to bring together professionals from both HIV and mental health programs. The group defined the key challenges for integration and conducted a review of HIV and mental health guidelines and other needed tools.

The process for updating competencies also included introduction of quality improvement systems, including the establishment of formal multidisciplinary teams, referral systems, standards of care, and assessment tools. This step was very important, Sahabo said, because

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sponsors. ICAP supports HIV-related programs in 18 countries primarily in Africa (Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Kenya, Lesotho, Malawi, Mali, Mozambique, Nigeria, Rwanda, South Africa, South Sudan, Swaziland, Tanzania, Thailand, Uganda, and Zambia). See http://icap.columbia.edu.

HIV program managers did not see the need for integration, so it was critical to present a win/win approach to interest HIV managers in mental health, and vice versa. Nine district hospitals were then selected as pilot sites for collaborations.

As noted above, a key issue was defining roles and responsibilities, in particular who should lead the integration process. It was decided that the national mental health program was responsible for coordinating and mobilizing resources for training, sensitizing district hospitals, and making sure there was a strategy for creating demand for mental health services at the district level. The HIV program was responsible for lobbying for the review of guidelines; for providing HIV trainers and training resources to mental health professionals; and ensuring that mental health tools are integrated in overall HIV management guidelines. The Ndera Neuropsychiatric Hospital was responsible for educating trainers and for proving mentors to the district hospitals. As a result of this collaborative approach, HIV care providers at district hospitals were trained in mental health, and other health care providers at district hospitals received training on the relevant aspects of HIV mental health.

In 2010, Ndera Neuropsychiatric Hospital began to test for HIV and offer mental health counseling and treatment services. As a result, the Ndera mental health professionals gained the expertise in HIV needed so they could then offer themselves as qualified mentors to other hospitals in the integration of HIV care and mental health. Sahabo shared data showing the progress of mental health screening at one district hospital and how that has translated into patients receiving treatment with antidepressants. Sahabo noted the importance of defining indicators or metrics of mental health integration into HIV care, and promoting accountability among health care providers at the district level.

In closing, Sahabo summarized the key principles for the rollout of HIV and mental health services integration from Ndera Neuropsychiatric Hospital to the district hospitals, and shared his perspective on the lessons learned (see Box 6).

Zimbabwe

Psychiatrist Dixon Chibanda shared his experiences regarding building and sustaining MNS competencies in Zimbabwe. In 2005, there were just 7 psychiatrists in Zimbabwe compared to 72 physicians. Currently there are more than 1,000 general practitioners in private practice in the country and approximately 130 new junior doctors graduating from medical school each year. A survey of 68 randomly

selected new doctors found that only 2 percent were interested in psychiatry as a possible specialty after completing their internship compared to 28 percent who selected internal medicine. When asked what criteria they used to decide which specialty would be best for them, the most frequent responses were professional development, financial remuneration, respect, research opportunities, international travel, and service. In essence, Chibanda suggested that junior doctors believed that psychiatry was not an attractive discipline. The key question is how to interest general practitioners and new doctors in MNS health care. Among the specific objectives defined were building faculty expertise, modernizing undergraduate curriculum, building research capacity, developing community MNS health care services, and modernizing postgraduate training. Chibanda explained that a "marketing mix" of the components was needed to make psychiatry a more attractive specialty, including education, community, and private practice.

BOX 6
Integration of HIV and Mental Health Services

Principles

- Integration allows streamlined care for people with dual diagnoses of HIV and mental health disorders.
- When possible, co-localization of services at the same site can
  - increase adherence to care,
  - improve monitoring of psychiatric and HIV symptoms, and
  - ensure monitoring of response to treatment and adverse reactions to medications.

Lessons Learned

- Integration is most successful when mental health services are incorporated into health policy and the legislative frameworks, and are supported by senior leadership, adequate resources, and clear governance.
- Primary care for mental health for HIV patients needs to be coordinated within a network of services at different levels of care and complemented by a broader health system development.

SOURCE: Adapted from Sahabo presentation, September 5, 2012.

Education

For the education component, he noted that the University of Zimbabwe was fortunate to receive a Medical Education Partnership Initiative (MEPI)[9] award with two sub-grants. One was in mental health, the Improving Mental Health Education and Research Capacity in Zimbabwe (IMHERZ) Program. As a result of MEPI, there are now 11 Master of Medicine psychiatry students, as well as 8 in clinical psychology, 3 Master of Philosophy, 2 Ph.D., and 4 in subspecialties, including child psychiatry. This is a significant achievement for Zimbabwe, Chibanda noted.

Compared to the old system, a variety of MEPI approaches have contributed to the success of this initiative (see Table 5). One approach that Chibanda highlighted was the mentoring triangles, where every student has both a local mentor and an external mentor from one of the partner institutions (e.g., University of Cape Town, Institute of Psychiatry-London, and Harvard University).

Community

The next component in the mix is the "Friendship Bench" project, which has interventions delivered by lay health workers in the community in a task-shifting approach. Since 2006 lay health workers in this program are supervised by senior counselors, who in turn are supervised by clinical psychologists and psychiatrists. The Friendship Bench is a physical bench that is placed within the grounds of the primary health care clinic. The lay health workers are usually elderly ladies—the current mean age is 58 years—who reside in the community, with literacy as the only requirement. The city health department pays the lay health workers, which contributes to the stability, Chibanda said.

Since inception, more than 6,000 individuals and their families have used the Friendship Bench. More than 800 lay health workers work in 33 primary clinics throughout Harare. Chibanda said a cluster randomized controlled trial of this intervention was planned to begin in November 2012.

[9] MEPI supports medical education and research at SSA institutions through grant awards. MEPI is coordinated by the Office of the U.S. Global AIDS Coordinator and supported by the National Institutes of Health and the Health Resources and Services Administration. See http://www.mepinetwork.org.

TABLE 5 Comparison of Prior Educational Approach to the Current MEPI Approach

Current Approach (MEPI)	**Previous Approach**
Mentoring triangles	Group supervision
Buddy system	None
Mental Health Resource center	None
Balance between research, clinical work, and service	Purely clinical
Community program	No community program
Local mentor/non-psychiatrists	No mentoring
Invite other specialties	Restricted to psychiatry
E-learning	Textbook approach
Master classes/invite non-psychiatrists	Departmental only
Fellowships	No financial incentive

These changes from the previous approach to the current Friendship Bench approach have resulted in a self-sustainable successful program. Chibanda pointed out that using clinic nurses to deliver interventions was not well received, and having interventions delivered by lay health workers who are part of the community has been better received. In addition, the approach works better when the lay health workers are carrying out a variety of health tasks within the community, rather than focusing solely on MNS disorders. For example, tuberculosis surveillance, treatment strategies, antiretroviral therapy adherence, and immunization can all be improved by incorporating a MNS health care component. Perception is important, and Chibanda noted that "Friendship Bench" was more accepted than the old name "Community Mental Health Initiative."

Private Practice

Chibanda said that private practice generally has been left out of efforts to develop capacity for MNS health care in the country. Now, Zimbabwe has a "Therapy Support Group" that consists of 34 MNS health professionals and general practitioners in private practice. These providers are encouraged to attend master classes in MNS disorders, for which they earn continued medical education points that go toward

maintaining their registration. In the current program, professionals no longer only see patients in private practices, but instead also support community programs and provide supervision to community lay workers.

In summary, Chibanda said, Zimbabwe has adopted a more holistic approach to MNS issues and is increasingly using modern technology to teach and deliver interventions. Regular visiting lecturers and an exchange program help to maintain interests of students and professionals. He added that as more students travel on exchange programs they are less likely to permanently leave when they finish their education. Encouraging and funding regular travel and providing opportunities to link with other specialties is important.

Ethiopia

Tedla Wolde-Giorgis, mental health advisor to the Federal Ministry of Health in Ethiopia, described the released Ethiopian National Mental Health Strategy for 2012/2013 to 2015/2016.[10]

This strategy will leverage the already existing health system while integrating MNS health care at all levels. All health care professionals will receive training to provide care appropriate to their role within the health care system. The system will be decentralized, but Wolde-Giorgis stressed it will be fully integrated and will not result in new silos.

The Ethiopian health system consists of the Federal Ministry of Health, Regional Health Bureaus, zonal health offices, district health centers, local health extension posts, and community health extension workers. A new approach to community engagement has been developed, referred to as the "health development army," Wolde-Giorgis explained. "Model families" are recruited for the health army and, with the support of paid health extension workers, help to disseminate information and influence healthy habits in other families throughout the community. Health extension workers train model families in health-related activities. The model families are then attached to five other households. Their role is to encourage and to support these five families to become models as well.

Wolde-Giorgis described the National Mental Health Strategy as one of contextual integration. For example, similar to how general nurses

[10] See http://www.globalmentalhealth.org/sites/default/files/Ethiopia%20MH%20Strategy.pdf.

have learned to provide antiretroviral therapy to HIV/AIDS patients, they can also be trained to provide psychotropic medications. There are HIV case managers who are already trained in basic counseling skills and do AIDS-related counseling such as ART adherence counseling. Their expertise can be leveraged and their competency expanded to be able to identify MNS disorders and provide appropriate care, referral, and follow-up. Wolde-Giorgis stressed that this is not the introduction of a whole different system, but building on existing infrastructure.

One challenge to progress is how best to capitalize on minimal financial resources allocated for MNS disorders. Most of the funds for the MDGs are allocated to the designated priorities such as malaria, tuberculosis, and family planning. Wolde-Giorgis suggested that this will require integration of care for MNS disorders into the already existing system through task sharing. This process will meet resistance because providers are already overwhelmed and are concerned about "task dumping."

There are different levels of competence, Wolde-Giorgis noted. For example, informational competence is where one has knowledge about a topic area; interpersonal competence is where one is able to communicate effectively and engage the patient, or may be able to communicate with external organizations; and cultural competence is where one has an understanding of the community. There is also interventional competence, in other words, can you go out and work with patients? Can you intervene?

Wolde-Giorgis emphasized that the acquisition of core competencies cannot take place in one training session. Training is a process that requires continual reinforcement to ensure providers reach interventional competence. This can be a costly venture, he acknowledged, and finding balance between obtaining those competencies and providing supervision, coaching, mentoring, and in-service training is important. For example, the Ethiopian National Mental Health Strategy specifically discusses periodic supervision, mentoring, and coaching as important for attaining and retaining core competencies. The strategy also identifies different functions, core requirements, and competencies for different providers.

Uganda

Sheila Ndyanabangi, national coordinator of mental health services at the Ministry of Health in Uganda, focused her comments on strengthening human resources for MNS disorders in primary care. In

2002, upon realizing the low numbers of professionals trained in MNS disorders and the lack of MNS care at the primary health care level, the Ministry of Health started an in-service training program. At that time, MNS in-service training was done centrally, with the health workers coming from their districts to the tertiary hospital for lectures and some practical sessions, however there was no follow-up or supervision of trainees. Many of the trainees were not frontline prescribers. In addition, training was led by experts who used complex terminology. Therefore many of the health workers did not or could not practice what they had learned when they went back to their districts. Since then, many changes have been made and the program continues to be evaluated and improved. Now, training about MNS disorders is provided as part of pre-service training for all health workers.

Ndyanabangi highlighted some of the lessons learned and achievements. Among the approaches that worked well was the development of training materials with a cross-section of providers, including psychiatrists, psychologists, social workers, psychiatric clinical officers, and nurses. Another important component, she explained, was the inclusion of trainees for whom the materials were being developed, which ensured the relevance and appropriateness of language and expected competencies. The language in the manuals was simplified to help demystify neuropsychiatric terminology and training was concentrated on common conditions that are managed in primary care. Methods for adult learning were used, including group discussions, role play, and practical sessions. The training also included providers, including psychiatric clinical officers and the nurses, who would carry out future supervision of the trainees. This helped to bridge the gap between primary care and specialists. In addition, formation of networks for follow-up, referrals, supervision, and mentoring are encouraged.

The training process now includes orientation of district political leaders, the district health management team, the chief administrative officers of the district, the health managers of the health facilities, and others in key sectors such as education, social development, religion, and law enforcement, to provide supportive mechanisms for change. Such mechanisms include, for example, recruitment of the appropriate providers, a referral system, access to essential medicines, and resettlement and reintegration of patients after referral. The process also provides for supervision and mentoring on a monthly basis, by either regional or district-based mental health professionals. This helps to build the confidence of trainees. In addition, the use of modern technology is

encouraged, such as consultation by mobile telephone with expert trainers.

Achievements

Ndyanabangi noted that this training system has served to achieve political commitment and awareness of stakeholders about MNS disorders, which are critical for successful integration of MNS disorders into primary care. MNS health care is for everybody, she said, and is not just about patients, but the whole community.

In practical terms, the training system has led to increased attendance and care, as shown by Uganda's health management information system. For example, between 2009 and 2011, there was an increase of 17,000 more patient visits at the primary care level. The success of the training program has also helped attract more general health workers to train as mental health professionals, Ndyanabangi said, and many now view MNS health care as a good area in which to specialize.

Moving Forward

Ndyanabangi stressed that to engage policy makers and the public, it is necessary to raise awareness of the importance of mental health in day-to-day life, and not focus only on the treatment of MNS disorders. Linking MNS health care to popular issues such as education, poverty eradication, sexual- and gender-based violence, conflict and disaster, and alcohol and substance abuse helps to make treating MNS disorders relevant to the general population.

Ndyanabangi highlighted the importance of mid-level providers, such as psychiatric clinical officers, to bridge the gap between specialists and general health care workers. Investment in comprehensive processes to secure buy-in and support of MNS human resource training, starting with a policy change at the national level, integration of MNS guidelines in Ministry of Health guidelines, and orientation of district structures, will be important for the success of any effort.

Finally, Ndyanabangi stressed that competencies for leadership, advocacy, and resource mobilization would need to be incorporated into all training programs to be able to successfully integrate MNS into general care. Most training programs are about the "what" (i.e., the knowledge), but little about the "how." We need to concentrate it on the "how," she suggested.

Rwanda

Jeanne d'Arc Dusabeyezu, director of the Unit of Drug Abuse Prevention and Treatment at the Ministry of Health, Rwanda, explained that much of the MNS health care focus in the country is focused on psychological suffering and emotional distress associated with the Rwandan genocide. In the after-genocide period, Dusabeyezu explained, people are facing posttraumatic stress disorder (PTSD), severe depression, and psychosis along with other conditions and are in need individual medical psychological interventions and community shelters.

Dusabeyezu explained that MNS health care operational services have been established at several district hospitals and at the community level. Regular refresher sessions are held for specialists and nurses who work in district hospitals and referral hospitals. General medical doctors and general nurses from district hospitals and health centers are trained in MNS disorders twice yearly. Community health workers who deal with non-communicable diseases are now being trained in MNS disorders. In addition, members of some genocide survivor associations and other associations are being trained in basic management of PTSD or emotional crisis and Red Cross volunteers are given the appropriate training module on PTSD management.

As noted by others, Dusabeyezu said there was some resistance among non-specialist health care providers toward integrating MNS health care into general care. However, as the training progressed, there was increased understanding and more active involvement in the management of MNS programs. Referral of MNS cases also improved. For example, a patient who is referred to the specialty hospital for the management of a psychological crisis can now be referred back to the district hospital that has a psychiatric nurse, and follow-up care can be provided at the local level. Dusabeyezu noted growing demand for MNS disorders training by general nurses working at the health center level and their respective hospital managers.

As a sign of the success of the training programs, Dusabeyezu said there has been better recognition and management of MNS disorders as well as a remarkable involvement by non-specialized professionals. The number of people accessing MNS health services has improved, in part because many can now seek services near their home. In addition, everyone in Rwanda has "Mutual Health Insurance" that covers the care they receive at all levels.

Panel Overview

Speakers highlight significant challenges but also successful programs concerning the integration of services for patients with MNS disorders (see Box 7).

PERSPECTIVES ON NEXT STEPS

In the final session, the workshop co-chairs and participants discussed practical next steps for dissemination and implementation of the candidate core competencies identified at the workshop and identified potential partners to continue efforts around this topic.

Collins suggested integrating what was discussed at the workshop with larger ongoing efforts, such as MEPI discussed earlier, which is focused on designing competencies for medical education. She reiterated the points made by Chibanda regarding research as a way of making training exciting and interesting. She noted that MEPI provides opportunities for research exchange programs, allowing investigators to have mentors outside of their countries.

NIMH is investing in building research capacity through a program of collaborative hubs for research in international mental health, she said. How can these research capacity-building platforms be used to strengthen what countries are doing regarding medical education? For example, can they provide opportunities for trainees to become involved in research locally? Collins also raised the question of how professional associations could be engaged in issues of MNS human resources and competencies. As noted by many participants, a critical key for buy-in is engaging stakeholders at all levels.

Musisi raised several issues for consideration. The first is the importance of engaging governments to consider the development of MNS health policies, and to improve funding for the integration of MNS health services into general health care and for training programs. Musisi next suggested that overcoming the stigma associated with MNS disorders and the care of patients would be important for long-term change. Identification of allies in training, collaboration, and service delivery could be one mechanism for reducing stigma. Another concern is the lack of career paths for many providers. Musisi left the audience with this question: How can training be revised to offer degrees and career groups, and thereby retain providers?

BOX 7
Challenges and Opportunities for Integration

Challenges

- Establishment of a need for integration
- Attracting individuals into MNS care specialties
- Sustaining providers within the region once trained
- Lack of defined roles and responsibilities around integration
- Minimal human and financial resources for capacity building
- Overwhelmed providers

Opportunities

- International funding for development of training and research opportunities
- Greater willingness of community/lay workers to be involved in treatment and care initiatives
- Modern technology to deliver training and interventions
- Examples of successful programs integrating MNS disorder treatment and care into the general health care system
- Development of candidate core competencies for other diseases (e.g., HIV) that can be leveraged
- Development of training materials by a cross-section of providers
- Increasing engagement of policy makers and the public

SOURCE: Adapted from Sahabo, Chibanda, Wolde-Giorgis, Ndyanabangi, and Dusabeyezu presentations.

Patel reflected on the workshop discussions, including his experiences as a member of two breakout groups. He noted that a large portion of the discussion focused on how the numerous human resource categories were classified, organized, and defined. Many discussions focused on prescription practices, country differences, and relationship roles. The discussion of candidate competencies focused primarily on clinical aspects, but Patel noted the importance of system level competencies, such as supervisory skills. Teaching and supervision do not always come naturally and are skills to be learned, much as surgical skills are learned. Patel stressed the importance of recognizing that specialists and other professionals high in the system would benefit from competencies in capacity building, supervision, advocacy, and leadership. Patel asserted that system level competencies would need to be considered separately from clinical competencies.

When considering candidate competencies for MNS disorders across SSA, Patel suggested it is important to consider that resource levels are highly variable, even within an overall low resource context. A large number of participants noted during the workshop that in many areas there are no health professionals trained in MNS disorders. Patel emphasized that a full, multi-level human resource framework laid out during the workshop might be non-existent in some places, and that the candidate competencies would need to be adapted relative to the most highly trained provider available.

This is a work in progress, Patel emphasized, and he offered several guiding principles to consider going forward:

- Care of MNS disorders is guided by a framework of collaborative stepped care that implies a team effort of different providers, with different levels of competencies, delivering different kinds of interventions, according to their complexity and the needs of individual patients.
- The purpose of developing candidate core competencies is empowerment, giving MNS care providers more skills to make them more effective and efficient, within a collaborative framework of active support and supervision that includes incentives and career paths. Additional tasks are not being "dumped" on the person at the next lower level; rather, they are becoming fully integrated within a system of relationships.
- A key feature of developing candidate core competencies would be finding a common language to communicate across the many different efforts geared toward improving access to MNS health care. Competencies are a uniting feature of these diverse programs and will likely have similarities with other programs and disease areas.

Practical Considerations for Moving Forward

Numerous individual comments were made during the final discussion regarding how best to move forward with the development and integration of candidate core competencies. Many of these final comments reiterated points made by participants throughout the workshop. The following list highlights recurring topics and is provided here as part of the factual summary of the workshop. These should not be construed as reflecting any consensus of the workshop participants or any endorsement by the Forum or the IOM.

- **MNS health care as a complement of general health.** Many participants noted that linking the treatment and care of patients with MNS disorders to general health and to improved outcomes for other diseases (e.g., HIV) might facilitate integration of MNS health care into the larger health care system, encourage development of MNS health policies and legislation and increase funding for MNS health care.
- **Community-driven public education.** Many participants stressed the need for education about MNS disorders geared toward the public. Increased knowledge about the causes of MNS disorders might reduce stigma and misperceptions. A few participants noted that peer-to-peer education driven from the community level might be more successful because community members would be more familiar with cultural differences.
- **Training and career paths.** Many participants suggested that training of mid-level providers (e.g., clinical officers) be revised to offer degrees and career growth. One participant noted that incentives, such as research opportunities and degrees, might also improve retention of providers. While training would be a critical component of any next steps around developing additional candidate core competencies, many participants noted that mentoring, post-training evaluations, and continual education are just as important as initial provider trainings.
- **System-level competencies.** Many participants noted that training in supervision, teaching, leadership, and advocacy is lacking at all curriculum levels. Several participants noted that increasing training in these and other areas, such as resource mobilization and fundraising, might lead to greater ease of integration of MNS care into general health care.
- **Information technology.** Several participants noted that nurses and medical officers are sometimes put in challenging situations where access to support or other health professionals is limited. With new technologies, support might no longer require that other providers be physically present; instead, remote consultations with experts can take place via telemedicine. These new avenues of engagement might also deliver increased assistance to providers in rural areas or other remote locations. Technology might also be used to enhance training and mentoring.

- **Lessons learned from other areas.** Throughout the workshop, examples of integration of MNS health care into established health systems and approaches to training and engagement were discussed. Many participants stressed the importance of examining successful sustained efforts around candidate core competencies, integration, training, and continuing education. One participant noted that efforts to reduce the treatment gap for MNS disorders need not start from "square one."
- **Collaboration and engagement.** A large number of participants indicated that developing partnerships with a diverse array of stakeholders will be critical for improving care for MNS disorders across SSA. Participants suggested that partners with the technical expertise to help further develop the candidate core competencies into a plan of action would be valuable. In addition, many participants indicated that collaborations might focus on governments and NGOs that can help identify financial resources, engage policy makers, and create collaborations across disease areas with shared competencies.
- **Evidence-based research.** Many participants noted that a challenge to securing government, private-sector, and public support for MNS-related initiatives is the lack of evidence-based information on the burden of MNS disorders in many SSA countries. Throughout the discussions, participants urged investments in research to extend the evidence base for task shifting and task sharing as an approach to the provision of services for patients with MNS disorders. One participants noted that the treatment gap for MNS disorders might be reduced through a greater understanding of the evidence base for integrating MNS health services into other platforms of care.

Closing Remarks

Ndyanabangi of the Uganda Ministry of Health suggested that upon returning home, participants review their different approaches to capacity building and look for potential mechanisms to improve on programs that are delivering competencies needed for MNS health workers. Collins of NIMH stressed the need for accountability, both for governments to be accountable in terms of what they do for patients with MNS disorders, and for the workshop participants to be accountable for taking this process forward.

Alan Leshner, chief executive officer at the American Association for the Advancement of Science and workshop planning committee member, encouraged participants to use the workshop discussions and candidate core competencies as tools, adapting them for use in their own local policy-making systems.

A

Summary of Candidate Core Competencies[1]

NOTE: ALL signifies every provider in a particular category. See Table 1 in the main report (page 19) for definitions of acronyms.

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
Screening/Identification (SI)					
SI.1 Demonstrates awareness of common signs and symptoms	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.2 Recognizes the potential for risk to self and others	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

[1] This table presents candidate core competencies discussed by one or more workshop participants. During the workshop, all participants engaged in active discussions of candidate competencies. In some cases, participants expressed differing opinions about whether a particular competency could be useful and included in the list. However, because this is a summary of workshop comments and not meant to provide consensus recommendations, workshop rapporteurs endeavored to include all candidate core competencies discussed by workshop participants across providers and disorders. This table and its content should be attributed to the rapporteurs of this summary as informed by the workshop.

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
SI.3 Demonstrates basic knowledge of causes	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.4 Provides the patient and community with awareness and/or education	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.5 Demonstrates cultural competence	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.6 Demonstrates knowledge of other mental, neurological, and substance use (MNS) disorders	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
SI.7 Demonstrates the ability to screen for and use screening tools	Community/Lay Worker	ALL	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW, OT	SW, OT		SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.8 Demonstrates knowledge and skills in taking patient history	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.9 Demonstrates the ability to conduct a mental status exam	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW, OT		OT	SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
SI.10 Recognizes patients who are relapsing and require inpatient care	Community/Lay Worker			CHW	
	Non-specialized, Non-prescribing			SW	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
SI.11 Demonstrates knowledge and skills to assess patients and determine level of care needed	Community/Lay Worker				
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	PRN, NE, PS	ALL
SI.12 Identifies cases during home visits	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing				
	Specialized				
SI.13 Demonstrates knowledge and skills to identify high-risk patients or treatment complications (e.g., children, breastfeeding women)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS
SI.14 Demonstrates knowledge and skills to assess patients at risk of relapse	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	CO, MD	CO, MD	CO, MD	CO, MD
	Specialized	PS	PS	PRN, NE, PS	PY, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
SI.15 Demonstrates knowledge and skills to conduct a physical exam	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS
SI.16 Recognizes primary manifest-tations of other disorders (e.g., conversion disorder, anxiety)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	NE, PS	NE, PS	NE, PS	NE, PS
SI.17 Recognizes comorbidities that cause secondary epilepsy	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			ALL	
	Specialized			PRN, NE, PS	

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
SI.18 Recognizes physical features that might indicate an underlying condition other than epilepsy (e.g., skin lesions, deformities)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			CO, MD	
	Specialized			NE	
SI.19 Recognizes serious neurological disorders that may be present with seizures or epilepsy (e.g., central nervous system infection, stroke, tumor)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			CO, MD	
	Specialized			NE, PS	
Formal Diagnosis/Referral (DR)					
DR.1 Demonstrates knowledge of when to refer to next level of care/other provider/ specialist	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
DR.2 Demonstrates knowledge of potential providers for specialized care within the community	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
DR.3 Demonstrates skills in assessment of relative levels of social, cognitive, and physical functioning	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
DR.4 Demonstrates knowledge of required information for effective referral	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
DR.5 Demonstrates skills in using various assessment tools	Community/Lay Worker			CHW	
	Non-specialized, Non-prescribing		OT	OT	
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
DR.6 Demonstrates knowledge and skills in diagnosis of psychosocial factors related to condition	Community/Lay Worker				
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, PY, PS	PRN, PY, PS	ALL	PRN, PY, PS
DR.7 Demonstrates an understanding of and ability to apply contextually appropriate diagnostic systems (e.g., DSM, ICD)[2]	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
DR.8 Demonstrates knowledge and skills to make a formal diagnosis and formulation of differential diagnosis	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

[2] DSM: Diagnostic and Statistical Manual of Mental Disorders; ICD: International Statistical Classification of Diseases and Related Health Problems.

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
DR.9 Demonstrates ability to determine severity level	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
DR.10 Demonstrates ability to make a diagnosis according to an algorithm (not considered a clinical diagnosis)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
DR.11 Demonstrates ability to interpret laboratory results	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	MD	MD	MD	MD
	Specialized	NE, PS	NE, PS	NE, PS	NE, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
DR.12 Demonstrates knowledge about status epilepticus and other types of seizures	Community/Lay Worker			CHW	
	Non-specialized, Non-prescribing			OT	
	Non-specialized, Prescribing			ALL	
	Specialized			ALL	
DR.13 Demonstrates ability to diagnose alcohol use disorders and related problems	Community/Lay Worker				
	Non-specialized, Non-prescribing				SW
	Non-specialized, Prescribing				ALL
	Specialized				ALL
DR.14 Demonstrates psychological interview skills	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	PRN, PY, PS	PRN, PY, PS	ALL	PRN, PY, PS
DR.15 Demonstrates ability to conduct a neuro-psychiatric evaluation	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	PY, PS	PY, PS	PY, NE, PS	PY, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
DR.16 Demonstrates knowledge of indications when electro-encephalogram (EEG) and/or neuroimaging is needed for epilepsy	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			MD	
	Specialized			NE, PS	
DR.17 Demonstrates ability to interpret EEG and neuroimaging reports	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			MD	
	Specialized			NE, PS	
Treatment/Care (TC)					
TC.1 Provides support for patients and families while in treatment and care	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.2 Identifies and assists patients and families in overcoming barriers to successful treatment and recovery (e.g., adherence, stigma, finances, accessibility, access to social support)	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.3 Demonstrates ability to monitor mental status	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.4 Demonstrates knowledge of how to offer emergency first aid	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.5 Initiates and/or participates in community-based treatment, care, and/or prevention programs	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.6 Demonstrates knowledge of treatment and care resources in the community	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.7 Promotes mental health literacy (e.g., to minimize impact of stigma and discrimi-nation)	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.8 Commu-nicates to the public about MNS disorders	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.9 Monitors for adherence to and/or side effects of medication	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.10 Practices good therapeutic patient interactions (e.g., communication, relationship, attitude)	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.11 Provides links between patients and community resources	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.12 Identifies available resources to support patients (e.g., rehabilitation, medication supplies)	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.13 Promotes activities that aim to raise awareness and improve the uptake of interventions and the use of services	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.14 Protects patients and identifies vulnerabilities (e.g., human rights)	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.15 Demonstrates respect, compassion, and respon-siveness to patient needs	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.16 Demonstrates knowledge and skills to use information technology to improve treatment and care	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	ALL	ALL	ALL	ALL
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.17 Demonstrates ability in general counseling skills	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.18 Demonstrates ability to administer brief interventions	Community/Lay Worker	ALL			ALL
	Non-specialized, Non-prescribing	SW	SW		SW
	Non-specialized, Prescribing	ALL	ALL		ALL
	Specialized	ALL	ALL		ALL
TC.19 Demonstrates ability to select appropriate treatment based on an understanding of diagnosis	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.20 Initiates, organizes, and/or facilitates self-help or support groups	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, PY	PRN, PY	PRN, PY	PRN, PY

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.21 Provides brief advice on symptom management	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.22 Demonstrates skills to provide psychosocial interventions	Community/Lay Worker	CHW	CHW		
	Non-specialized, Non-prescribing	SW, OT	SW, OT		OT
	Non-specialized, Prescribing	ALL	ALL		ALL
	Specialized	ALL	ALL	PRN, PY	ALL
TC.23 Conducts relapse prevention programs	Community/Lay Worker	CHW	CHW		CHW
	Non-specialized, Non-prescribing	SW	SW		SW
	Non-specialized, Prescribing	CO, RN	CO, RN		CO, RN
	Specialized	PY	PY		PY
TC.24 Demonstrates skills in home visitation	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	CO	CO	CO	CO
	Specialized				

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.25 Assists with adjustments following discharge	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	CO, RN	CO, RN	CO, RN	CO, RN
	Specialized				
TC.26 Demonstrates competence in the delivery of evidence-based therapies	Community/Lay Worker	CHW	CHW	CHW	CHE
	Non-specialized, Non-prescribing	SW	SW		SW
	Non-specialized, Prescribing	CO	CO	CO, MD	CO
	Specialized	PY, PS	PY, PS	PY, NE, PS	PY, PS
TC.27 Advises patients and families on taking medications properly	Community/Lay Worker				
	Non-specialized, Non-prescribing	PH, SW	PH, SW	PH, SW	PH, SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.28 Demonstrates knowledge of and ability to apply relevant legislation and policies and access to appropriate services	Community/Lay Worker				
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.29 Demonstrates knowledge of drug interactions	Community/Lay Worker				
	Non-specialized, Non-prescribing	PH, SW	PH, SW	PH, SW	PH, SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS
TC.30 Provides appropriate forms of therapy (e.g., individual group, family, marital)	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing	CO	CO	CO	CO
	Specialized	PY	PY	PY	PY
TC.31 Demonstrates knowledge of community-based rehabilitation approaches	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized				

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.32 Educates patients about side effects, contra-indications, etc.	Community/Lay Worker				
	Non-specialized, Non-prescribing	PH	PH	PH	PH
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS
TC.33 Demonstrates skills to provide long-term support/care	Community/Lay Worker				
	Non-specialized, Non-prescribing	OT	OT	OT	OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, PY, PS	PRN, PS	PRN, PS	PRN, PY, PS
TC.34 Reports information to relevant health management systems	Community/Lay Worker				
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.35 Demonstrates knowledge and skills to dispense medications	Community/Lay Worker				
	Non-specialized, Non-prescribing	PH	PH	PH	PH
	Non-specialized, Prescribing	MD	MD	MD	MD
	Specialized	NE, PS	NE, PS	NE, PS	NE, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.36 Assists patients with access to other providers and helps coordinate efforts	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.37 Provides advice on symptom management	Community/Lay Worker	CHW	CHW	CHW	CHW
	Non-specialized, Non-prescribing	SW	SW	SW	SW
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, PY, PS	PRN, PY, PS	ALL	PRN, PY, PS
TC.38 Documents medical records	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.39 Demonstrates knowledge and skills to consult with other providers in the treatment/care team	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.40 Demonstrates knowledge and skills to provide proactive follow-up and monitors outcomes of care	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.41 Demonstrates knowledge of standard drug regimens	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL
TC.42 Provides mentoring and support to other health care providers	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	ALL	ALL	ALL	ALL

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.43 Demonstrates knowledge and skills to prescribe, monitor, and adjust medication per patient response and in consultation with other providers	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	NE, PS	PRN, NE, PS
TC.44 Demonstrates ability to offer work, social, and recreational activities in a welcoming atmosphere	Community/Lay Worker	ALL	ALL	ALL	ALL
	Non-specialized, Non-prescribing	SW, OT	SW, OT	SW, OT	SW, OT
	Non-specialized, Prescribing				
	Specialized				
TC.45 Demonstrates skills to provide structured clinical interventions	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL		ALL
	Specialized	PRN, PS	PRN, PS		PRN, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.46 Manages acute hospital-ization of patients with severe conditions pending review/ transfer to mental health specialist	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	CO, MD	CO, MD	CO, MD	CO, MD
	Specialized	ALL	ALL	NE, PS	ALL
TC.47 Demonstrates knowledge and skills to treat comorbidities according to level of training	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS	PRN, NE, PS
TC.48 Provides team members with skills in assessment, treatment, and follow-up	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	CO, MD	CO, MD	CO, MD	CO, MD
	Specialized	PY, PS	PY, PS	PY, NE, PS	PY, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.49 Screens for adverse events and allergies	Community/Lay Worker				
	Non-specialized, Non-prescribing	PH	PH	PH	PH
	Non-specialized, Prescribing	ALL	ALL	ALL	ALL
	Specialized			NE, PS	
TC.50 Demonstrates knowledge and skills to supervise treatment and care/follow-up care by other providers	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	CO, MD	CO, MD	CO, MD	CO, MD
	Specialized	PY, NE, PS	PY, NE, PS	PY, NE, PS	PY, NE, PS
TC.51 Manages inpatient treatment and care	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	CO, MD	CO, MD	CO, MD	CO, MD
	Specialized	ALL	ALL	ALL	ALL
TC.52 Provides follow-up and referral for patients with active epilepsy; recognizes status epilepticus and referral as an emergency	Community/Lay Worker			ALL	
	Non-specialized, Non-prescribing			SW, OT	
	Non-specialized, Prescribing			CO, MD	
	Specialized			NE, PS	

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.53 Demonstrates mental health promotion skills to prevent depression	Community/Lay Worker	CHW			
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing	ALL			
	Specialized	ALL			
TC.54 Demonstrates knowledge and skills to provide medication management for complex cases, including second- and third-line medications	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			MD	
	Specialized	PRN, NE, PS	PS	NE, PS	PS
TC.55 Supervises complex regimens requiring more than one drug	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			MD	
	Specialized	NE, PS	NE, PS	NE, PS	NE, PS
TC.56 Administers long-term interventions	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	PY, PS	PY, PS	NE	PY, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.57 Demonstrates knowledge and skills to provide structured psychosocial interventions, individual and group (e.g., interpersonal psycho-therapy, CBT, PST)[3]	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	PY, PS	PY, PS		PY, PS
TC.58 Defines and initiates a treatment plan	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			CO, MD	
	Specialized	PY, NE, PS	PY, NE, PS	NE, PS	PY, NE, PS

[3] CBT = cognitive behavioral therapy; PST = problem solving therapy.

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.59 Demonstrates knowledge and skills to apply various modalities of psycho-therapy to treat patients	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	PY, PS	PY, PS	PY, PS	PY, PS
TC.60 Recognizes when to consult prescriber about appropriate-ness of prescription (e.g., wrong dose, critical drug interaction)	Community/Lay Worker				
	Non-specialized, Non-prescribing	PH	PH	PH	PH
	Non-specialized, Prescribing				
	Specialized				
TC.61 Develops and administers a rehabilitation plan in consultation with primary care provider	Community/Lay Worker				
	Non-specialized, Non-prescribing	OT	OT	OT	OT
	Non-specialized, Prescribing				
	Specialized				

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.62 Demonstrates skills to monitor and assist in rehabilitation	Community/Lay Worker				
	Non-specialized, Non-prescribing	OT	OT	OT	OT
	Non-specialized, Prescribing				
	Specialized				
TC.63 Provides supervision of complex cases, including those with neurological comorbidities	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	NE, PS	NE, PS	NE, PS	NE, PS
TC.64 Manages status epilepticus	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			ALL	
	Specialized			NE, PS	
TC.65 Demonstrates knowledge and skills to treat serious neurological disorders that may present with seizures or epilepsy (e.g., CNS infection, stroke, tumor)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			MD	
	Specialized			NE, PS	

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.66 Administers modified electro-convulsive therapy (ECT)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized			PRN, NE, PS	
TC.67 Demonstrates knowledge of drug dosing for children and adults, titration (both first-line drugs and adjuncts)	Community/Lay Worker				
	Non-specialized, Non-prescribing			PH	
	Non-specialized, Prescribing			ALL	
	Specialized			NE, PS	
TC.68 Demonstrates knowledge and skills in treatment of cases complicated by infectious and non-communicable diseases (e.g., HIV/AIDS)	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	NE, PS	NE, PS	NE, PS	NE, PS

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.69 Demonstrates knowledge and skills to provide a full range of psychological therapies	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized	PY	PY		PY
TC.70 Demonstrates knowledge of when to initiate treatment if a comorbid neurological condition exists	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			CO, MD	
	Specialized	NE	NE	NE	
TC.71 Demonstrates knowledge and skills for the selection of patients for surgical management	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized			NE	

Candidate Core Competency	Provider Types	Condition			
		Depression	Psychosis	Epilepsy	Alcohol Use
TC.72 Demonstrates skills to provide social intervention —addressing social problems that led to/are maintaining depression	Community/Lay Worker				
	Non-specialized, Non-prescribing	SW			
	Non-specialized, Prescribing				
	Specialized				
TC.73 Demonstrates knowledge and skills to manage refractory epilepsy	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized			NE	
TC.74 Demonstrates knowledge and skills in management of psychiatric comorbidities	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing				
	Specialized			PS, NE	
TC.75 Demonstrates knowledge and skills in management of pseudo-seizures	Community/Lay Worker				
	Non-specialized, Non-prescribing				
	Non-specialized, Prescribing			MD	
	Specialized			PS, NE	

B

Candidate Core Competencies

The expanded candidate core competencies are available at www.iom.edu/candidatecompetenciesappendix.

C

Provider Definitions and Relationship Roles

COMMUNITY/LAY WORKERS

Peer/service user (PR): A peer/service user can be a family member, friend, or other patient who is either being treated for a similar condition or has a relationship with the primary patient. Patients who use health care services in the community can provide support to others, share personal experiences, and participate in self-help and mutual aid activities. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment.

Community health care worker/health extension worker (CHW): Community health workers and health extension workers provide health education, referral and follow-up, case management, and basic preventive health care and home visiting services to specific communities. They provide support and assistance to individuals and caregivers in navigating the health and social services system. They foster a foundation for sharing information, providing mutual support and a sense of belonging for patients, families, and providers. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. They reduce caregiver burden and can encourage the involvement of caregivers in treatment plans. They can both refer and receive patients.

NON-SPECIALIZED, NON-PRESCRIBING PRACTITIONERS

Pharmacist (PH): Pharmacists store, preserve, compound, and dispense medicines. They advise patients and family members on the proper use and adverse effects of drugs and medicines. Pharmacists dispense prescription medications according to the direction of medical doctors and other health professionals. They contribute to researching, testing, preparing, prescribing, and monitoring medicinal therapies for optimizing human health. They communicate about drug procurement or shortage issues. They may educate other providers about new drugs. They may provide assistance in accessing and coordinating with other health care providers.

Social worker (SW): A social worker is a professional who plans and provides counseling, skills development, crisis intervention, and mediation services in individual, family, or group settings to assist clients' function within the limitations of their environment, improve their relationships, and solve personal and family problems. They may serve as counselors for a large array of issues and in a variety of settings. They may also serve as case managers. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. They may consult and/or liaise with general practitioners to deliver primary interventions (e.g., drug supply, organization of community health services) and with other providers (e.g., psychiatric nurses, occupational therapists, psychologists).

> *Psychosocial care provider (subcategory)*: Through good communication and assessment skills, psychosocial care providers support patients on psychological, social, and spiritual levels. They play a unique role in supporting patients through dialogue in order to understand how patients view themselves as individuals, what is important to them, and how their relationship with others may affect their treatment. Psychosocial care providers build a rapport with patients and help other providers develop a clinical relationship with patients and their families.

Occupational therapist (OT): An occupational therapist is a professional who works with patients to help them achieve a fulfilled and satis-

fied state in life. An occupational therapist utilizes purposeful activity or interventions designed to achieve functional outcomes that promote health, prevent injury or disability, and develop, improve, sustain, or restore the highest possible level of independence. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. They may work exclusively with individuals in a particular age group or with particular disabilities. Specific therapies may include facilitating the use of the hands, promoting skills for listening and following directions, fostering social skills, or teaching dressing and grooming skills. Occupational therapists may also serve as case managers. They can consult and/or liaise with other providers (e.g., general practitioners, psychiatric nurses, psychologists). They may provide assistance in accessing and coordinating with other health care providers.

NON-SPECIALIZED PRESCRIBING PRACTITIONERS

Clinical officer (CO): A clinical officer is a paramedical practitioner who provides advisory, diagnostic, curative, and preventive medical services. A clinical officer performs duties that are more limited in scope and complexity than those carried out by medical doctors. They work autonomously or with limited supervision from medical doctors, and perform clinical, therapeutic, and surgical procedures for treating and preventing diseases, injuries, and other physical or mental impairments common to specific communities. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. Clinical officers can serve as liaisons with other providers and may provide assistance in accessing and coordinating with other health care providers. They may also work with other health care professionals to provide health education for patients, caregivers, and families. They may collaborate with health professional groups and other important partners involved in program implementation to ensure that all health workers receive appropriate education and training, including management of mental, neurological, and substance use (MNS) disorders.

Nurse (RN): Nurses provide treatment, support, and care services for people experiencing the effects of illness, injury, aging, or other physical or mental impairments. They assume responsibility for the planning and

management of the care of patients, including the supervision of other health care providers, working autonomously or in teams with medical doctors and other providers in the practical application of preventative and curative measurers in clinical and community settings. They may make referrals to other providers for patient follow-up (e.g., social workers, occupational therapists). They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. Nurses may be involved in the development and dissemination of interventions to foster community mobilization and participation. They can consult and/or liaise with other providers (e.g., general practitioners, psychiatric nurses, occupational therapists, psychologists) and may provide assistance in accessing and coordinating with other providers. The distinction between nursing and midwifery professionals and associate professionals should be made on the basis of the nature of the work performed in relation to this definition.

Medical doctor/general practitioner (MD): Medical doctors/general practitioners are professionals who diagnose, treat, and prevent illness, disease, injury, and other physical and mental impairments. Their key role is to maintain the general health of patients through application of the principles and procedures of modern medicine. Medical doctors plan, supervise, and evaluate the implementation of care and treatment plans by other health care providers. They do not limit their practice to certain disease categories or methods of treatment, and may assume responsibility for the provision of continuing and comprehensive medical care to individuals, families, and communities. They may lead multidisciplinary teams and supervise other providers, such as nurses and social workers. They may consult and/or liaise with other providers (e.g., psychiatric nurses, occupational therapists, psychologists) and may provide assistance in accessing and coordinating with other providers. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. They may collaborate with health professional groups and other important partners involved in program implementation to ensure that all health workers receive appropriate education and training, including management of MNS disorders.

SPECIALIZED PRACTITIONERS

Psychiatric nurse (PRN): A psychiatric nurse practices a specialty that cares for people of all ages with mental illness or mental distress, such as schizophrenia, bipolar disorder, psychosis, depression, or dementia. Nurses in this area receive more training in psychological therapies, building of alliances, dealing with challenging behavior, and the administration of psychiatric medication. They may supervise other providers (e.g., nurses, community health workers, peer/service users) and may provide assistance in accessing and coordinating with other providers. Psychiatric nurses may be involved in training non-specialized nurses. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment.

Psychologist (PY): Psychologists are professionals who work with patients in a variety of therapeutic contexts. There are different types of psychologists, including clinical, organizational, and academic. They may serve as part of a specialist ambulatory team providing training, support, and supervision of non-specialists. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. They may supervise other providers (e.g., nurses, community health workers, peer/service users) and may provide assistance in accessing and coordinating with other providers. They will work and/or liaise with other providers (e.g., general practitioners, psychiatric nurses, occupational therapists). They may collaborate with health professional groups and other important partners involved in program implementation to ensure that all health workers receive appropriate education and training, including management of MNS disorders. Psychologists may conduct research or apply their knowledge as practitioners. This latter category includes clinical or counseling psychologists.

Neurologist (NE): A neurologist is a physician who specializes in neurology and is trained to investigate, diagnose, and treat disorders of the nervous system. Neurologists diagnose and treat all categories of disease involving the central, peripheral, and autonomic nervous systems, including their coverings, blood vessels, and all effector tissue, such as muscle. They may receive referrals from psychiatrists if patients have a condition

comorbid with a neurological condition or if a neurological condition needs to be ruled out. They may consult providers (e.g., psychiatrists, medical doctors), supervise providers (e.g., nurses, community health workers, peer/service users), and/or train providers (e.g., psychiatrists, medical doctors), and may provide assistance in accessing and coordinating with other providers. They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. The corresponding surgical specialty is neurosurgery. Neurologists may also be involved in clinical research, and clinical trials, as well as basic research and translational research.

Psychiatrist (PS): A psychiatrist is a physician who focuses on the study and treatment of mental illness and behavioral disorders. Psychiatrists are trained in diagnostic evaluation and in psychopharmacological treatment. As part of their evaluation of patients, psychiatrists can prescribe psychiatric medications, conduct physical examinations, order and interpret laboratory tests and electroencephalograms, and may order brain imaging studies. They will receive referrals from other providers. They may lead multidisciplinary teams and supervise task shifting to medical doctors, nurses, psychologists, and social workers. They will provide ongoing assessment of treatment, education, and support services in addition to monitoring and evaluating community mental health services. They will engage in training of other providers and interact with a wide range of providers (e.g., psychiatric or general nurses, clinical psychologists, social workers, occupational therapists). They can form collaborative relationships and communicate with other community members and/or health care providers to address patient needs, including prevention and treatment. If resources are available, they may provide a consultancy-liaison service to outpatient and primary health center settings for complex cases.

D

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E

Workshop Agenda

Strengthening Human Resources for Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: A Workshop

September 4-5, 2012
Sheraton Kampala Hotel
Kampala, Uganda

Background: Sub-Saharan Africa (SSA) has one of the largest treatment gaps for mental, neurological, and substance use (MNS) disorders in the world. It is estimated that 4 out of 5 people with serious mental disorders living in low- and middle-income countries do not receive mental health services that they need. The ability to provide adequate human resources for delivery of essential interventions in MNS disorders has been identified as a critical barrier to bridging the treatment gap. There is an overwhelming call for the development of a diverse, well-trained network of workers to reduce the treatment gap. The goal of the workshop is to bring together key stakeholders to examine the human resource needs for effective delivery of treatments and improvement of the MNS health care workforce in SSA. The emphasis of the workshop will be on MNS disorders with the greatest disease burdens, focusing on depression, schizophrenia, epilepsy, and alcohol use.

Meeting objectives:
Participants will be invited to:

- Assess the future needs of MNS health care workers based on provider type, treatment environment, and MNS disorder

  - Examine human resource needs for effective delivery of treatments in a typical African district health care system
  - Consider core competencies and performance requirements necessary to improve human resource capabilities for MNS disorders (e.g., diagnosis, prescribing of medicines, and patient monitoring)
- Discuss potential mechanisms for task shifting and task sharing among human resources and across treatment locations
- Explore education and training opportunities for acquiring and maintaining core competencies
  - Consider existing and potential partnerships for:
    - Developing programs to train current providers to reach core competencies
    - Implementing training programs
- Consider tangible next steps for the dissemination of identified human resource core competencies and performance requirements

DAY ONE

8:30 a.m. Welcome and background statement

SEGGANE MUSISI (Master of Ceremony)
Professor of Psychiatry
Makerere University

ALAN LESHNER
Chief Executive Officer, American Association for the Advancement of Science (AAAS)
Executive Publisher, *Science*

8:35 a.m. Key themes from the 2009 workshop Mental, Neurological, and Substance Use Disorders in Sub-Saharan Africa: Reducing the Treatment Gap, Improving Quality of Care (with Q&A)

EDWARD K. KIRUMIRA
Deputy Principal of the College of Humanities & Social Sciences
Makerere University

8:50 a.m. Human resources available for diagnosis and care of MNS disorders in sub-Saharan Africa: Review of the *2011 Mental Health Atlas* (with Q&A)

DANIEL CHISHOLM
Health Economist
World Health Organization

9:10 a.m. Why focus on depression, schizophrenia, epilepsy, and alcohol use?

SEGGANE MUSISI
Professor of Psychiatry
Makerere University

9:20 a.m. Strengthening human resources through core competency development

VIKRAM PATEL
Professor of International Mental Health
London School of Hygiene & Tropical Medicine

9:30 a.m. Charge to workshop participants

PAMELA COLLINS
Director, Office for Research on Disparities & Global Mental Health
National Institute of Mental Health

9:40 a.m. Welcoming remarks

SHEILA NDYANABANDI
National Coordinator, Mental Health Services
Ministry of Health, Republic of Uganda

9:45 a.m. Keynote

HONORABLE CHRISTINE ONDOA
Minister of Health
Republic of Uganda

SESSION I: CORE COMPETENCIES FOR MNS DISORDERS

Session Objectives: Discuss available human resources and their capability to provide appropriate care for MNS disorders in SSA.

10:00 a.m. Session introduction

SEGGANE MUSISI, *Session Chair*

10:05 a.m. MNS disorder provider profiles (*all participants*)

- Brief overview of provider types that commonly care for patients with MNS disorders, including a focus on country differences (*introduction by panel moderator*)
- Provider perspectives
  - What are the challenges of caring for patients with MNS disorders in SSA?
  - What key points should participants consider when developing the core competencies?

SOLOMON RATAEMANE, *Moderator*
Head, Department of Psychiatry
University of Limpopo

Panelists
MUTHONI MATHAI
Psychiatrist, Kenya

GERALD VITUS KIHWELE
Nursing Officer
Mirembe National Mental Hospital

ANTHONY MULENGA ZIMBA
Chair/Vice President
International Bureau for Epilepsy–Africa Region

SEBOLELO TSEEKE
Senior Social Worker
Sanca Eastern Gauteng, South Africa

10:30 a.m. Panel discussion with speakers and participants

11:00 a.m. Breakout I goals (*all participants*)
Treatment environment and treatment role

- Review and finalize treatment environment and treatment role columns
- Are the treatment environments listed for each provider type correct? Are any missing?
- Are the treatment roles appropriate for each provider type? Are any roles missing?

SEGGANE MUSISI, *DISCUSSANT*

11:20 a.m. BREAK

11:30 a.m. Breakout I: Treatment Environment and Treatment Role

DEPRESSION – SYLVIA KAAYA, *GROUP FACILITATOR*
SCHIZOPHRENIA – DAVID NDETEI, *GROUP FACILITATOR*
EPILEPSY – ADESOLA OGUNNIYI, *GROUP FACILITATOR*
ALCOHOL USE – SOLOMON RATAEMANE, *GROUP FACILITATOR*

12:30 p.m. LUNCH

1:30 p.m. Breakout II goals (*all participants*)

Core competencies: From diagnosis through treatment and care

- Review and finalize core competencies for each provider type
- Are the core competencies for these areas correct? Are any missing?

VIKRAM PATEL, *DISCUSSANT*

1:50 p.m. Breakout II: Screening/Identification, Diagnosis, and Treatment/Care Core Competencies

DEPRESSION – SYLVIA KAAYA, *GROUP FACILITATOR*
SCHIZOPHRENIA – DAVID NDETEI, *GROUP FACILITATOR*
EPILEPSY – ADESOLA OGUNNIYI, *GROUP FACILITATOR*
ALCOHOL USE – SOLOMON RATAEMANE, *GROUP FACILITATOR*

3:45 p.m. BREAK

4:15 p.m. Breakout III goals (*all participants*)
Continuum of care: Relationship roles and template commonalities

- Review and finalize the relationship roles providers have with each other
- Discuss commonalities across the templates. Refine templates to highlight both commonalities and distinctions

PAMELA COLLINS, *DISCUSSANT*

4:35 p.m. Breakout III: Relationship Roles and Template Commonalities

SPECIALIZED PRACTITIONERS

PAMELA COLLINS AND SOLOMON RATAEMANE, *FACILITATORS*

NON-SPECIALIZED PRESCRIBING PRACTITIONERS

WALTER KOROSHETZ AND SYLVIA KAAYA,
FACILITATORS

NON-SPECIALIZED, NON-PRESCRIBING PRACTITIONERS

SEGGANE MUSISI AND DAVID NDETEI, *FACILITATORS*

COMMUNITY AGENTS/LAY WORKERS

VIKRAM PATEL AND ADESOLA OGUNNIYI, *FACILITATORS*

6:00 p.m. ADJOURN TO RECEPTION

DAY TWO

9:00 a.m. Introduction

ALAN LESHNER, *Session Moderator*

Commonalities across disorders and shared provider roles

- Where is there evidence of commonalities across the disorder templates?
- What core competencies are shared among different provider types?
- What are the relationship roles among different provider types?
- How are relationship roles defined in these templates similar to or different from current practices?

PANEL
Specialized Practitioners Group
PAMELA COLLINS AND SOLOMON RATAEMANE,
FACILITATORS

Non-Specialized Prescribing Practitioners Group
SYLVIA KAAYA AND WALTER KOROSHETZ, *FACILITATORS*

Non-Specialized, Non-Prescribing Practitioners Group
SEGGANE MUSISI AND DAVID NDETEI, *FACILITATORS*

Community Agents/Lay Workers Group
ADESOLA OGUNNIYI AND VIKRAM PATEL, *FACILITATORS*

10:15 a.m. Re-imagining the health care system for MNS disorders

- Provide highlights of critical and/or significant changes to provider core competencies as outlined in the templates
- How would the newly defined core competencies change the current system of care for MNS disorders?
- What are potential challenges for integration of new core competencies into the current health care system?

PANEL
SYLVIA KAAYA, Depression Working Group Leader
DAVID NDETEI, Schizophrenia Working Group Leader
ADESOLA OGUNNIYI, Epilepsy Working Group Leader
SOLOMON RATAEMANE, Alcohol Use Working Group Leader

11:30 a.m. BREAK

SESSION II: OPPORTUNITIES FOR INTEGRATION INTO CURRENT TRAINING PROGRAMS

Session Objectives: Explore successful mechanisms for strengthening human resources from other disease areas and countries. Examine current medical/health professional education programs in SSA for MNS disorders. Discuss potential opportunities and mechanisms to add-on components around MNS disorders to existing programs.

11:45 a.m. Session introduction

PAMELA COLLINS, *Session Chair*

11:50 a.m. Lessons about integration of new or revised core competencies (with Q&A)

- What was the mechanism for updating the core competencies?
- What components have been critical to the launch of new training programs? In revision to current training programs?
- What training tools have been most successful?
- What were key challenges? How were they overcome?

RUBEN SAHABO
Country Director, Swaziland
International Center for AIDS Care and Treatment Programs

12:10 p.m. Group discussion with speakers and participants

- What opportunities exist to include MNS disorders in already-established training programs for other disease areas?
- What should be considered as critical components of a stand-alone training program for MNS disorders?
- What steps would be important for implementation?

12:30 p.m. LUNCH

SESSION III: NEXT STEPS—BUILDING AND SUSTAINING COMPETENCIES

Session Objectives: Explore mechanisms for integrating core competencies into the current health care system. Identify training priorities at multiple stakeholder levels for incorporation.

1:30 p.m. Session introduction

VIKRAM PATEL, *Session Chair*

1:40 p.m. Training programs for MNS disorders (with Q&A)

- What components have been critical in the launching of these programs?
- What training tools have been most successful?
- Describe the process of adaption and field testing
- What have been the successes and challenges?

PANEL

SHEILA NDYANABANGI
National Coordinator, Mental Health Services
Ministry of Health, Republic of Uganda

DIXON CHIBANDA
Psychiatrist, Zimbabwe

TEDLA WOLDE-GIORGIS
Ministry of Health, Ethiopia

JEANNE D'ARC DUSABEYEZU
Director, Unit of Drug Abuse Prevention and Treatment
Ministry of Health, Rwanda

2:40 p.m. Panel discussion with speakers and participants

- What opportunities exist to include newly identified core competencies in already-established programs?
- What are critical components of a stand-alone training program for MNS disorders?

3:10 p.m. Next steps with workshop co-chairs

- Identify tangible next steps for dissemination and possible integration of the core competencies
- Who would be critical partners in continued efforts around this topic?
- What mechanisms should be employed to disseminate the information?
- What are key components of a training program based on the core competencies identified in the templates?

4:30 p.m. Closing remarks

ALAN LESHNER
Chief Executive Officer, AAAS
Executive Publisher, *Science*
PAMELA COLLINS
Director, Office for Research on Disparities & Global Mental Health
National Institute of Mental Health

4:45 p.m. ADJOURN

F

Working Groups

DEPRESSION GROUP

Sylvia Kaaya (*Facilitator*)
Head of the Department of Psychiatry and Mental Health
Muhimbili University College of Health and Allied Sciences

Dixon Chibanda
Psychiatrist
Zimbabwe

Lara Fairall
Head, Knowledge Translation Unit
University of Cape Town Lung Institute

Charlotte Hanlon
Psychiatrist and Epidemiologist
Addis Ababa University
King's College London

Inge Petersen
Department of Psychology
University of KwaZulu-Natal

Joshua Ssebunya
Project Coordinator, Programme for Improving Mental Health Care (PRIME) Research Program Consortium (RPC)
Makerere University and Butabika National Hospital

PSYCHOSIS GROUP

David M. Ndetei (*Facilitator*)
Director
Africa Mental Health Foundation

Arvin Bhana
Executive Director
Human Sciences Research Council
Associate Professor of Psychology
University of KwaZulu-Natal

Jonathan Burns
Professor and Head of the Department of Psychiatry
University of KwaZulu-Natal

Abebaw Fekadu
Clinical Lecturer
Department of Psychiatry
Addis Ababa University

Fred Kigozi
Executive Director and Senior Consultant Psychiatrist
Butabika National Referral and Teaching Mental Hospital

Juliet Nakku
Ministry of Health
Republic of Uganda

EPILESPY GROUP

Adesola Ogunniyi (*Facilitator*)
Professor of Medicine
University of Ibadan

Walter J. Koroshetz
Deputy Director
National Institute of Neurological Disorders and Stroke

Ana-Claire Meyer
Assistant Professor, Department of Neurology
University of California, San Francisco, Kenya Medical Research Institute

Sheila Ndyananbangi
National Coordinator, Mental Health Services
Ministry of Health, Republic of Uganda

M. Boy Sebit
Associate Professor of Psychiatry
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Chief Executive Officer
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Clinical Manager, Senior Lecturer
Tara Hospital
University of the Witwatersrand

Lusanda Rataemane
Clinical Psychologist
University of Free State

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