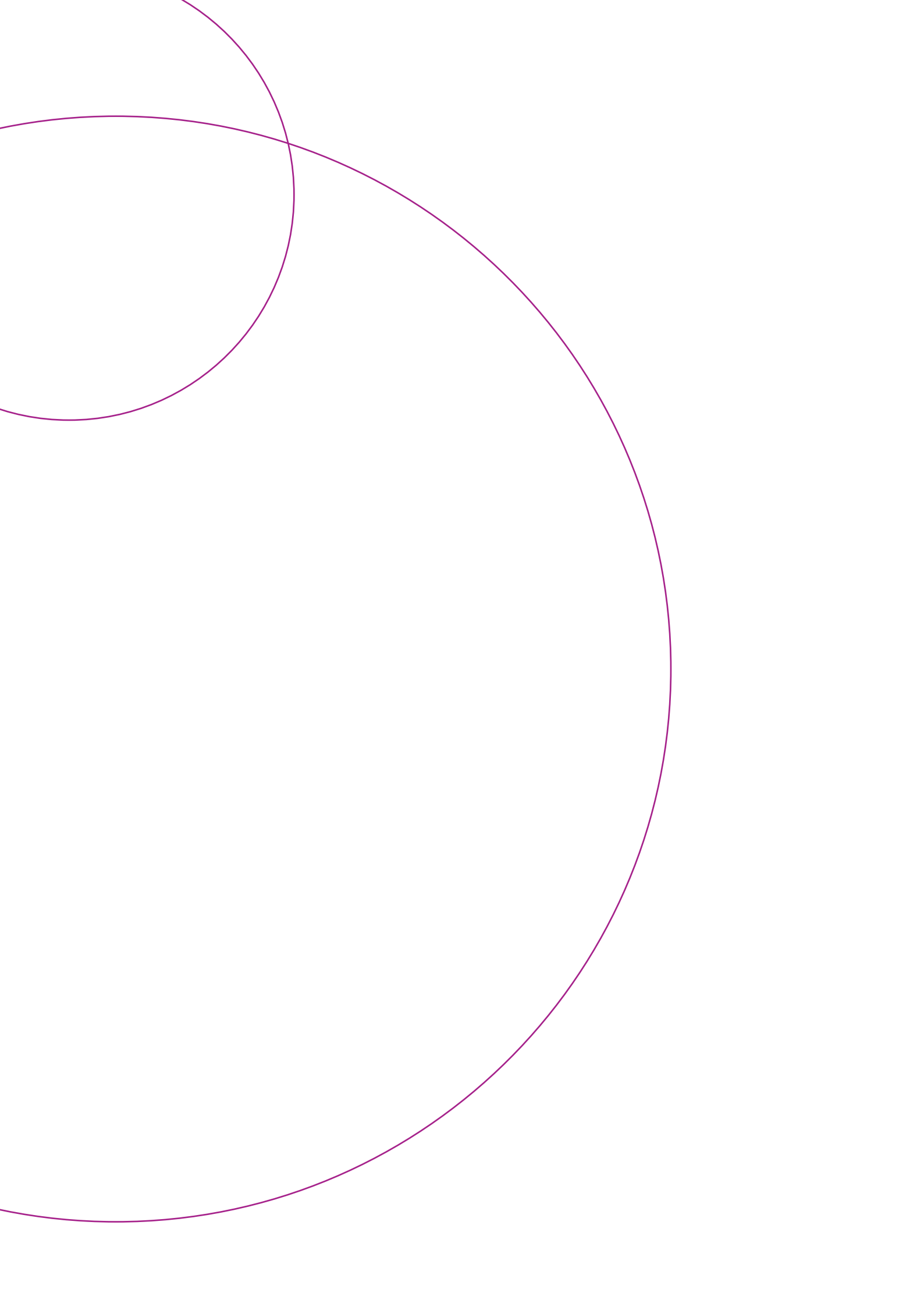
Educating medical and nursing students to provide mental health, neurological and substance use care

A practical guide for pre-service education

World Health Organization



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Preface

Severe shortages in the mental health workforce cause an enormous gap in care for people with mental health, neurological and substance use (MNS) conditions. As outlined in WHO's *Comprehensive Mental Health Action Plan 2013–2030*, pre-service education (PSE) in MNS care for future doctors and nurses can support long-term sustainability of MNS services and systems by building a competent national and local MNS workforce.

This guide aims to strengthen competency-based education in providing MNS care by focusing on enhancing first-degree educational curricula for future doctors and nurses. The guide was informed by extensive literature reviews, documentation of best practice examples and consultations with experts globally, including people with lived experience of MNS conditions. It defines 12 core competencies for MNS care relevant to the roles of doctors and nurses in most countries and offers practical advice on how to embed these into undergraduate curricula, including suggestions for teaching methods, and how to assess student outcomes and monitor and evaluate educational programmes. The guide is meant to be used flexibly, to either enhance existing curricula or to develop new curricula where education on MNS care is absent. The guide also provides strategies for engaging stakeholders, mobilizing resources and implementing curriculum changes in diverse contexts.

The need for competent health professionals who can provide quality MNS care has never been greater. This guide can offer a practical pathway to transform medical and nursing education, contributing to improving the lives of people who face MNS conditions. By working together to educate doctors and nurses to implement these evidence-based approaches, we can build a health care workforce that is not only technically skilled, but also compassionate and rights-based in their care. By strengthening pre-service education in MNS care, we have an unprecedented opportunity to create meaningful and lasting change for generations to come.

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Photo credit (next page): health care workers in a rural setting. ©Freepik

Glossary of terms

Brain health. The state of brain functioning across cognitive, sensory, social-emotional, behavioural and motor domains, allowing a person to realize their full potential over the life course, irrespective of the presence or absence of disorders.

Community-based mental health care. Any mental health care that is provided outside of a psychiatric hospital.[1] This includes services available through primary health care, specific health programmes (for example HIV clinics), district or regional general hospitals, community mental health teams, relevant social services and services in other outpatient settings.

Competence. A person's proficiency in applying competencies to tasks according to a pre-defined standard. Competence is contextual, multidimensional and dynamic; it changes with time, experience and setting.

Competency.[2] A person's ability to integrate specific attitudes, knowledge and skills when performing tasks. Competencies are durable, trainable and, through the expression of behaviours, measurable.

Curriculum. A set of organized educational activities and environments designed to achieve specific learning goals. The curriculum comprises: the learning content and how it is organized and sequenced; teaching methods and learning experiences; assessment formats and programme evaluation; and quality improvement strategies.

Enhanced curriculum. A course curriculum for medical and nursing students that has been enriched to include greater emphasis on developing students' competencies for providing care to people with mental health, neurological and substance use conditions (either by adapting an existing curriculum or by developing a new curriculum).

Integrated care. Health services that are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout the life course.

Medical doctors (including family and primary care doctors).[3] Health professionals who diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments and maintain general health. Medical doctors plan, supervise and evaluate the implementation of care and treatment plans by other health care workers. They do not limit their practice to certain types of disease or methods of treatment, and they may assume responsibility for providing continuing and comprehensive medical care to individuals, families and communities.

[1] As conceptualized in: World mental health report: transforming mental health for all. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/356119, accessed 16 September 2024).

[2] As defined in: Mills J-A, Middleton JW, Schafer A, Fitzpatrick S, Short S, Cieza A. Proposing a re-conceptualisation of competency framework terminology for health: a scoping review. Hum Resources Health. 2020;18(1):15. doi:10.1186/s12960-019-0443-8. See also: Global competency and outcomes framework for universal health coverage. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/352711, accessed 16 September 2024).

[3] In this document, the term "doctors" refers to medical doctors.

Mental health.[4] A state of mental well-being that enables people to cope with the stresses of life, to realize their abilities, to learn well and work well, and to contribute to their communities. Mental health is an integral component of health and well-being and is more than the absence of mental disorder.

mhGAP priority conditions. A subset of mental health, neurological and substance use conditions with a high burden in terms of mortality, morbidity, disability, economic cost, or human rights violations.

Mental health, neurological and substance use (MNS) conditions. A collective term for health conditions and disorders that compromise mental or brain health and functioning and may lead to cognitive, intellectual, psychosocial or physical impairment, or self-harm or suicide. This includes mental, behavioural and neurodevelopmental disorders and diseases of the nervous system that are defined in WHO's International Classification of Diseases, 11th Revision (ICD-11).[5]

- Mental health conditions include diagnosable disorders such as psychosis and depression, and also other mental and behaviourial states associated with significant distress and impairment in functioning, including self-harm or suicide.
- In this guide, neurological conditions include neurodevelopmental disorders (such as autism spectrum disorder), but not neurological disorders (such as stroke, epilepsy, headache disorders, dementia and Parkinson disease), neuromuscular disorders (such as peripheral neuropathy), neuroimmunological disorders (such as meningitis and multiple sclerosis), neuroinfections, brain tumours or traumatic injuries.
- Substance use conditions include disorders due to psychoactive substance use, as well as hazardous and harmful use of alcohol, psychoactive drugs or other substances.

MNS care. In the context of this guide, "MNS care" is used to mean services that provide psychosocial, psychological and/or pharmacological care (e.g. assessment, management, and referral) for people experiencing MNS conditions.

MNS care tasks. The tasks that doctors and nurses are expected to carry out to provide services for people with MNS conditions.

Nurse.[6] A health care professional who provides autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nurses promote health, help prevent illness, and care for ill, disabled and dying people.

Person-centred care. Care that is organized around the health needs and expectations of people, not diseases. Person-centred care engages individuals, families and communities as active participants in, rather than passive recipients of, care. It consciously adopts people's own perspectives and priorities and responds to these in humane and holistic ways. Person-centred care seeks to understand and respect people's cultural understandings of mental health, and to ensure that mental health care workers engage in meaningful conversations about people's needs and concerns.

[4] As defined in: World mental health report: transforming mental health for all. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/356119, accessed 16 September 2024.

[5] See: Clinical descriptions and diagnostic requirements for ICD-11 mental, behavioural and neurodevelopmental disorders (CDDR). Geneva: World Health Organization; 2024 (https://iris.who.int/handle/10665/375767, accessed 16 September 2024).

[6] For more detailed definitions of nurses and nursing see: Current nursing definitions. In: ICN/Resources [website]. Geneva: International Council of Nurses; 2024 (https://www.icn.ch/resources/nursing-definitions/current-nursing-definitions, accessed 16 September 2024).

Pre-service education (PSE). The learning that takes place in preparation for a future role as a health care worker. PSE provides pre-clinical training and takes place in universities, colleges and professional schools, as well as other educational settings, such as health institutes, clinical facilities and community organizations. In the context of this guide, PSE refers specifically to the learning of medical and nursing students taking a first degree course in a university setting. In many countries this is undergraduate education that requires no prior courses or knowledge.

Recovery-oriented care. Recovery-oriented care supports people in their unique recovery journey and empowers them to have control of their own lives. It involves supporting people to: identify and work towards their goals and aspirations in order to lead fulfilling and meaningful lives; make decisions about all areas of their lives including treatment, care and support; and choose their own way of understanding their distress.

Rights-based care. Care provided by mental health and social services that respects people's human rights and dignity, including by promoting autonomy, legal capacity, non-coercion, confidentiality, participation and community inclusion.

Specialists. Health professionals with advanced training in specific diseases or treatments, who use specialized methods to diagnose, treat and prevent illness, injury or other physical and mental impairments. Specialists may also teach or do research. In this guide, specialists often refer to psychiatrists and other mental health professionals.

Substance use. The use of psychoactive substances, including alcohol, drugs and nicotine, that affect mental processes such as perception, consciousness, cognition or mood and emotions.

Universal health coverage (UHC). All people have access to the full range of quality health services they need, when and where they need them, without financial hardship.

Executive summary

Chapter 1. Introduction

In all countries, mental health, neurological and substance use (MNS) conditions are widespread and cause significant suffering and early death. Despite effective interventions, many people go untreated due to inaccessible, unaffordable, or poor-quality services, or because of stigma.

The shortage of trained MNS health care workers everywhere worsens the treatment gap. Expanding the specialist workforce is important to improve access to care, especially for people with moderate to severe disorders. But achieving universal health coverage (UHC) requires other strategies, including integrating prevention and care for mild to moderate MNS conditions into the roles of doctors and nurses.

In-service training (including postgraduate education, on-the-job training and continuous professional development) is a useful and evidence-based approach for upskilling doctors and nurses to manage MNS conditions. Another complementary approach is to strengthen pre-service education (PSE) in mental health care for medical and nursing students before they enter the workforce by embedding core competencies for MNS care throughout their undergraduate curricula (not just in psychiatry or neurology courses). This approach is recommended by the *WHO Comprehensive mental health action plan, 2013–2030.*

Existing PSE in MNS care varies widely in how it is provided. It is often brief and theoretical, lacking in practical learning for real-world tasks. There is an urgent need to enhance PSE for medical and nursing students worldwide so that graduates are adequately equipped to manage MNS conditions.

Chapter 2. Prepare and plan for change

Embedding MNS care competencies in PSE requires clear goals, stakeholder support and institutional capacity. The planning phase of curricular change includes four key activities. The order and depth of these activities will vary by context and resources. MNS-related updates will likely need to coincide with broader curriculum revisions.

Establish a curriculum review committee (CRC)

- Include representatives from all stakeholder groups, including people with lived experience of MNS conditions.
- Involve university administration and faculty from different departments to ensure a multidisciplinary approach and reduce teaching loads.

Do a situation analysis

- Assess the need for and feasibility of curricular changes, internally (curricula and educator competencies) and externally (MNS service needs).

Advocate and engage stakeholders

- Raise awareness about the need for an enhanced curriculum among all stakeholders.
- Secure support from decision-makers and mobilize resources for curriculum enhancement.

Develop an implementation plan and budget

- Identify roles, timelines and resources needed to implement the enhanced curriculum.
- Make a monitoring and evaluation (M&E) plan with indicators and means of verification for measuring success.

Photo credit (previous page): duty nurses gather at Dhaka Medical Hospital in Bangladesh, 2023. © WHO / Fabeha Monir

Chapter 3. Define competencies

A competency-based curriculum is driven by learning objectives tied to real-world health needs. The first step in developing one is to identify the MNS conditions relevant to the country's health system and associated MNS care tasks (i.e. the tasks that doctors and nurses must perform when providing MNS care, such as administering diagnostic tools, providing psychosocial support, or referring families to community services).

Chapter 3 of this guide defines 12 core competencies that doctors and nurses need to adequately perform MNS care tasks following PSE. The attitudes, knowledge, and skills underpinning each of these competencies is also defined.

These competencies apply to all the priority conditions of WHO's Mental Health Gap Action Programme (mhGAP)[7] and are broad enough to likely apply to other MNS conditions. They represent the minimum set of attitudes, knowledge and skills for MNS care, though not all will apply to every situation.

Core competencies for MNS care

1. **Demonstrate foundational helping**
2. **Provide rights-based care**
3. **Promote mental and brain health, prevent/reduce harms due to substance use and prevent/reduce risk of priority MNS conditions**[a]
4. **Provide clinical emergency care for people with MNS conditions**
5. **Assess for MNS conditions**
6. **Manage priority MNS conditions**
7. **Provide psychosocial support as part of managing MNS conditions**
8. **Support carers of people with MNS conditions**
9. **Adapt MNS care for people in populations with special needs** (e.g. pregnant women, new mothers, young people, older adults, among others)
10. **Refer people with MNS conditions appropriately and in a timely manner and collaborate with other health care workers in their care**
11. **Follow-up with people with MNS conditions**
12. **Engage in self-care**

Attitudes

Attitudes are a person's feelings, values and beliefs, which influence their behaviours and performance of tasks. If students develop the right attitudes identified (e.g. genuineness, compassion, inclusivity, warmth, respect and non-judgement) they will be better able to care for people experiencing MNS conditions.

Knowledge

Knowledge provides the informational basis for applying skills and performing MNS care tasks. This includes knowledge about evidence-based interventions for specific MNS conditions as well as knowledge about public mental health.

Skills

Skills provide a higher level of analysis and application of knowledge in MNS care. They are the focus of a competency-based curriculum.

[a] MNS stands for mental health, neurological and substance use

[7] The mhGAP priority conditions are: alcohol use disorders (AUDs), generalized anxiety disorder, panic disorder and panic attacks, child and adolescent mental and behavioural disorders, post-traumatic stress disorder, dementia, depression, drug use disorders (DUDs), epilepsy and seizures, psychosis and bipolar disorder, self-harm and suicide, and other significant emotional problems and bodily distress.

Chapter 4. Enhance the curriculum

The core competencies form the foundation for shaping the enhanced curriculum, guiding learning objectives and content. Chapter 4 gives examples of how situation analyses inform competencies and learning objectives; and how these competencies then guide curriculum enhancement to meet identified needs, ensuring relevance to both students and the health care system.

Key activities in this phase include planning learning experiences to shift attitudes, building knowledge and fostering skills, selecting assessment methods and training educators.

Plan learning experiences

- Combine active learning with classroom-based teaching for competency development.
- Exposure to different health care settings (community, primary, secondary and tertiary) is essential for practical learning. Where this is not feasible, structured role plays can simulate practice environments and provide valuable learning experiences.
- Team-based learning, such as group discussion, across disciplines is important to foster collaboration, allowing students to develop broader competencies and build relationships that support integrated care models.
- Digital technologies can reduce resource demands (e.g. through pre-recorded lectures and computer-based modules), offer safe environments for practising competencies, and help prepare students for evolving fields such as tele-mental health.

Select competency assessments

- Assess all levels of learning that graduates must demonstrate to achieve full competence (knows, knows how, shows and does).
- Use structured role plays to measure behaviours in a controlled setting; and use real-world observation to assess how students deliver MNS care in practice.
- Complement role plays and real-world observation with tests for knowledge and attitudes to ensure a comprehensive evaluation.

Train educators

- Training educators is important to ensure they can effectively deliver the enhanced curriculum.
- Training approaches include self-directed learning (for experienced educators in MNS care), train-the-trainer models, and senior-to-junior faculty mentorship, where postgraduates teach undergraduates with senior oversight.
- Existing initiatives such as mhGAP can also be leveraged to train educators.

Learning experiences to shape attitudes, knowledge and skills

Shifting stigmatizing attitudes around MNS conditions is difficult. The most effective strategy is social contact, where students interact with individuals with lived experience of MNS conditions. Research has shown that courses co-taught by people with lived experience significantly reduce stigma.

Other approaches, such as myth busting, experiential learning, peer and mentor support and community engagement and advocacy, can also contribute to attitudinal change.

Knowledge building often relies on traditional didactic teaching methods, but active learning strategies, such as case-based and problem-based learning, improve retention.

Participatory methods such as flipped classrooms, where students lead research, presentations and seminars, also enhance understanding and retention, laying the groundwork for future skills development.

Skills development is the central focus of a competency-based curriculum. It requires hands-on learning through digital technologies or real-life clinical practice. Students can engage in role plays, simulations (virtual or real-life standardized patients), case studies, and clinical tasks through shadowing or supervised clinical placements.

Clinical placements should reflect students' likely future work environments, such as primary care settings, and involve supportive supervision.

Local organizations providing community mental health care can also serve as valuable placement providers.

Chapter 5. Implement the curriculum

How an enhanced curriculum is implemented will vary by country and resources available (especially time, funds and people) but includes three key activities.

Identify barriers and solutions

- Common barriers include insufficient funding, educator shortages and resistance to change. Limited access to technology and tight donor deadlines can also add pressure.
- Enablers include political and institutional support, early student and faculty involvement, peer support, and environments that promote mental health for both learners and educators.
- Regular consultation with professional organizations helps keep curricula aligned with the latest evidence-based practices, and robust feedback mechanisms ensure continuous improvement.

Choose an implementation approach

- In resource-constrained contexts, start small to demonstrate value before scaling up.

Monitor and evaluate

- Design M&E to track the curriculum's effectiveness in preparing graduates to provide MNS care and drive continuous curriculum improvement.
- Define key indicators to cover relevance of learning content, teaching methods and assessments; applicability to national context; curriculum structure, teaching quality and student satisfaction; and changes in student competencies and confidence.
- M&E data can also be used to support and inform research on field testing a newly enhanced curriculum, investigating the impact of specific recommendations (e.g. involving co-educators with lived experience), or analysing cost–effectiveness. In resource-constrained settings, applied research and small-scale studies documenting feasibility and impact may be prioritized to mobilize funds for bigger changes.

Three tips for resource-constrained settings

Rethink teaching methods by replacing traditional lectures with participatory formats (e.g. flipped classrooms and role-playing) and using self-directed online learning to reduce resource loads.

Make small changes to existing courses, such as adding MNS-focused case studies, modules or lectures and expanding clinical placements beyond psychiatric hospitals to also include general hospitals and other health care settings

Harness community resources by involving people with lived MNS experience as co-educators and partnering with local organizations as clinical placement providers.

1

Introduction

1.1 Background

Mental health, neurological and substance use (MNS) conditions are highly prevalent, affecting people across every community and age group in the world, including children and adolescents. In 2021, around one in eight people were living with MNS disorders *(1)* (see Fig. 1.1). A considerable number of people are also affected by broader MNS conditions – including psychosocial as well as cognitive disabilities, and other mental states associated with significant distress, impairment in functioning, and suicide or self-harm *(2)*.

These conditions cause significant disability *(3, 4)*. They can also lead to early death, often co-occurring with physical illnesses (see Fig. 1.1).

In addition to the direct costs of treatment, MNS conditions have indirect societal costs such as reduced productivity and high unemployment *(2)*. People with these conditions face stigma, discrimination and human rights violations, including isolation, incarceration and ill-treatment.

There are many effective psychosocial and pharmacological interventions to prevent and treat MNS conditions, many of which can be quickly and easily delivered at relatively low costs *(5, 6)*. At the population level, laws and policies can help promote mental and brain health, avoid harms due to substance use and reduce the risks associated with the onset of MNS conditions.

Yet despite the existence of effective treatments, most people experiencing MNS conditions go untreated because services are inaccessible, unaffordable, insufficient or of poor quality, or because stigma stops them from getting help. Governments allocate, on average, just 2% of health budgets to mental health *(7)*. Only 12% of countries have a separate budget line for neurological conditions *(8)*. Even fewer have a budget line for treating substance use disorders *(9)*. What budget there is tends to go to hospital- rather than community-based services *(10)*.

The lack of trained MNS health care workers in countries of all income levels worsens the treatment gap *(11)*. Nearly half the world's population lives in countries with fewer than one psychiatrist per 200 000 people *(7)*. Neurologists and addiction medicine specialists are even scarcer *(12, 9)*. Globally, the number of mental health nurses – who make up 44% of the global mental health workforce – fluctuates, with only slight increases observed since 2017 *(7)*. And everywhere, the MNS specialist workforce that does exist is often concentrated in cities and large hospitals away from rural areas, which puts services out of reach for many people.

Expanding the specialist workforce is important to reduce the MNS treatment gap, especially for people with moderate to severe disorders. But countries cannot rely solely on MNS specialists to achieve UHC. They must look to other strategies, including integrating prevention and care for mild to moderate MNS conditions into the responsibilities of other health care workers, such as doctors (i.e. general practitioners, paediatricians) and nurses.

Doctors and nurses are often the first to see people with MNS conditions in the health system, making them a valuable resource for MNS diagnosis and care. They make up a huge portion of the health care workforce and work in diverse settings, from hospitals and urgent care centres to primary care clinics, community health centres, long-term care facilities, schools and even homes. They are well placed to identify, treat, care and support people experiencing MNS health conditions *(13)*.

Photo credit (previous page): doctor standing in front of a bed in a hospital in a low-resource setting. Somalia, 2022 © WHO / Ismail Taxta

Integrating MNS diagnosis and care into the responsibilities of doctors and nurses has many benefits. It:

- expands the workforce available for MNS care;
- increases access to care;
- reduces stigma and human rights violations *(14, 15)*;
- promotes collaborative and person-centred care *(2)*;
- allows for better recognition of physical health problems;
- keeps people close to their support systems for better recovery; and
- is more likely to deliver positive physical and mental health outcomes *(16, 17)*.

FIG. 1.1

MNS disorders are widespread and are major causes of disability and early death.

Prevalence

1 billion people globally were living with a **mental disorder** in 2021.[a]

7.5% of children under 5 years have a disorder contributing to **developmental disability**.[b]

400 million people (7% of people over 15 years of age) have **alcohol use disorders** (AUDs).[c]

64 million people had **drug use disorders** (DUDs) in 2022.[d]

Nearly **57 million** people had **dementia** in 2021.[e]

More than **24 million** people had **epilepsy** in 2021.[e]

Early death

More than **720 000** people **died by suicide** in 2021.[f]

The harmful **use of alcohol** caused around **2.6 million deaths** in 2019.[c]

Psychoactive drug use caused **0.6 million deaths** in 2019.[c]

People living with **severe mental disorders die** **10–20 years earlier**, often because of unrecognized and untreated comorbidities, such as cardiovascular disease.[g]

Dementia caused nearly **two million deaths** in 2021.[e]

Sources:

[a] IHME, 2021 *(1)*.

[b] WHO and UNICEF, 2023 *(18)*.

[c] WHO, 2024 *(9)*.

[d] UNODC, 2024 *(19)*.

[e] GBD 2021 Nervous System Disorders Collaborators, 2024 *(4)*.

[f] WHO, 2021 *(20)*.

[g] Chesney et al, 2014 *(21)*; Heiberg et al, 2019 *(22)*.

1.1.1 A focus on pre-service education (PSE)

For integration to work, doctors and nurses must be equipped with the attitudes, knowledge and skills to competently provide high-quality MNS care to people at all stages of life.[1]

They can gain the competencies they need through PSE (see Box 1.1) and in-service training (including postgraduate education, on-the-job training and continuous professional development), and experience.

All these types of learning are closely related (see Fig. 1.2). PSE and in-service training are necessary to secure a competent workforce for MNS care

BOX 1.1

What is PSE in MNS care (PSE-MNS)?

In the context of this guide, PSE-MNS:

- is done by medical and nursing students during their first-degree in a university setting (typically undergraduate education);
- is multidisciplinary and focused on public health, conditions and people;
- covers care for MNS conditions, including MNS disorders and related issues, that students are likely to encounter once they enter clinical practice;
- covers aspects of, but is separate from, speciality programmes on psychiatry and neurology;
- includes neuropsychiatry but not all aspects of neurology (e.g. strokes and migraines);
- uses a competency-based framework;
- includes practical training experiences;
- is evidence-based;
- encourages teaching that is aligned with WHO's ICD-11;
- ensures a person-centred, recovery-oriented and human rights-based approach to care;
- forms the basis for later postgraduate education and other in-service training; and
- is endorsed by health and education authorities and certification and regulation bodies.

Good PSE in MNS care ensures that the competencies required to support people with MNS conditions are consistently addressed in multiple learning activities across the curriculum, rather than just in dedicated psychiatry, neurology or mental health courses.

This understanding of PSE for MNS care aligns with key WHO initiatives, such as the Mental Health Gap Action Programme (mhGAP).

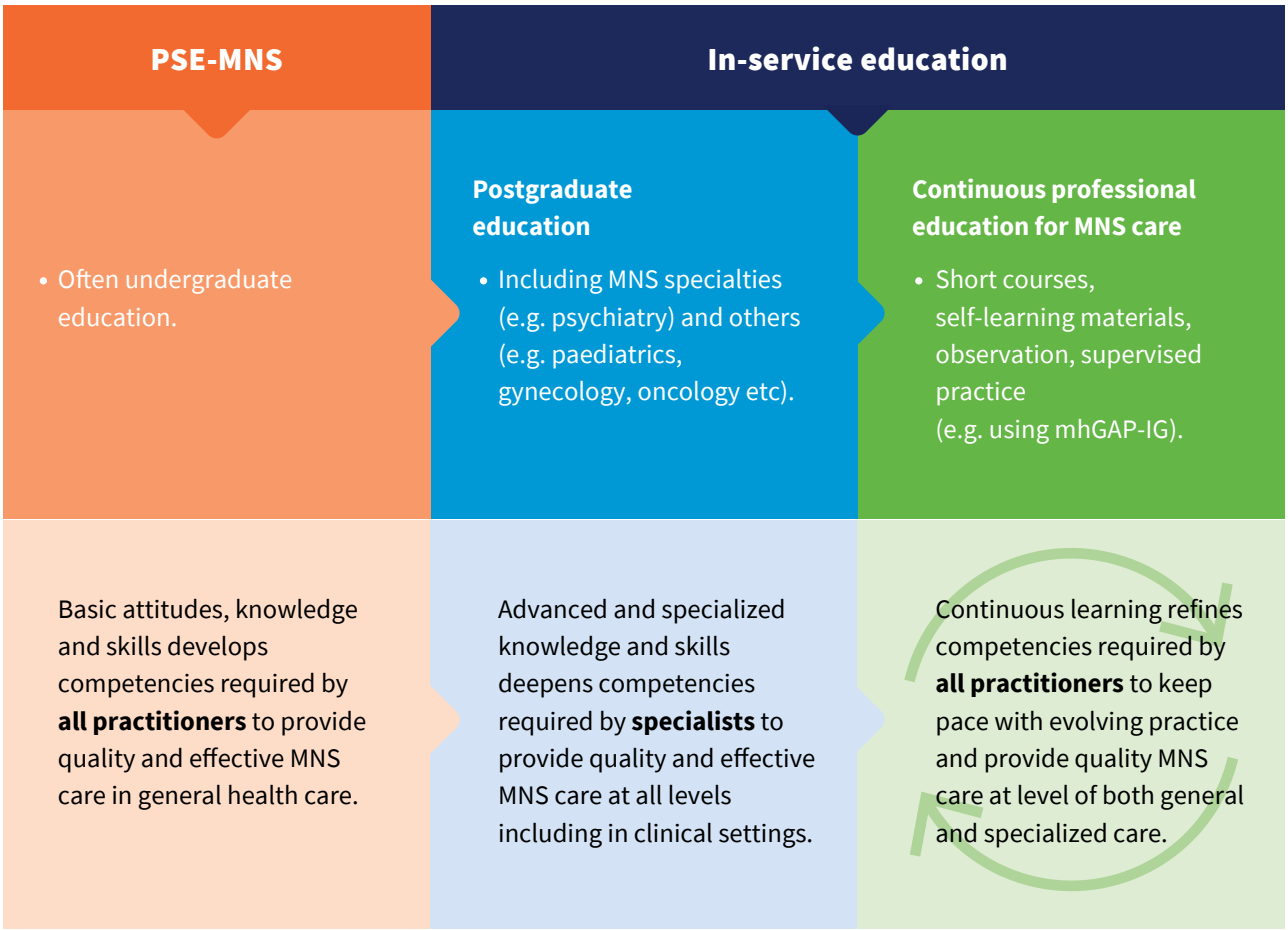
[1] This includes the foundational helping skills that are a universal prerequisite for delivering effective psychosocial and psychological care (and indeed all health care), and which lie at the heart of the WHO-UNICEF Ensuring Quality in Psychosocial and Mental Health Care (EQUIP) project to strengthen quality in psychosocial and psychological training and service delivery (see Box 4.8).

that continuously maintains performance over time *(23)*. Where a workforce is specialized, including postgraduate education to ensure competency is equally important. For example, because all nurses are expected to contribute to mental health care, all nursing undergraduate curricula should equip students with a set of foundational competencies for mental health care. Those students that go straight into service after graduating will continue to refine these competencies through in-service training.

Those who go on to specialize in mental health nursing through postgraduate education will develop deeper competencies to navigate the complex health, psychological, biological and social aspects of mental health. These advanced competencies will likely go beyond diagnosis, basic treatment and management of MNS conditions to include advocacy, leadership, research, psychopharmacology, crisis intervention and the delivery of more advanced and scalable psychological interventions *(24)*.

FIG. 1.2

A system of continuous competency-based learning to ensure quality and effective MNS care.



Embedding MNS care into PSE is especially valuable.

- It encourages doctors and nurses to take responsibility for MNS care early in their careers.
- New graduates gain confidence in providing MNS care and can be assessed for competence.
- Graduates are better prepared to address physical, mental and brain health and substance use issues holistically.
- Graduates can use postgraduate education and in-service training to build on their initial training, rather than starting from scratch.
- PSE reduces stigma *(25)* and can promote a common understanding of MNS care among different categories of health professionals.
- It ensures that MNS conditions are valued equally with other health issues.
- It is a sustainable approach, supporting long-term development of the health workforce *(26)*.

PSE in MNS care today

PSE varies widely in how it is provided across and within countries *(27)*. In 2020, only 44% of countries reported using PSE to train health professionals in providing MNS services (Mental Health Atlas 2020 Survey, World Health Organization, unpublished data, 2020), and about 10% lacked education on substance use disorders *(9)*.

While many universities include MNS content in their PSE (most often in the form of psychiatry and neurology programmes), it is often brief and theoretical, lacking practical learning for real-world tasks *(28)*. For example, students may learn how to deliver evidence-based pharmacological interventions but may be insufficiently trained in applying basic psychosocial support skills. Traditional clinical placements often focus on severe cases in highly specialized settings (e.g. psychiatric or forensic hospitals, eating disorder units, inpatient settings) that do not – in terms of service users and care – reflect the broader primary health care and community environments where many students will work. This can reinforce stigma and neglect person-centred, rights-based care.

Commonly cited barriers to PSE in MNS care include:

- overloaded curricula;
- resistance to change (e.g. by educators, universities, professional boards and ministries, and students);
- insufficient resources, funding and infrastructure;
- stigma and low prioritization of MNS conditions; few clinical sites, placements and mentors available; and
- lack of standard, normative or evidence-based guidance and evaluations on pre-service curricula.[2]

As a result, learners may not achieve the competencies needed for effective MNS care. Conditions such as depression often go undetected or are poorly managed by general health care workers *(29)*. Person-centred, rights-based care is rare *(30)*. Health care workers, often unintentionally, stigmatize people with MNS conditions, which delays help seeking and compromises quality of care *(31, 32)*. Graduates are rarely equipped to provide emotional and practical support so people experiencing MNS conditions, including emotional distress, suicidal thoughts and self-harm, and social difficulties often rely on other sources to receive care, such as families, school systems or specialists.[3] The demand for specialist services has increased due to Covid-related issues.

There is an urgent need to strengthen PSE to qualify doctors and nurses in MNS care and improve the extent and quality of care for people with MNS conditions globally.

[2] For more information on pre-service implementation barriers and how to overcome them, see section 5.2.

[3] For example, see: Provider core competencies for improved mental health care of the nation. Pretoria: Academy of Science of South Africa; 2021 (https://research.assaf.org.za/items/f5a5fb05-11bf-4fcd-9fa8-2c48e44e2831, accessed 16 September 2024).

Photo credit (next page): Kitatumba nursing school in DRC, 2019. © WHO / Hugh Kinsella Cunningham

1.2 About this guide

This document offers practical guidance to strengthen PSE in MNS care for medical and nursing students worldwide.

1.2.1 Purpose and use

Written for health care workforce decision-makers and educators, this guide outlines key activities and considerations for better integrating MNS care into PSE.

Using a competency-based approach, it defines relevant learning outcomes and offers advice for enhancing existing curricula (although it can be used to develop new curricula if needed). While focused on PSE, it can also be used with other WHO resources to support postgraduate and in-service training programmes *(33)*.

1.2.2 Scope

This guide focuses on educational approaches to develop medical and nursing students' competence in promoting mental and brain health, avoiding harm from substance use, and identifying and managing MNS conditions commonly found in general health care settings. It focuses on MNS conditions that are widespread, disabling, costly and linked to human rights violations *(6)*.[4]

It does not cover broader public health strategies, such as universal promotion and prevention or multisectoral initiatives to address the social determinants of MNS conditions.

In targeting medical and nursing students, this guide is relevant for all countries. It may also inspire improvements in the PSE of other health care workers (such as clinical officers, medical assistants, health assistants, midwives, general social workers, general occupational therapists, and other allied health professionals, as well as family doctors and paediatricians) and in postgraduate programmes within and beyond mental health, brain health and substance use.

It is not meant for students already studying mental health, brain health or responses to substance use, for example first-degree psychology or cognitive neuroscience students and postgraduate students specializing in psychiatry, neurology, addiction medicine, mental health nursing or mental health social work. It is also not meant for training community health workers, volunteers or in-service staff (although some content may still be useful for these groups).[5]

Doctors and nurses have distinct but complementary roles in health care and must understand their own and each other's professional principles. Differences in traditions, laws and population needs across the world mean that while the roles of doctors and nurses in MNS care vary widely, they often overlap. Task-sharing further blurs these boundaries, making roles dynamic. In this context, it is essential for enhanced curricula to focus on core competencies across the entire health system, not just specific to each profession.

This document speaks of medical and nursing students together and presents guidance for both groups. While this broad approach is beneficial in supporting integrated care across general health settings (including primary health care), the guidance should be adapted to fit local cultural and country contexts and regulations.

[4] See Box 2.2 in Chapter 2 for a list of the priority MNS conditions addressed by the WHO Mental Health Gap Action Programme (mhGAP).
[5] For training resources for community health workers, see: CHW Central [website]: https://chwcentral.org/training-resources-search.

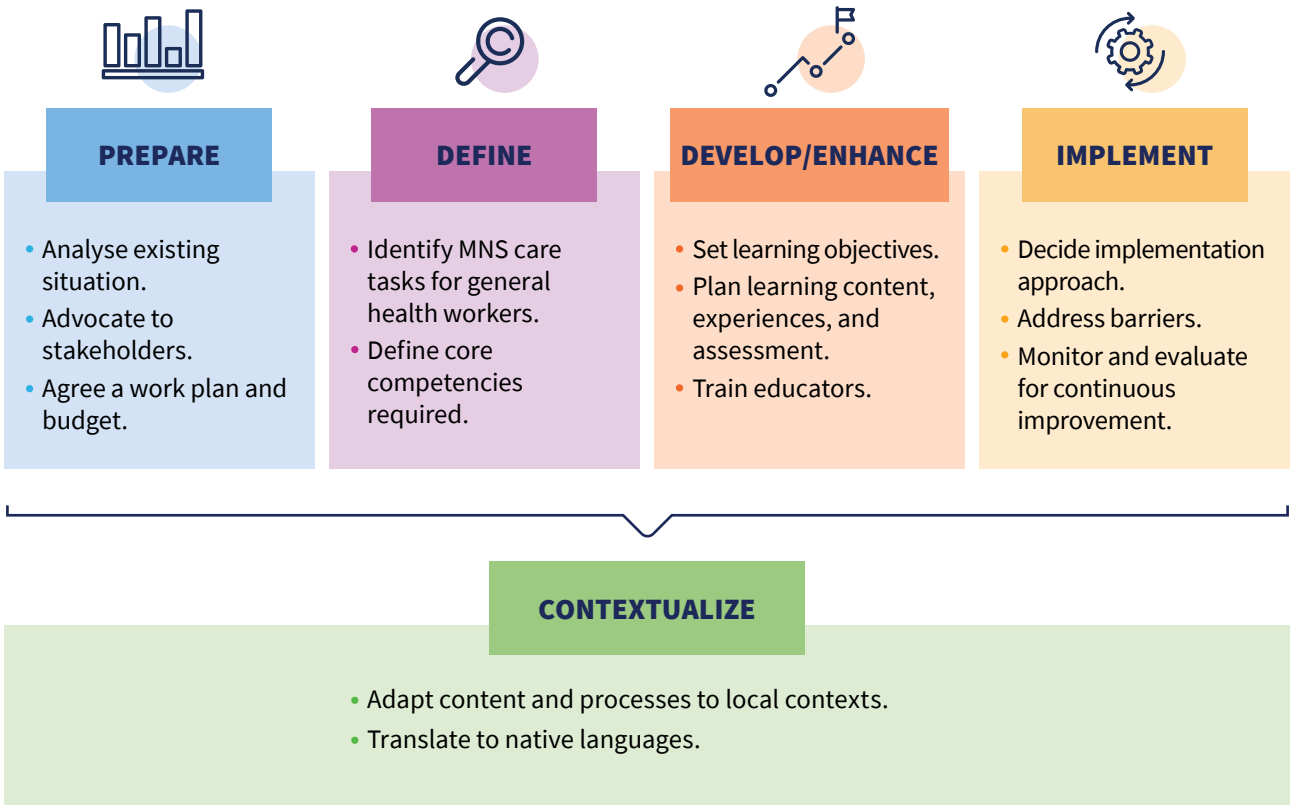
1.2.3 Structure and overview

The remaining chapters focus on key activities across four phases of action to embed MNS care competencies in first-degree medical and nursing curricula (see Fig. 1.3).

- Prepare and plan for curricular change by analysing existing contexts, building awareness and appetite among stakeholders and agreeing a work plan and budget (see Chapter 2).
- Define the parameters of change by identifying MNS care tasks that doctors and nurses need to do and defining the core competencies required (see Chapter 3).
- Enhance the curriculum by specifying the learning content, learning experiences, and assessment methods that will be used; and training educators where necessary (see Chapter 4).
- Implement the enhanced curriculum using a context-relevant approach and use monitoring and evaluation to drive continuous improvement (see Chapter 5).

FIG. 1.3

Four phases of action to embed MNS care competencies in first-degree medical and nursing curricula.



1.2.4 Development methods

The content for this document, including the list of core competencies for MNS care provided in Table 3.1 was developed in collaboration with partners, using an eight-step process.

- **Scoping review.** A review of the literature on PSE in MNS care, covering 12 scientific publications, 12 studies of mhGAP in PSE, 13 full university curricula, and nine curriculum summaries.
- **Expert consultations.** Semi-structured interviews and focus groups with 43 stakeholders across all six WHO regions, including academics, researchers, ministries of health and education, accreditation and licencing bodies, medical and nursing societies, students and people with lived experience of MNS care.
- **Expert group meeting.** A two-day workshop with 35 stakeholders from universities, government health and education departments, and professional and student associations. Participants shared their experience and expertise to define key competencies, curriculum content and implementation strategies.
- **Desktop review.** A review of peer-reviewed articles and grey literature on competency-based education, including academic publications, existing curricula, WHO programmes and publications,[6] and various international standards and national professional guidelines.[7]
- **Competency table.** WHO staff developed an initial set of 51 competencies, defined them in terms of attitudes, knowledge and skills; and then reduced them to 12 core competencies.
- **Review.** Multiple reviews of core competencies for technical accuracy and alignment with WHO tools and international guidelines,[6] first by WHO staff, then by 63 global stakeholders.
- **Second expert group meeting.** An international meeting with 27 stakeholders to validate the 12 core competencies.
- **Finalization.** Refinement of core competencies based on feedback from reviews.

[6] For example: mhGAP training manuals (https://iris.who.int/handle/10665/259161), UHC compendium (https://www.who.int/universal-health-coverage/compendium/database), Global competency and outcomes framework for UHC (https://iris.who.int/handle/10665/352711), and EQUIP (https://equipcompetency.org/en-gb).

[7] For example: International Council of Nurses guidelines on mental health nursing (https://www.icn.ch/resources/publications-and-reports/guidelines-mental-health-nursing), World Psychiatry Association recommendations (https://www.wpanet.org/_files/ugd/e172f3_831da6ddcfcf43a284c2afc1a1666589.pdf) and UK General Medical Council guidelines (https://www.gmc-uk.org/-/media/documents/outcomes-for-graduates-2020_pdf-84622587.pdf).

2

Prepare and plan for change

Embedding MNS care competencies in PSE is essentially an exercise in curricular change. Success requires a clear purpose, stakeholder support and institutional capacity. Key activities are establishing a curriculum review committee (CRC), doing a situation analysis to assess needs, advocating and engaging stakeholders, and developing an implementation plan and budget.

Importantly, there is no single order in which to do these activities, and the depth to which each is completed will vary depending on context and resources. So, for example, in some cases the situation analysis may come before appointing a CRC, which may be formal or informal. In resource-limited settings, curricular change may start with small changes, or target only a small cohort of students. Later, any successes can be used to drive further investment and expansion.

Although curricular change is urgent because of large treatment gaps and workforce shortages, its timing relies on available resources, context and university processes. You will likely need to align MNS-related enhancements with general university curriculum updates.

2.1 Pick a curriculum review committee

The CRC is responsible for planning and overseeing the development and implementation of an enhanced curriculum. Its diverse roles include: engaging stakeholders, building support and securing resources (see section 2.3), planning and overseeing the process of curricular change (see section 2.4), and overseeing monitoring and evaluation (see section 5.3).

The CRC may be established at national or institutional levels. In resource-constrained settings it may simply be an informal group. Ideally, it should include representation from key stakeholder groups such as people with lived experience of MNS conditions, students and graduates, educators, policy-makers, health care workers, and professional organizations such as nursing and medical associations. Different stakeholders have different roles in supporting curricular change (see Table 2.1).

TABLE 2.1
Stakeholder roles in curricular change.

Stakeholder group		Role in curricular change
Accrediting, licensing, professional and regulatory bodies	Medical and nursing boards, licensing boards, ministries of health and/ or education, professional associations and societies.	• Set accreditation criteria and guidelines for an enhanced curriculum. • Use a competency-based approach and include MNS content in national board exams (or equivalent). • Align accreditation and licensing requirements. • Audit the enhanced curriculum.
University administration	Senates, faculty deans and councils, any other staff responsible for managing and apprwoving curricula.	• Guide and approve curricular changes. • Promote change to university staff and students. • Oversee the process of curricular change. • Liaise with accrediting bodies to get the enhanced curriculum accredited and audited.

Photo credit (previous page): nurses doing paperwork at a health centre. Tajikistan, 2023 ©WHO / Mukhsin Abidzhanov

TABLE 2.1 (continued)

Stakeholder group		Role in curricular change
People with lived experience of MNS conditions (and non-profit and advocacy groups that work with these populations)	Service user groups and people with lived experience of MNS conditions, their families and carers (formal and informal).	• Identify gaps in current practice. • Provide feedback on proposals for an enhanced curriculum. • Help monitor and evaluate the enhanced curriculum (including by providing feedback on graduates' competencies that can be reported back to university and national boards).
University staff and external consultants (including pedagogical consultants, faculty developers, health science education researchers)	Teaching staff, course coordinators, supervisors and heads of schools/ departments responsible for developing and delivering curricula.	• Where possible, join a multidisciplinary team to co-develop, deliver and assess the enhanced curriculum. • Promote curricular change to colleagues and students. • Monitor and evaluate the enhanced curriculum; and make changes for continuous improvement.
Clinical placement institutes and supervisors	Community-based health care facilities, general hospitals, primary health care bodies, regional clinics and their staff and administrators.	• Host clinical placements for the enhanced curriculum. • Provide supervisors and external staff for enhanced curriculum in-clinic activities and assessments. • Help monitor and evaluate (including by participating in pilot tests and evaluating graduates' competencies and reporting them to the university and national boards).
Potential employers of graduates	Public and private health care services and their staff and administrators.	• Help define learning outcomes and competencies needed for practice. • Help monitor and evaluate (including by participating in pilot tests and evaluating graduates' competencies and reporting these back to the university and national boards).
Learners	Current students, prospective students and recent graduates.	• Provide feedback on enhanced curriculum proposals; and co-develop content. • Help monitor and evaluate (including by participating in pilot tests and providing feedback of experiences during and after the enhanced curriculum).

Ideally, multiple representatives from each stakeholder group, especially people with lived experience, are appointed to the CRC. Involving university administration and faculty across different departments – such as general medicine and nursing, neurology, paediatrics, psychology and psychiatry – can help ensure a multidisciplinary approach, which reduces teaching loads and means that students cover all aspects of MNS care (see Box 2.1). Educators may need incentives to participate, for example extra training or recognition towards recertification or continuing professional development *(34)*.

BOX 2.1

Lessons from Costa Rica: harnessing the power of a multidisciplinary CRC

In Costa Rica, at the University of Medical Sciences (UCIMED), a multidisciplinary CRC from psychiatry, psychology, medicine, pharmacology, public health, and nutrition developed and delivered an enhanced curriculum for undergraduate medical students.

Led by the head of the psycho-pedagogy department, the committee used the mhGAP intervention guide (mhgap-IG) as the basis for its work and adopted a collaborative approach to content creation. Committee members reviewed the guide through their area of expertise, integrating it with existing curricula and adding content. Each committee member was also invited to develop additional content and assessments; and to teach the newly enhanced curriculum.

Sharing the teaching load across subject experts reduced the resources needed for training and ensured that students covered all aspects of MNS care. Each aspect of care was taught by subject experts (for example, public health educators covered the public health framework for MNS care, pharmacists taught the pharmacology of MNS care, and psychiatrists taught diagnostics etc).

The curriculum structure encouraged students to see their future careers as part of an interdisciplinary MNS care team, reflecting the collaborative, multidisciplinary nature of MNS care.

Source: Ana Carolina Paris de Zaidman, School of Medicine, Department of Psychopedagogy, University of Medical Sciences (UCIMED), Costa Rica, personal communication, 26 November 2022.

2.1.1 Establish a shared vision

A first task for the CRC is to develop a shared vision that defines the purpose of curricular change to guide the committee's work. This vision should be developed with input from key stakeholder groups and should specify:

- why curricular change is needed and what gaps it will address;
- the target audience for curricular change (e.g. nursing students, medical students);
- specific goals and objectives for an enhanced curriculum; and
- envisioned outcomes of an enhanced curriculum (see Chapter 4).

2.2 Do a situation analysis

A situation analysis helps identify to what extent curricular change is necessary and feasible. It informs planning and implementation (see Table 2.2). It also guides the CRC in selecting competencies to be taught in the enhanced curriculum (see Table 3.1). It includes gathering information about:

- existing first-degree medical and nursing curricula and how they are implemented within the university, including educators' competencies (internal situation analysis); and
- the broader local, regional and national context for setting and delivering these curricula, and the needs in health services that they should address (external situation analysis).

Data for the situation analysis can be national, regional or local (e.g. for a specific district or setting). Information can be quantitative, qualitative or mixed. It should be as recent and specific to the context as possible.

TABLE 2.2

Types of information to gather in a situation analysis.

Internal situation analysis

The existing curriculum	• Learner objectives for developing MNS care competencies. • Learning content and sources. • Organization and sequencing (e.g. time spent on MNS care). • Learning experiences and teaching methods. • Assessment methods and formats (e.g. use of role plays or equivalent). • Structure of course credits. • Alignment with evidence-based, rights-based, person-centred care approaches. • Any recent reports or evaluations of existing curriculum.
Existing and potential resources within the institution	• Existing and potential resources for curriculum delivery (e.g. people, time, funds, infrastructure). • Existing competencies of educators (to assess training needs). • Any plans to revise existing curricula. • University guidance for curriculum reform.
Institutional context	• Attitudes toward MNS issues within the university (i.e. how educators and students perceive people with MNS conditions and MNS care).

TABLE 2.2 (continued)

External situation analysis

Standards, policies and recommendations	• Standards of MNS care and defined roles for doctors and nurses (e.g. policies, strategies, legislation, prescribing privileges). • Requirements for MNS care in first-degree medical and nursing curricula. • Any recent reports or evaluations of medical and nursing curricula. • Relevant legislation (e.g. on substance use, criminalization of suicide and self-harm; mental health laws, voluntary and involuntary admissions). • Context-specific limitations (e.g. alignment with governmental standards and curricula, evidence, and national priorities). • National MNS-related plans, policies and strategic framweworks.[a b c]
MNS needs	• Epidemiology of MNS conditions across the life course.[c d] • Community needs for accessing MNS care. • Discrimination and stigma against people with MNS conditions. • Cultural considerations (e.g. cultural expressions of MNS conditions or culturally appropriate care such as from traditional and faith healers).
Existing services for MNS care	• Availability, accessibility, acceptability and quality of services for providing MNS care.[b c] • Guidelines, protocols and expectations for MNS care provided by doctors and nurses. • In-service training in MNS care for doctors and for nurses.
Existing and potential resources outside the university	• Existing and potential resources for defining, developing and delivering an enhanced curriculum (e.g. clinical placement provider organizations, champions for change, funding). • Available and relevant training materials that could be adapted for the enhanced curriculum.

Notes:

[a] WHO MiNDbank provides an online database of national and regional policies, strategies, laws and service standards on mental health, substance abuse, disability, general health, NCDs, human rights, development, children and youth, and older persons. See: https://extranet.who.int/mindbank/.

[b] The WHO Mental Health Atlas tracks progress in implementing WHO's Comprehensive Mental Health Action Plan 2013–2030, with information on mental health policies, resources and services. See: https://iris.who.int/handle/10665/345946.

[c] The Global Information System on Alcohol and Health (GISAH) is a tool for assessing and monitoring the health situation, trends and policy responses related to alcohol consumption and alcohol-related harm. See: https://www.who.int/data/gho/data/themes/global-information-system-on-alcohol-and-health.

[d] If there are no national epidemiology studies available, then modelled data are available from the Institute for Health Metrics and Evaluation at: https://ghdx.healthdata.org.

2.2.1 Identify targets for improvement

Embedding MNS competencies into PSE for doctors and nurses typically involves enhancing an existing curriculum, rather than building a new one. Only in some cases, for example the establishment of a new medical school, or a complete absence of MNS education, will a new curriculum be necessary.

Targets for improvement that might emerge from the situation analysis include:

- updating content to better reflect current evidence;
- shifting towards a more biopsychosocial model that emphasizes human rights and person-centered care;
- including contextual influences and culture-related features of MNS conditions;
- involving service users in curriculum delivery;
- adding more practical components or competency-based assessments to strengthen experiential learning;
- increasing the use of digital technology to support teaching and learning processes;
- training faculty to increase their MNS knowledge; or
- refining clinical placement settings.

2.2.2 Tailor to context

The external situation analysis helps prioritize and tailor curricular change to context.

In all countries, this guide proposes that medical and nursing students be trained to competently care for the priority conditions in WHO's mhGAP (see Box 2.2). It also suggests students should be able to identify and respond to a broad range of issues that may increase the risk of MNS conditions, such as child abuse or bereavement (see Fig. 2.1). Addressing these social issues will typically require collaborating with health, legal, social or other professionals, agencies or resources as they often extend beyond the scope of nursing and medical practice.

Students should also recognize and be able to refer (but not necessarily be skilled to manage) people living with a wider range of conditions, such as obsessive-compulsive disorder, specific phobias, social anxiety disorder, and cerebral palsy. Additionally, students should be aware of context-specific differences in the concepts of mental health, brain health, substance use and MNS care.

BOX 2.2

mhGAP priority conditions

mhGAP focuses on priority MNS conditions that represent a high burden in terms of mortality, morbidity and disability; cause large economic costs; or are associated with widespread violations of human rights.

The mhGAP priority conditions are: alcohol use disorders (AUDs), generalized anxiety disorder, panic disorder and panic attacks, child and adolescent mental and behavioural disorders, post-traumatic stress disorder, dementia, depression, drug use disorders (DUDs), epilepsy and seizures, psychosis and bipolar disorder, self-harm and suicide, and other significant emotional problems and bodily distress.

FIG. 2.1

Social issues that increase the risk of developing an MNS condition.

Relationship
- Physical, sexual or psychological abuse (including domestic gender-based violence and intimate partner violence).
- Child neglect and/or abuse.
- Elder abuse.
- End of relationship.
- Harassment or bullying (including online).

Absence, loss or death of others
- Bereavement.
- Disappearance or death of family member/close friend.
- Terminal diagnosis of family member.

Family circumstances
- Separation or divorce.
- Pregnancy, infertility, fetal exposure to psychoactive substance use, maternal reproductive and postpartum health or new parenthood.
- Inadequate family support.
- Caregiver stress.
- Financial pressures.
- Adverse childhood experiences.

Exposure to potentially traumatic events
- Exposure to disaster, conflict or violence.
- Victim of (violent) crime or terrorism.
- Serious accident.
- Interpersonal or collective gender-based violence.
- Sexual exploitation.

Education
- Problems associated with low-level literacy.
- Limited or interrupted education.
- Poor learning environments.

Social or cultural environment
- Social exclusion, rejection or isolation.
- Social, economic and gender inequalities.
- Injustice, discrimination or persecution.
- Conflict and forced displacement.
- Climate crisis, pollution or environmental degradation.
- Myths and misconceptions about MNS conditions.
- Social norms that favour substance use.
- Easy access and advertisement of psychoactive substances.
- Cultural beliefs and practices that affect health-seeking behaviour.

Work
- Unemployment.
- Discrimination in accessing or carrying out work.
- Poor working conditions.
- Chronic workplace stress.

Health behaviours
- Hazardous alcohol and/or drug use.
- Hazardous gambling and/or gaming.
- Problems with diet, physical activity, hygiene and/or oral health.
- Poor health and help-seeking behaviours.

Other
- Initiating opioid or other addictive painkillers as a response to acute or chronic disease.
- Dealing with difficult diagnoses.
- Irrational or inappropriate practices for prescribing and dispensing medicines.
- Diversion of medicines with psychoactive and dependence-producing properties to nonmedical use.
- Problems with criminal justice.

Sources: WHO, 2024 *(35)*; WHO, 2022 *(2)*.

2.2.3 Find sources of support

A key part of the situation analysis is evaluating resources to address capacity gaps, including identifying funding for curricular change.

For example, the analysis may show that general nursing and medical faculty need training to effectively deliver MNS-related content (see section 4.5). Or it may point to other disciplines, departments or external organizations skilled in MNS care that can help co-develop and co-deliver an enhanced curriculum (see Box 2.1).

2.2.4 Understand your stakeholders

Part of the situation analysis should focus on learning about stakeholders to better understand how curricular change might impact them, gauge their support or resistance, identify conflicts of interest and determine how they might contribute *(36)*.

This involves assessing their knowledge of MNS conditions and care, position on change, interest, power, and leadership potential. Mapping stakeholders onto a power–interest grid can guide their engagement (*37*).

Understanding the perspectives of national decision-makers, and university staff and management is especially important as these stakeholders can make or break an enhanced curriculum. If accrediting, licensing and regulating bodies support stronger MNS care in first-degree curricula, it will ease the process. Similarly, university administrations that prioritize mental and brain health and substance use prevention are more likely to mobilize resources.

Engaging students is key to understanding their mental health needs and priorities, identifying potential curriculum issues that might lead to overload and excessive stress, and assessing the availability of mental health services and resources for support. Involving people with lived experience is also valuable for curriculum development as well as for advocacy and endorsement.

2.3 Advocate for and secure endorsement

Achieving curricular change relies on ongoing advocacy and engagement from diverse stakeholders. Advocacy efforts aim to:

- raise awareness and understanding of the need for an enhanced curriculum focused on MNS competencies;
- secure support, consensus and endorsement among key decision-makers;
- mobilize resources for curriculum development and delivery; and
- achieve widespread acceptance and meaningful participation of those affected (including students, people with lived experience of MNS conditions and health care workers).

Advocacy goals and the level of endorsement needed will vary by context and stakeholder group.

2.3.1 Focus on levers for change

Building an investment case for promoting mental and brain health, preventing substance use harms, and supporting curricular change is often a critical first step in advocacy. This forms the foundation for effectively engaging with stakeholders.

Findings from the situation analysis may point to useful entry points or levers for change.

- **Use national or regional policies or regulations** to argue for greater emphasis on MNS or clinical practice. For example, the June 2018 mental health law in the Philippines mandates psychiatry and neurology as required subjects in all medical and allied health courses *(38)*.
- **Leverage mhGAP** in countries where it is well known and used for in-service training to disseminate information. Emphasize integrating MNS care into primary health care and other services and build buy-in for enhanced curricula among health care workers and educators (including potentially through training, see section 4.5).
- **Look for windows of opportunity** provided by favourable contexts or key events that can provide the momentum for change. For example, emergencies, natural disasters and conflict, while tragic, can also represent an opportunity to capitalize on increased public and political attention to develop appetite for mental, brain and behavioral health and workforce development.
- **Use institutional curriculum review cycles** as a framework for reform and formal opportunities to push for significant revisions.

Effective advocacy is a collective task. Champions and collaborators, respected by their peers and enthusiastic about MNS care, should be recruited across stakeholder groups. People with lived experience of MNS conditions can be particularly valuable champions. By sharing their stories, they can help people better understand MNS conditions and their economic, social and individual impacts and so build support for an enhanced curriculum *(39)*.

Students and educators can also drive change by raising awareness of MNS conditions and lobbying for stronger integration of MNS care into existing curricula (see Box 2.3). Demand for curricular change can be built top-down, for example by influencing exam boards to include more content on MNS care in exit exams. Or they can be built bottom-up through student and faculty initiatives, such as by:

- promoting self-care and MNS awareness on campus;
- hosting events in universities and communities to profile mental health, brain health and the prevention of substance use harms;
- strengthening student associations' capacity to voice the need for MNS care to be integrated into the curriculum;
- supporting university clubs related to mental health, brain health and substance use; and
- increasing the weight of MNS components in formal student performance evaluations.

Global experiences in integrating mental and brain health and substance use responses into PSE highlight the importance of engaging university staff *(40)*. Involving specialists, such as teaching psychiatrists, neurologists and advanced mental health nurse practitioners, ensures content accuracy and encourages specialist community support *(26)*. Non-specialist educators will need training to teach and assess an enhanced curriculum (see section 4.5).

Early engagement can help educators take ownership of any new learning content, reducing the need for extensive preparation and endorsement later. Eventually, having a strong curriculum on MNS care will boost institutional reputation, which in turn will attract new faculty and students and generate funds for further investment in PSE.

BOX 2.3

Lessons from the Philippines: engaging student champions

In the Philippines, the Association of Philippine Medical Colleges – Student Network (APMCSN) was instrumental in improving MNS care training for medical students. In collaboration with the Philippine Educational Theatre Association (PETA) and faculty at the Ateneo School of Medicine and Public Health, APMCSN started the Semicolon Project, a series of workshops about MNS conditions.

These workshops combined informational sessions with standardized role plays and practical exercises where students could apply what they learned in a peer-to-peer context. Sessions went beyond MNS conditions to cover a broad array of psychologically distressing issues. The Semicolon Project sessions adapted to online formats during the COVID-19 pandemic and several typhoons.

Sessions were well received by medical students across the Philippines. The APMCSN used their success to advocate for MNS care training at a national event with deans from all 62 medical schools and faculties in the country. The network then continued to lobby universities to include MNS-related content in medical curricula. Many students used the lobbying as a platform to speak out about their own mental health struggles.

The students' efforts worked: one university developed a module on mental health; others included mental health talks and seminars in their curricula. One school set up a mental health wellness team and another launched a mental health workshop. These changes were driven by student advocacy, but would not have been possible without the support and collaboration of university administrators and various stakeholders.

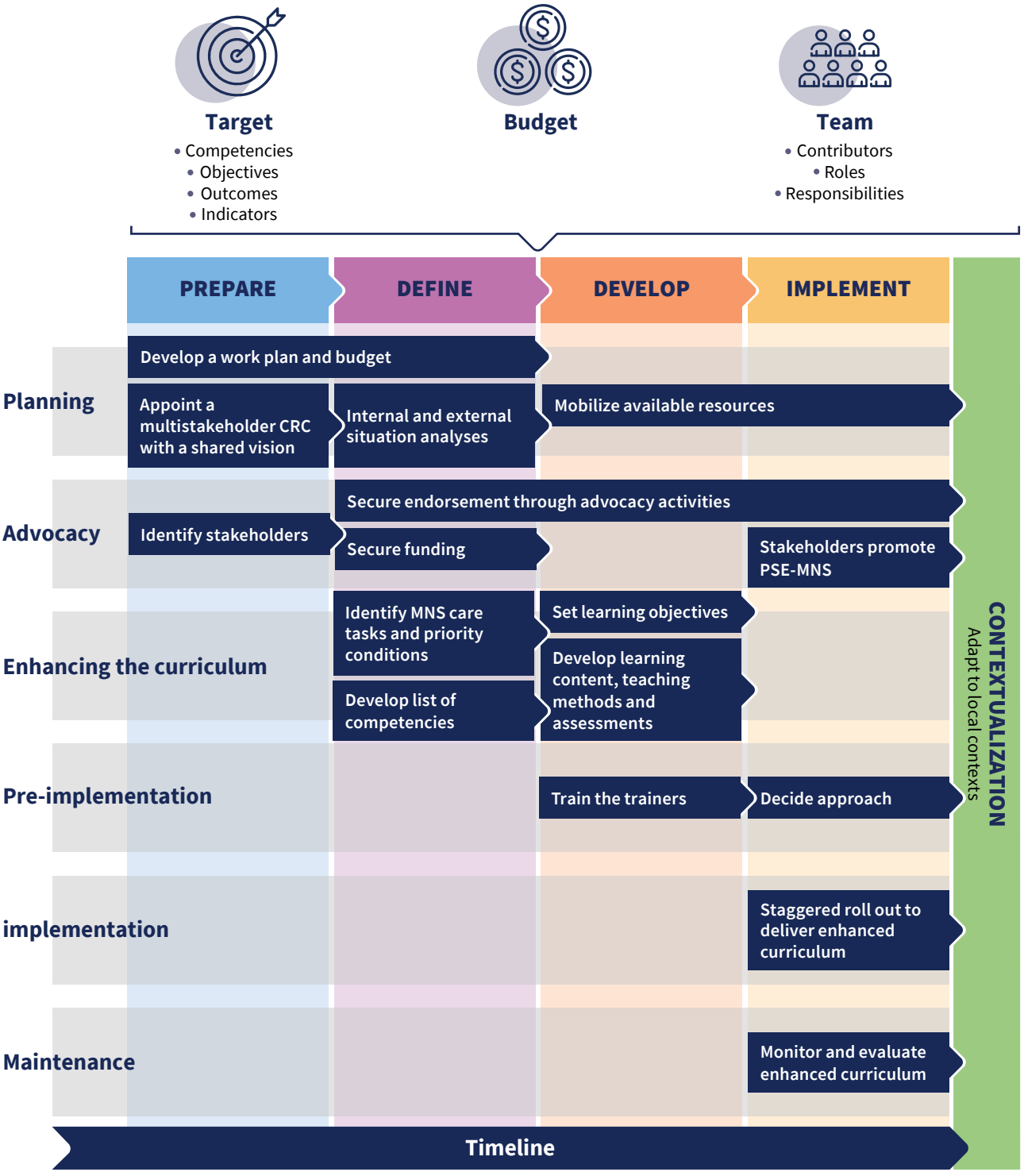
Source: Jean Rya Lim and Leandro Salazar, Association of Philippine Medical Colleges - Student Network; Fatima Barateta, Philippines Student Organizations Coordinating Council; and Genquen Philip Carado, Philippine General Hospital Interns' Council. Focus group discussion: the Philippines; 26 November 2022.

2.4 Develop a work plan and budget

The situation analysis findings should be used to develop a work plan and budget that identifies the who, what, where, how and when of implementing an enhanced curriculum (see Fig. 2.2).

FIG. 2.2

Typical components of a work plan for curricular change.



International principles for educational (re)design recommend that work plans be *(41, 23)*:

- targeted, with clear and realistic objectives for curricular change;
- inclusive, developed with the meaningful involvement and support of stakeholders, including people with lived experience of MNS conditions and students;
- informed by evidence and information about MNS conditions and care in the local context (i.e. based on findings from the situation analysis);
- competency-based, with all activities working toward the achievement of attitudes, knowledge and skills needed for professional roles;
- comprehensive in listing activities throughout implementation;
- specific in defining roles, responsibilities and realistic timelines for action; and
- resourced based on realistic costings.

Where teaching, funding, and time constraints exist, the work plan for enhancing the curriculum might comprise just a few quick changes (see Box 2.4).

The CRC should be responsible for developing, monitoring and, where necessary, revising the work plan and draft budget. To that end, the group will need to:

- define the specific goals and objectives of curricular change;
- identify possible barriers and mobilize available resources (see section 5.2 and Table 5.1);
- list activities, inputs and deliverables across all phases of implementation;
- decide who will lead each activity;
- cost activities and inputs;
- identify and secure reliable funding;
- establish implementation indicators for the plan and track the status of each activity; and
- create a monitoring and evaluation plan to assess the curriculum's success after launch (see Chapter 5).

BOX 2.4

Practical tips for working in resource-constrained settings

In resource-limited settings, consider these tips for quick curriculum enhancements.

- Focus on just a few core competencies (or underpinning knowledge, attitudes and skills) rather than all of them (see Table 3.1).
- Reorganize curriculum hours instead of adding more.
- Make small changes to existing courses, such as replacing case studies with those based on MNS conditions.
- Replace didactic teaching with self-learning or technologically supported methods to save time in the curriculum.
- Integrate MNS-related content into existing courses without waiting for formal curriculum renewals.
- Work with other faculties and schools to maximize teaching resources.
- Partner with local organizations and stakeholders (consultants, people with lived experience, clinical placement providers) to deliver curriculum content.

For more information on implementing an enhanced curriculum and practical tips for delivery in resource-constrained settings, see section 5.2.

3 Define competencies

3.1 Use a competency-based approach

In a competency-based approach, the curriculum is driven by learning objectives that are informed by real-world, context-specific health needs and expectations *(42, 43)*. These objectives are competencies linked to the MNS care tasks that medical and nursing students must master by the time they graduate and join the workforce (see Box 3.1).

Competency-based education has long been a focus of educational reform for health professionals *(42, 43, 23)*. Implemented well, it can increase the quality of MNS and other health services and support students to develop essential skills. Achieving and sustaining competencies is associated with lower workforce turnover rates, higher job satisfaction, reduced medical errors, and increased patient safety *(44, 45, 46)*. Compared with other educational models, competency-based education promotes better learner engagement and preparedness for practice *(47)*. By focusing on educational outcomes, it provides greater transparency and accountability to learners, policy-makers, and other stakeholders *(48)*.

A competency-based approach affects how an enhanced curriculum is structured and implemented. A defining characteristic is that the curriculum is learner centred. Students learn by "doing"; and they are encouraged to show what they have learned and mastered in a variety of ways *(49)*.

BOX 3.1

Defining MNS care tasks and competencies

MNS care tasks are the tasks that doctors and nurses are expected to carry out to provide services for people with MNS conditions during routine delivery of health care, including managing the issues in Fig. 2.1.

MNS competencies are the abilities of medical and nursing students and graduates to integrate attitudes, knowledge and skills in their performance of MNS care tasks *(50)*. Competencies are durable, trainable and, through the expression of behaviours, observable and measurable. To tell if someone is competent (proficient in applying competencies to tasks according to a pre-defined standard), their behaviour must be observed and assessed while they carry out tasks. Competence is contextual, multidimensional and dynamic, changing with time, experience and setting.

Photo credit (previous page): malaria vaccination campaign in Binava and Toumad. Côte d'Ivoire, 2024 © WHO / Amani, ADIDJ

In practice, a competency-based approach to developing an enhanced curriculum for MNS care comprises four main activities.

- **Define MNS conditions.** Identify the MNS conditions (disorders, psychosocial issues, etc) relevant to the country's health system.[8] This is accomplished through the situation analysis (see section 2.2).
- **Identify MNS care tasks.** Determine the MNS care tasks doctors and nurses need to perform based on these conditions (see section 3.2).
- **Select competencies.** Choose the competencies (and associated attitudes, knowledge and skills) required for students to adequately perform these tasks (see section 3.3).
- **Tailor the curriculum.** Design content, learning experiences and assessments to help students to achieve those competencies (see Chapter 4).

3.2 Identify MNS care tasks for doctors and nurses

Doctors and nurses need to perform various tasks when supporting people with MNS conditions. These will vary by context and should integrate mental, physical and social health care. Examples include:

- gathering information through assessments to understand support needs;
- administering screening and diagnostic tools;
- developing and adjusting treatment and recovery plans;
- providing medicines and monitoring their side effects;
- providing psychosocial support;
- responding to crises; and
- referring families to specialist care or community supports and services, as appropriate.

Some MNS care tasks are condition-specific, for example assessing for depression, or educating a person and their family about epilepsy. Others are cross-cutting, for example explaining confidentiality, encouraging self-care, providing outreach, or addressing life-course needs, like those of children or older adults. Combatting stigma is a universal task *(39, 51)*. In first-degree medical and nursing curricula, MNS tasks should be foundational, with more specialized tasks covered during later in-service training including postgraduate education.

3.2.1 Consider your context

Many MNS care tasks apply to both doctors and nurses but might vary in types of responsibility (for example, a doctor may have to do more detailed assessments). The specific MNS care tasks will depend on local regulations, needs, resources and available health services.

The availability of specialists also influences task distribution. In contexts where doctors and nurses are supported by MNS specialists, or work in teams for collaborative care, MNS care tasks become multidisciplinary activities with shared responsibility. By contrast, in contexts with limited access to specialists, especially in rural or private health care settings, doctors and nurses often taken on most MNS care tasks.

Interviews with educators, MNS specialists and other stakeholders highlight the diverse MNS care tasks expected across different contexts (see Fig. 3.1).

[8] Remember to consider all mhGAP priority conditions as well as any other nationally relevant MNS conditions (including disorders and related issues).

FIG. 3.1

Examples of locally relevant MNS care tasks for doctors and nurses, as prioritized by country stakeholders.

GUYANA

- Detect depression, self-harm and suicide among children and adolescents.
- Support individuals experiencing psychological distress related to HIV or diabetes.
- Do home visits to support people with AUDs.
- Community outreach.

INDIA

- Identify clinically significant distress, substance use and self-harm.
- Provide perinatal, child and adolescent mental health care and support.
- Engage communities to promote and protect mental and brain health and avoid harms due to substance use.
- Integrate traditional medicines and methods of care in mental health care plans.
- Link people to social insurance schemes.
- Participate in monitoring activities to collect data.

ETHIOPIA

- Accurately detect mental health conditions.
- Prescribe medicines.
- Refer to specialists.
- Communicate with individuals and families.
- Reduce stigma through mental health advocacy.

ZAMBIA

- Provide mental health care for children and youth.
- Raise awareness of MNS conditions.
- Administer culturally appropriate screening.
- Deliver interventions for alcohol and substance use related conditions.
- Deliver suicide prevention interventions.
- Deliver remote support.

Sources: Ethiopia: Atalay Alem, Department of Psychiatry, University of Addis Ababa, Co-director of a WHO Collaborating Centre, interviewed on 11 July 2022. Guyana: Nicole Nedd-Jerrick, Enmore Polyclinic, Georgetown Guyana, Head of Clinic and Medical Practitioner, interviewed on 19 October 2022. India: Pratap Sharan, All Institute of Medical Sciences, Professor, interviewed on 28 July 2022. Zambia: Kelvin Ngoma, REPSSI, Country director, interviewed on 5 August 2022.

The findings from the situation analysis can help identify relevant MNS care tasks, including those that might be mandated or prioritized in government policy. It will also identify existing resources for MNS services in the health system.

3.3 Identify competencies required

To provide quality and effective care for people with MNS conditions, doctors and nurses must be competent, i.e. they must be able to integrate relevant knowledge, skills and attitudes when performing MNS care tasks (see Fig. 3.2). Competencies are expressed as behaviours that can be observed and measured when performing MNS care tasks.

FIG. 3.2

Competencies comprise attitudes, knowledge, and skills integrated in the performance of MNS care tasks.

The sections that follow define 12 core competencies that doctors and nurses need to adequately perform MNS care tasks following PSE (see Table 3.1). The attitudes, knowledge and skills underpinning each competency are also defined.

These competencies apply to all mhGAP priority conditions (see Box 2.2) and are broad enough to likely also apply to other MNS conditions. They represent the minimum set of attitudes, knowledge and skills for MNS tasks in any clinical encounter, though not all will be relevant in every situation.

While curricula should ideally cover all 12 core competencies, some may require only minimal enhancements or may focus on specific skills (e.g. a course on psychological assessment). In some cases, additional competencies may be necessary for locally relevant MNS conditions, such as conditions related to regionally specific psychoactive substances (e.g. khat in Somalia, tramadol in Northwest Syria, or heroin in Afghanistan). Competency selection will be guided by the situation analysis (see section 2.2).

TABLE 3.1

Core competencies required by doctors and nurses to effectively care for people with priority MNS conditions across settings and tasks.

Competencies	Attitudes[a]	Knowledge	Skills
1. Demonstrate foundational helping[b] (applies to every clinical encounter)	Cross-cutting foundational attitudes that apply to all competencies: • Genuine. • Compassionate. • Warm. • Optimistic/hopeful. • Inclusive. • Respectful. • Non-judgmental. • Collaborative.	• What foundational helping skills are and why they matter. • Local cultural differences in communication, help-seeking and expectations of care. • Legal provisions on confidentiality and consent. • Risk and protective factors for suicide. • Psychoeducation topics for MNS conditions.	• Use non-verbal communication and active listening. • Use verbal communication. • Explain and promote confidentiality. • Build rapport and support self-disclosure. • Explore and normalize feelings. • Demonstrate empathy, warmth and genuineness. • Assess risk of harm to self and harm to or from others and develop a collaborative response plan. • Connect to social functioning and impact on life. • Explore the explanation of the problem from the perspective of the person and their social support network. • Involve family members and others appropriately. • Collaboratively set goals and address expectations (with the person, their caregivers and other health care workers). • Promote realistic hope for change. • Incorporate coping mechanisms and solutions that worked in the past. • Provide psychoeducation and use local terminology. • Get feedback when providing advice, suggestions and recommendations.

Notes.

[a] The definition of foundational helping is based on the Enhancing Assessment of Common Therapeutic (ENACT) competencies. See: https://equipcompetency.org/sites/default/files/downloads/2022-07/ENACT_inperson_published_220321.pdf.

[b] Attitudes are defined as a person's feelings, values and beliefs, which influence their behaviours and performance of tasks. See: Mills J-A, Middleton JW, Schafer A, Fitzpatrick S, Short S, Cieza A. Proposing a re-conceptualisation of competency framework terminology for health: a scoping review. Hum Resour Health. 2020;18(1):15. https://doi.org/10.1186/s12960-019-0443-8.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
2. Provide rights-based care[c] (applies to every clinical encounter)	• Foundational attitudes (see above row 1). • Non-coercive. • Empowering. • Non-stigmatizing. • Respect for rights of individuals and their families.	• What is involved in person-centred, recovery-oriented rights-based care. • Health care workers' roles promoting and protecting rights and preventing coercion, violence and abuse. • International and national human rights standards and principles as applied to MNS conditions. • Legal limits of confidentiality. • National legislation that protects the rights of people living with MNS conditions and reporting mechanisms for violations. • Legal context related to MNS conditions (e.g. illegal drug use and consequences; criminalization of suicide). • Ethical approaches to health care and health care workers' roles in promoting and protecting rights and preventing coercion, violence and abuse.	• Promote respect, dignity and non-coercive practice. • Promote the rights of people with MNS conditions (including inclusion and participation in society) on an equal basis with others. • Address MNS-related stigma and discrimination, including by supporting people with MNS conditions to overcome discrimination. • Respect the will and preference of and promote supported decision-making, access, recovery and advance planning in the care of people with MNS conditions. • Identify ongoing or immediate risks of human rights violations against people with MNS conditions and protect them from coercion, violence and abuse. • Educate people with MNS conditions on their rights and ensure informed consent for treatment plans. • Educate families and any social care providers on how to protect and promote human rights of family members with MNS conditions. • Assess the person's capacity to understand, endorse, retain, evaluate, and communicate decisions relating to their care. • Respect the person's culture and their endorsement of other potential health care options (such as religious, faith or traditional healers).

[c] The definition of rights-based care is based on QualityRights training materials. See: https://www.who.int/publications/i/item/who-qualityrights-guidance-and-training-tools and https://www.who.int/teams/mental-health-and-substance-use/policy-law-rights/qr-e-training.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
3. Promote mental and brain health, prevent/reduce harms due to substance use and prevent/reduce risk of priority MNS conditions	• Foundational attitudes (see above row 1). • Proactive.	• Evidence-based strategies and interventions in prevention or reduction of harms due to substance use, mental and brain health promotion and MNS condition prevention that can be offered during clinical care. • Risk factors (particularly reversible ones) and determinants of MNS conditions. • Other health-related problems associated with MNS conditions, e.g. sleep problems, obesity, social isolation or withdrawal and substance use. • Suicide prevention strategies and interventions. • Other health conditions that can lead to increased rates of different MNS conditions. • Early childhood development and socio-emotional skills learning. • Community outreach and awareness raising strategies and opportunities.	• Promote mental and brain health and prevent/reduce harms due to substance use during routine clinical care. • Educate people with MNS conditions and their families on healthy choices around diet, physical activity, sleep, and on risks associated with alcohol and drug use. • Educate people with MNS conditions and their families on mental health, brain health and substance use and early warning signs of priority MNS conditions. • Educate people with MNS conditions and their families on suicide prevention strategies and early warning signs of suicidal behaviour. • Promote social connection and activation of social networks. • Promote early childhood development and socio-emotional skills learning among children and adolescents.
4. Provide clinical emergency care for people with MNS conditions	• Foundational attitudes (see above row 1). • Solution-focused. • Calm and composed.	• Emergency protocols and best practice (e.g. related to suicidal behaviour, self-harm, aggression, convulsions, substance use), covering both non-pharmacological and pharmacological interventions. • National standards, legislation and regulations for emergency response.	• Assess and manage emergency presentations common in priority MNS conditions (e.g. those related to self-harm, suicidal behaviour, aggression, convulsions, substance use), covering both non-pharmacological and pharmacological interventions.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
5. Assess for MNS conditions	• Foundational attitudes (see above row 1). • Deliberate. • Determined.	• The steps of MNS assessment. • Mental status and neurological examinations. • Common presentations of MNS conditions. • Clinical assessment techniques (e.g. clinical interviewing, laboratory testing) and specific clinical assessments (e.g. assessment of cognitive decline and behavioural/psychological symptoms for dementia). • Local idioms and concepts of distress, local help-seeking behaviours and local explanatory models for priority MNS conditions. • Methods for psychosocial assessment. • Diagnostic criteria for priority MNS conditions and differential diagnoses (including symptoms, syndromes, threshold and sub-threshold, acute and chronic presentations).[d]	• Obtain presenting complaints. • Assess physical health (history, physical examination, laboratory tests). • Conduct mental status and neurological examinations. • Assess for physical symptoms of MNS conditions (and vice versa). • Assess personal and family history of MNS conditions. • Conduct psychosocial assessment (e.g. of stressors, psychological and environmental resources, social, material and relational support needs, and social, structural and economic barriers/determinants impacting people with MNS conditions). • Conduct specific clinical assessments, as indicated (e.g. assessment of cognitive decline and behavioural/psychological symptoms for dementia). • Conduct and interpret results of screening for substance use related health risks. • Identify the problem and/or priority MNS condition and make differential diagnosis.[d]

[d] Local law will vary on what nurses and doctors are licensed to do.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
6. Manage priority MNS conditions	• Foundational attitudes (see above row 1). • Considered. • Determined. • Recovery-oriented. • Critical attitude to consider the value and limitations of different psychosocial and pharmacological interventions.	• Non-pharmacological techniques for specific priority MNS conditions. • Essential medicine prescription and ongoing management (education on benefits, harms, duration and adherence; laboratory monitoring of specific medicines). • Guidelines for managing symptoms that may be associated with MNS conditions, e.g. sleep problems, pain, obesity, enuresis. • Guidelines for managing side effects of medicines. • How to start and end care.	• Collaboratively plan treatment and recovery (with the person, their caregivers and other health care workers). • Manage physical health comorbidities and risk factors in people with MNS conditions. • Provide (psycho)education to individuals and caregivers for priority MNS conditions. • Provide psychosocial support (see row 7 below). • Provide non-pharmacological techniques for specific priority MNS conditions (e.g. individually tailored brief interventions for substance use conditions, brief problem-solving techniques, advice on behavioural activation for depression; cognitive stimulation for dementia; counselling on physical activity for depression). • Offer essential medicines for priority MNS conditions if indicated.[d] • Depending on local regulations and scope of practice, rationally prescribe any medicines with psychoactive and dependence producing properties.[d] • Manage symptoms that may be associated with MNS conditions, e.g. sleep problems, pain, obesity, enuresis. • Manage any side effects of medicines.[d] • Keep clinical records of assessment, management, referral, and follow-up throughout care.

[d] Local law will vary on what nurses and doctors are licensed to do.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
7. Provide psychosocial support as part of managing MNS conditions	• Foundational attitudes (see above row 1). • Values psychosocial support. • Recovery-oriented. • Solution-focused.	• Social resources in the community. • Problem solving counselling techniques. • Professional and legal responsibilities related to maltreatment, abuse and neglect. • Biopsychosocial impact of stress. • Guided self-help materials and techniques. • Specific stress management techniques.	• Identify and explore social stressors, difficulties, impact of social determinants, and support needs (e.g. relationship problems, employment/ livelihood issues, housing, bereavement, receiving a difficult diagnosis, education, social welfare). • Collaboratively identify ways to address social difficulties and link to relevant social resources (with the person, their caregivers and other health care workers). • Where appropriate, accommodate or collaborate with traditional or faith healers. • Assess and manage situations of maltreatment, abuse and neglect. • Offer guided self-help or refer to mutual support groups. • Teach stress management. • Strengthen social (interpersonal) supports.
8. Support carers of people with MNS conditions	• Foundational attitudes (see above row 1). • Values carers' contributions and needs.	• Role of carers in supporting people with MNS conditions. • Impact of priority MNS conditions on caregivers. • Where to refer to for resources for carer training and support. • Carer support resources and methods for selected conditions (e.g. for dementia, developmental disabilities).	• Provide psychosocial support to carers (see row 7 above). • Provide (psycho)education on MNS conditions to carers, including self-care and when to seek additional care. • Refer carers with MNS conditions, where appropriate. • Empower and engage carers in decision-making as appropriate.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
9. Adapt MNS care for people in populations with special needs (e.g. pregnant women, new mothers, young people, older adults, among others)[e]	• Foundational attitudes (see above row 1). • Non-discriminatory.	• Risks and special considerations in caring for populations with special needs. • Medicine interactions and contra-indications in populations with special needs. • Principles and approaches for child-, youth- and family-centred care.	• Apply specific protocols for deciding on medicines for populations with special needs. • Provide indicated management for populations with special needs. • Apply principles of child- family- and older adult-centred care.
10. Refer people with MNS conditions appropriately and in a timely manner and collaborate with other health care workers in their care	• Foundational attitudes (see above row 1).	• Available MNS specialists and their roles. • Referral procedures and options for MNS specialist care, psychological interventions and support from community resources (e.g. social services, employment support, harm reduction services, legal aid, mutual help groups). • Barriers to accessing care and help-seeking (e.g. lack of privacy, limited opening hours, lack of youth-friendly services).	• Refer to other health care workers where needed. • Refer for indicated psychological interventions (e.g. brief, manualized, evidence-based interventions based on approaches or specialist delivered cognitive behavioural therapy (CBT)). • Refer for indicated specialist care, including pharmacological interventions if necessary (e.g. opioid agonists maintenance treatment, uncontrolled seizures). • Refer for support and resources in the community (e.g. social care services or harm reduction services for people using drugs). • Collaborate with other health and social care workers in providing care, the person with an MNS condition and their caregivers.

[e] Populations with special needs may include, for example: children and adolescents; older adults; pregnant women and new mothers; people with learning, intellectual and other disabilities; neurodiverse people; people who identify as LGBTIQ+; people exposed to intimate partner violence and sexual violence; migrants and/or refugees; people living with HIV or other comorbid conditions, people in contact with the criminal justice sector, people experiencing homelessness, people who identify as ethnic minorities, etc.

TABLE 3.1 (continued)

Competencies	Attitudes	Knowledge	Skills
11. Follow-up with people with MNS conditions	• Foundational attitudes (see above row 1). • Proactive. • Realistic. • Flexible.	• Importance of follow-up. • Frequency of follow-up for different interventions/clinical scenarios. • Barriers and facilitators to MNS treatment adherence.	• Monitor and assess for change in symptoms and functioning. • Monitor and assess for change in physical health. • Monitor and assess for change in environmental or social circumstances and support needs. • Monitor management of priority MNS conditions. • Monitor, assess and support adherence to treatment and recovery plan. • Collaborate with people with MNS conditions, and, based on their will and preference, other relevant health care workers, family members and/or caregivers to continue with treatment and recovery plan or adapt it.
12. Engage in self-care	• Proactive. • Self-compassionate. • Insightful. • Warm. • Genuine. • Respectful. • Non-juudgement. • Optimistic/hopeful.	• Signs and symptoms of excessive stress. • Techniques and approaches for self-care and stress management. • When and where to seek additional support for stress or other challenges at work.	• Engage in healthy choices around diet, physical activity, alcohol and drug use, and sleep. • Engage in self-reflection to identify personal impacts of stress. • Practice self-care and stress management techniques. • Maintain professional boundaries between work and personal life. • Seek social and other support, including MNS care, where necessary.

Just as the care tasks expected of doctors and nurses may differ, the required competencies for each group can vary based on local or national scope of practice. Even where knowledge and skills overlap, they may be taught differently in each curriculum (see Chapter 4).

Competencies often interrelate. Any one clinical encounter may involve several MNS care tasks, which in turn will require several competencies.

For example, in a single interaction, the same doctor or nurse may have to build rapport, gather information, assess, interpret results, communicate a provisional diagnosis and then either provide care or arrange for a referral – all while supporting the person's rights. This requires multiple competencies.

Other competencies such as decision-making, teamwork, and commitment to lifelong learning are also important for MNS services, even if they are not included in Table 3.1. WHO's *Global competency and outcomes framework for UHC (23)* offers a complementary reference for shaping curriculum content. Leadership and advanced collaboration competencies are likely covered in postgraduate courses.

4

Enhance the curriculum

In this chapter, we provide the building blocks for curricular development or enhancement using the core competencies set out in Table 3.1. Each competency describes a broad learning objective (e.g. providing rights-based care, assessing for MNS conditions, or supporting carers of people with MNS conditions). These objectives guide the attitudes, knowledge and skills that form the basis for learning content. Together, the 12 core competencies represent the minimum set of learning objectives that are likely to be relevant across most countries.

In some countries, national guidelines dictate learning objectives to standardize outcomes for medical and nursing graduates. In these cases, the core competencies can be aligned with national requirements. For example, the Medical Council of India has introduced competency-based education for medical students, outlining 19 learning topics and 117 outcomes related to MNS care *(52)*. The 12 core competencies in this guide can be matched to these predefined topics and outcomes, which include the doctor–patient relationship, mental health, alcohol and substance use, and psychiatric emergencies.

Where learning objectives are not externally set, curriculum development or enhancement can be more flexible. Competencies can be selectively integrated to strengthen individual courses or programmes. For example, an undergraduate nursing course may already cover all the knowledge components of core MNS competencies and may only need new content to develop attitudes and skills. Meanwhile, a paediatrics course might focus only on child mental health competencies. A comprehensive review of medical and nursing curricula (see Chapter 2) will guide decisions on which competencies to integrate and where.

4.1 Set learning objectives

Table 4.1 gives examples of how needs identified in the situation analysis inform competencies and broad learning objectives.

TABLE 4.1

Examples of how needs identified in the situation analysis inform competencies and learning objectives.

Need identified in situation analysis	MNS care tasks required to meet need	Example (adapted) competencies required to perform MNS care tasks = broad learning objectives
Depression is common but not always identified in health services	Identify depression symptoms (and any related somatic symptoms).	**1.** Demonstrate foundational helping. **2.** Provide rights-based care. **5.** Assess for MNS conditions (depression in this example). **6.** Manage depression. **7.** Provide psychosocial support as part of managing MNS conditions (depression in this example).
	Use psychosocial and clinical assessment tools to identify people with depression.	
	Recognise contributing factors and social determinants of depression during clinical formulation.	
	Make a diagnosis.	
	Community outreach to encourage help-seeking behaviour.	

Photo credit (previous page): medical students in a lecture hall. Zimbabwe, 2011 ©Africa University

TABLE 4.1 (continued)

Need identified in situation analysis	MNS care tasks required to meet need	Example (adapted) competencies required to perform MNS care tasks = broad learning objectives
Substance use is a pervasive social issue that leads to high rates of substance use disorder	Take physical and history examinations, perform screening for substance use-related health risks.	**1.** Demonstrate foundational helping. **2.** Provide rights-based care. **3.** Promote mental and brain health, prevent/reduce substance use harms and prevent/reduce risk of priority MNS conditions (hazardous use of substances or substance use disorders in this example). **5.** Assess for MNS conditions (hazardous use of substances or substance use disorders in this example). **7.** Provide psychosocial support and pharmacological treatment as part of managing MNS conditions (substance use disorders in this example) or arrange referral to specialized care.
	Identify and explore social stressors, difficulties, impact of social determinants and support needs.	
	Educate individuals about risks associated with substance use.	
	Provide individually tailored brief interventions for people with substance use conditions and arrange access to further treatment for those in need.	
	Refer to other services such as social services, housing etc.	
	Follow up to reduce substance use harms.	
People with MNS conditions do not always adhere to their prescribed medications	Educate individual about medicines.	**1.** Demonstrate foundational helping. **2.** Provide rights-based care. **6.** Manage priority MNS conditions. **8.** Support carers of people with MNS conditions. **11.** Follow-up with people with MNS conditions.
	Offer prescriptions with clear instructions and educate on side effects. Ensure informed consent.	
	Collaborate with carers.	
	Follow up to encourage adherence.	
People with MNS conditions sometimes get lost on referral pathways in community settings and do not always receive the care that they need	Refer to appropriate specialists or community services and supports.	**1.** Demonstrate foundational helping. **2.** Provide rights-based care. **10.** Refer people with MNS conditions. appropriately and in a timely manner. **11.** Follow-up with people with MNS conditions.
	Collaborate and communicate with other health care workers.	
	Follow up with other health workers.	
	Collaborate with carers.	

After setting broad learning objectives, more specific objectives can be developed based on the attitudes, knowledge and skills needed for each competency (see Table 3.1). These components guide the curriculum's content, learning experiences and assessments.

For example, if the broad learning objective is to ensure professionals can refer people with MNS conditions appropriately and promptly, the specific learning objectives (and so learning content and experiences) will focus on supporting students to:

- be genuine, compassionate, warm, optimistic, inclusive, respectful, non-judgemental and collaborative (attitudes);
- understand available specialist services and lifestyle, psychological, social and economic interventions and community supports, including their purpose and access points (knowledge);
- recognize when referral is needed, refer people for psychological interventions, specialist care or community supports as indicated, and promote collaboration between health and social care workers (skills).

Assessing learners' competencies may include evaluating component attitudes, knowledge and skills as well as overall competence as expressed through behaviours when practising MNS tasks. In the example above, assessments would involve observing and measuring students' behaviours as they refer people with MNS conditions, either in structured role plays or in supervised real-world settings (see section 4.4).

4.2 Structure learning content

An enhanced curriculum can be structured using horizontal integration across disciplines, vertical integration across time, spiral integration across both, or a combination of these approaches (see Box 4.1) *(53)*.

It is common and advisable to choose an approach that breaks content down into manageable chunks – for example, modules – that make it easier for students to navigate the content and achieve competencies *(54)*.

The existing curriculum for medical and nursing students may already be structured into modules that can easily incorporate MNS care content. Some content – especially the knowledge components – may even already be covered.

In most cases, adapting existing modules or adding new ones may be necessary to ensure the curriculum is competency-based.

Enhanced curriculum modules can be organized by related competencies (e.g. assessment and management) across all priority MNS conditions (see Fig. 4.2) or by individual MNS conditions, with each module covering all relevant competencies for each condition (see Box 4.2).

Each module would consist of several learning sessions, each with their own learning content based on the subset of competencies that need to be achieved and the attitudes, knowledge and skills underpinning them (see Table 3.1).

BOX 4.1

Lessons from India: integrating medical education at AIIMS

Since 2019, the National Medical Council (NMC) of India has emphasized integrating disciplines in undergraduate medical education to promote holistic, person-centred care. At the All India Institute of Medical Sciences (AIIMS) in New Delhi, psychiatry is integrated both vertically and horizontally into medical education.

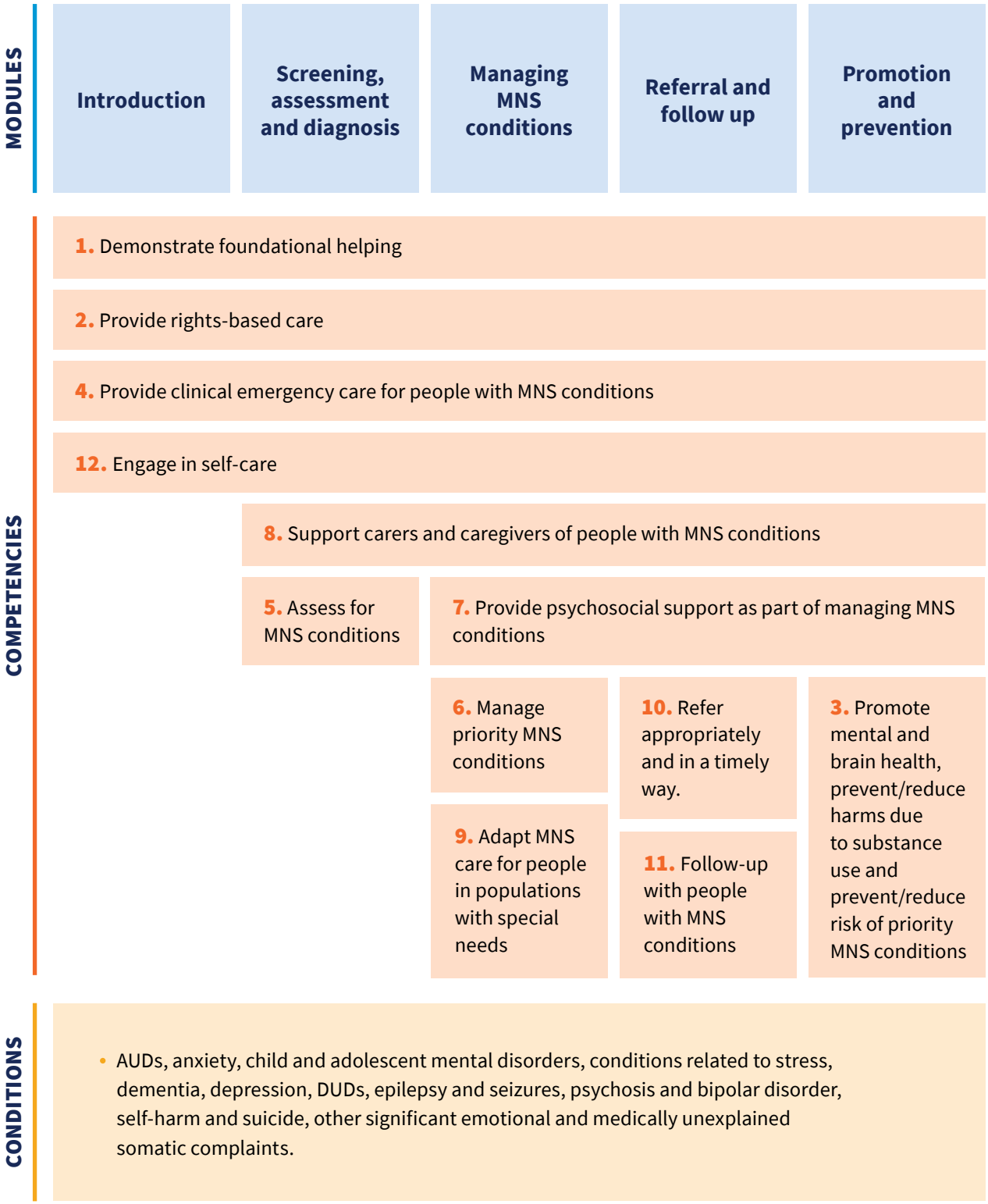
Even before NMC's recommendation, AIIMS had begun integrating practical psychiatric teaching into undergraduate courses. Second-year medical students take two courses that blend pharmacology and psychiatry: the management of psychotic and manic disorders; and the management of anxiety and depression. Mornings focus on the pharmacology of psychotropic medicines, while afternoons cover clinical knowledge and skills. This fusion is expected to enhance students' understanding, retention and application of knowledge.

Now AIIMS is looking to strengthen its efforts through: horizontal integration across community medicine and psychiatry (on issues ranging from burden of disease to disaster management); and vertical integration, embedding psychiatric training in the teaching of attitudes, ethics and communication in areas associated with stress (e.g. end of life issues and palliative care), stigma (e.g. HIV-AIDS and other sexually transmitted infections) and managing complex conversations (e.g. difficult diagnoses or hostile or uncooperative individuals).

Sources: Pratap Sharan and Nishtha Chawla, All India Institute of Medical Sciences, personal communication, 19 April 2024; Sood and Sharan, 2011 *(55)*.

FIG. 4.2

Modules can be organized by competency.



BOX 4.2

Lessons from integrating mhGAP-IG into university curricula

In 2018, WHO hosted three consultative meetings and later a three-day workshop on enhancing pre-service curricula using the mhGAP intervention guide (mhGAP-IG) for decision-makers and clinical educators from medical universities in Armenia, Georgia, Kyrgyz Republic and Ukraine. Participants discussed how best to incorporate mhGAP-IG, with a focus on the module on child and adolescent mental and behavioural disorders.

Following the workshop, each university adapted its curriculum, integrating different mhGAP-IG modules based on their specific needs. Across the four countries, these enhanced curricula were introduced for undergraduate and postgraduate medical and nursing students. In Kyrgyz Republic, legislative changes and support were needed before mhGAP-IG modules could be introduced. Lecture plans were adjusted, reducing didactic sessions while maintaining or increasing practical sessions, group activities and self-study.

Evaluations of the enhanced curricula one year after they were implemented showed that the mhGAP-IG modules were well received by students and contributed to increased mental health awareness.

Source: Pinchuk I et al, 2021 *(56)*.

Learning content in an enhanced curriculum will generally apply across all priority MNS conditions. For example, self-help interventions that doctors and nurses can deliver are relevant to multiple conditions, including depression, anxiety and AUDs and DUDs *(57)*.

Some condition-specific content is also necessary, including evidence-based interventions for each priority MNS condition. For example, part of learning to assess for substance use conditions includes learning how to screen and deliver brief interventions for harmful and hazardous substance use (e.g. the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)) *(58)*. That means students need to understand the health risks of psychoactive substances, know how to assess patterns of use and tailor interventions to the level of risk. They should also know which medicines and psychosocial interventions can be used to manage AUDs and DUDs and understand which public policies are effective in preventing them. By the end of the curriculum, students will need to show they can provide appropriate brief psychosocial interventions and medicines, refer for other treatment if necessary, monitor treatment and promote mental and brain health and avoid harms due to substance use to prevent relapse.

Table 4.2 offers examples of WHO-recommended evidence-based interventions for each mhGAP priority condition, with a broader list available in the mhGAP evidence resource centre *(59)*. All doctors and nurses should at least be aware of these interventions to apply them within their practice or make appropriate referrals. Note that while stigma or other local factors may lead to an emphasis on certain conditions, WHO suggests covering all priority MNS conditions in PSE.

TABLE 4.2

Examples of evidence-based interventions recommended by WHO for mhGAP priority conditions.

Priority MNS condition	WHO-recommended evidence-based interventions[a]
Alcohol and/or drug use disorders (AUDs and DUDs)	• Screening and brief interventions for harmful and hazardous substance use (e.g. Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and Alcohol Use Disorders Identification Test (AUDIT)). • Structured and standardized psychosocial interventions for substance use disorders (e.g. CBT, contingency management, motivational interviewing and motivational enhancement interventions, community reinforcement and family-oriented approaches, mutual-help groups). • Medicines for substance use disorders (benzodiazepines to manage alcohol withdrawal; thiamine to prevent Wernicke's encephalopathy; baclofen, naltrexone, acamprosate and disulfiram to treat AUDs; opioid agonists (methadone, buprenorphine) and antagonists (naltrexone) to manage opioid dependence; naloxone to prevent opioid overdose). • Harm reduction services for people using drugs, including needle and syringe programmes, testing and counselling for infectious diseases, low-threshold community outreach.
Anxiety	• Structured physical exercise. • Stress management techniques, including relaxation and mindfulness training. • Brief, structured psychological interventions, including those based on CBT principles. • Antidepressants for adults, including selective serotonin reuptake inhibitors.
Child and adolescent mental disorders	• Interventions to manage maternal depression. • Interventions for children with intellectual disabilities, such as beginning-to-read interventions. • CBT and interpersonal psychotherapy for children and adolescents with emotional disorders, and caregiver skills training for their caregivers. • Caregiver skills training for caregivers of children and adolescents with developmental, behavioural or emotional disorders. • Referral to or consultation with a specialist to explore initiation of fluoxetine in combination with psychological treatments in adolescents (13–17 years) with moderate to severe depression when psychosocial interventions alone have proven ineffective. • Structured physical exercise to improve motor skills and executive functioning, and to reduce anxiety and problem behaviours in children and adolescents with attention deficit hyperactivity disorder (ADHD).

Notes.

[a] Evidence profiles and further recommendations can be found in WHO's mhGAP evidence resource centre at https://www.who.int/teams/mental-health-and-substance-use/treatment-care/mental-health-gap-action-programme/evidence-centre.

TABLE 4.2 (continued)

Priority MNS condition	WHO-recommended evidence-based interventions
Conditions related to stress	• Stress management training, including relaxation training. • Psychological interventions, including CBT with a trauma focus and eye movement desensitization and reprocessing. • Serotonin reuptake inhibitors and tricyclic antidepressants when stress management and psychological interventions have failed or are unavailable.
Dementia	• Non-pharmacological interventions, including CBT, cognitive stimulation therapy and cognitive training. • Physical activity interventions (30–45 minutes of physical exercise 3–4 times per week for more than 12 weeks). • Psychosocial interventions for carers of people living with dementia, including mindfulness-based interventions, multicomponent interventions, psychoeducation and psychotherapy/counselling. Respite care should be considered. • Cholinesterase inhibitors for people with mild to moderate Alzheimer disease; and memantine for those with moderate to severe Alzheimer disease and vascular dementia (memantine should not be prescribed for Lewy Body dementia). • Dietary advice for people at risk of undernutrition.
Depression	• Brief, structured psychological interventions, including CBT, interpersonal therapy, behavioural activation therapy, third wave therapies, and problem-solving treatment. • Advice on regular physical activity. • Antidepressants for moderate to severe depression, including serotonin reuptake inhibitors and tricyclic antidepressants.
Epilepsy and seizures	• Intravenous lorazepam or diazepam for acute convulsive seizures in adults and children, where intravenous access is available. • Intravenous medicines – fosphenytoin, phenytoin, levetiracetam, phenobarbital or valproic acid (sodium valproate – except for women/girls with childbearing potential) – with monitoring, for adults and children with established status epilepticus, i.e. seizures persisting after two doses of benzodiazepines. • Monotherapy with lamotrigine or levetiracetam, or valproic acid (sodium valproate), as first-line treatment for generalized onset seizures in adults, adolescents and children (but valproate in women/girls with childbearing potential should be avoided). Monotherapy with lamotrigine or levetiracetam as first-line treatment for focal onset seizures in children and adults with epilepsy. • Psychological interventions, including relaxation therapy, psychoeducation and treatments based on CBT principles, as adjunctive treatments. • Information and advice on avoiding high risk activities and providing relevant first aid, given in a culturally appropriate and sensitive manner.

TABLE 4.2 (continued)

Priority MNS condition	WHO-recommended evidence-based interventions
Psychosis and bipolar disorder	• Oral or long-lasting injection antipsychotics, such as haloperidol, paliperidone and risperidone. • Mood stabilizers, e.g. lithium and valproic acid (except in women/girls with childbearing potential) for bipolar mania. • Psychosocial interventions for individuals and their families or carers, including psychoeducation, medicine adherence therapy and life or social skills training. • Psychological interventions, including CBT. • Recovery-oriented strategies to enhance community and economic inclusion, such as assisted living or supported employment.
Self-harm and suicide	• Assessment for self-harm or suicide. • Interventions based on principles of safety planning. • Regular contact and follow up. • Problem-solving approaches. • Where there is imminent risk or occurrence of self-harm, prioritize removing any means of suicide and provide urgent referral to a mental health service.
Other significant conditions and bodily distress complaints	• Psychological interventions based on CBT principles to manage bodily distress complaints. • Pharmacological interventions. • Psychosocial interventions, such as psychoeducation. • Self-help interventions and mutual support groups.

As well as knowing about specific interventions for managing mhGAP priority MNS conditions, graduates will also be expected to know about other MNS conditions so that they can accurately identify and refer people experiencing them.

The list of these conditions will vary by country and may include eating disorders, obsessive-compulsive disorder, phobias or disorders due to addictive behaviours (such as gaming or gambling). Students should know what each condition is and how it typically presents, how prevalent it is and what effective treatments are available, but not necessarily how to deliver them. They should be skilled in recognizing these conditions and know about relevant referral services (see Table 4.3).

Students should also be competent in assessment and first-line management of:

- neurological conditions not covered by mhGAP or this guide, such as stroke, migraine, meningitis and Parkinson disease;
- other physical health conditions common among people with psychoactive substance use, such as HIV, hepatitis C, gastrointestinal diseases, cardiovascular disease and pulmonary disease; and
- cases where maternal health, pregnancy and breastfeeding might impact MNS conditions.

Care and support for people with these conditions are not covered in this guide but are expected to be covered elsewhere in medical and nursing curricula.

Additionally, medical and nursing students should have a general understanding of public mental health, including social and biological determinants of MNS conditions, their disease burden and socio-economic consequences, benefits of care, common misconceptions and prevailing attitudes and beliefs, including stigma in both the community and health care workforce (see Table 4.3).

TABLE 4.3

Knowledge requirements for medical and nursing students.

Type of knowledge	Content
Knowledge of priority MNS conditions (e.g. conditions covered in mhGAP) as defined by WHO's ICD-11[a] To achieve core competencies	• Basic science (including neuroscience, behavioural science, social science) of MNS conditions. • Everything listed in the knowledge column of Table 3.1.
Knowledge of other MNS conditions (e.g. conditions beyond mhGAP) as defined by WHO's ICD-11[a] To inform recognition and referral	• Common presentations and diagnostic criteria. • Effective treatments (awareness of what these are but not necessarily how to deliver them).
Knowledge of public health relevant to MNS conditions[b] A base for all practice	• Core concepts in mental health, brain health and substance use (e.g. classification and diagnostic systems, mental health on a continuum, relationships with physical health, life course approach, social indicators and outcomes of mental health). • Epidemiology of MNS conditions (prevalence, incidence, age of onset, course, determinants, gender differences, treatment gap). • Impact/disease burden of MNS conditions. • Benefits of preventing and caring for MNS conditions (e.g. improved public health, reduced human rights violations, social and economic development). • Stigma, discrimination and human rights. • Policy and relevant legislation. • Population-based prevention and promotion. • Service models including team-based care, multidisciplinary teams and referral and counter-referral systems. • Roles of specialists (in service and in multidisciplinary teams). • National guidelines on MNS care tasks for doctors and nurses. • Evidence-based strategies and policies to promote workplace mental health (for doctors and nursing students who become managers/leaders in the health system).

Notes.

[a] See WHO, 2024 *(35)*.

[b] Key sources of information include: WHO, 2022 *(2)*; and Stewart et al, 2024 *(24)*.

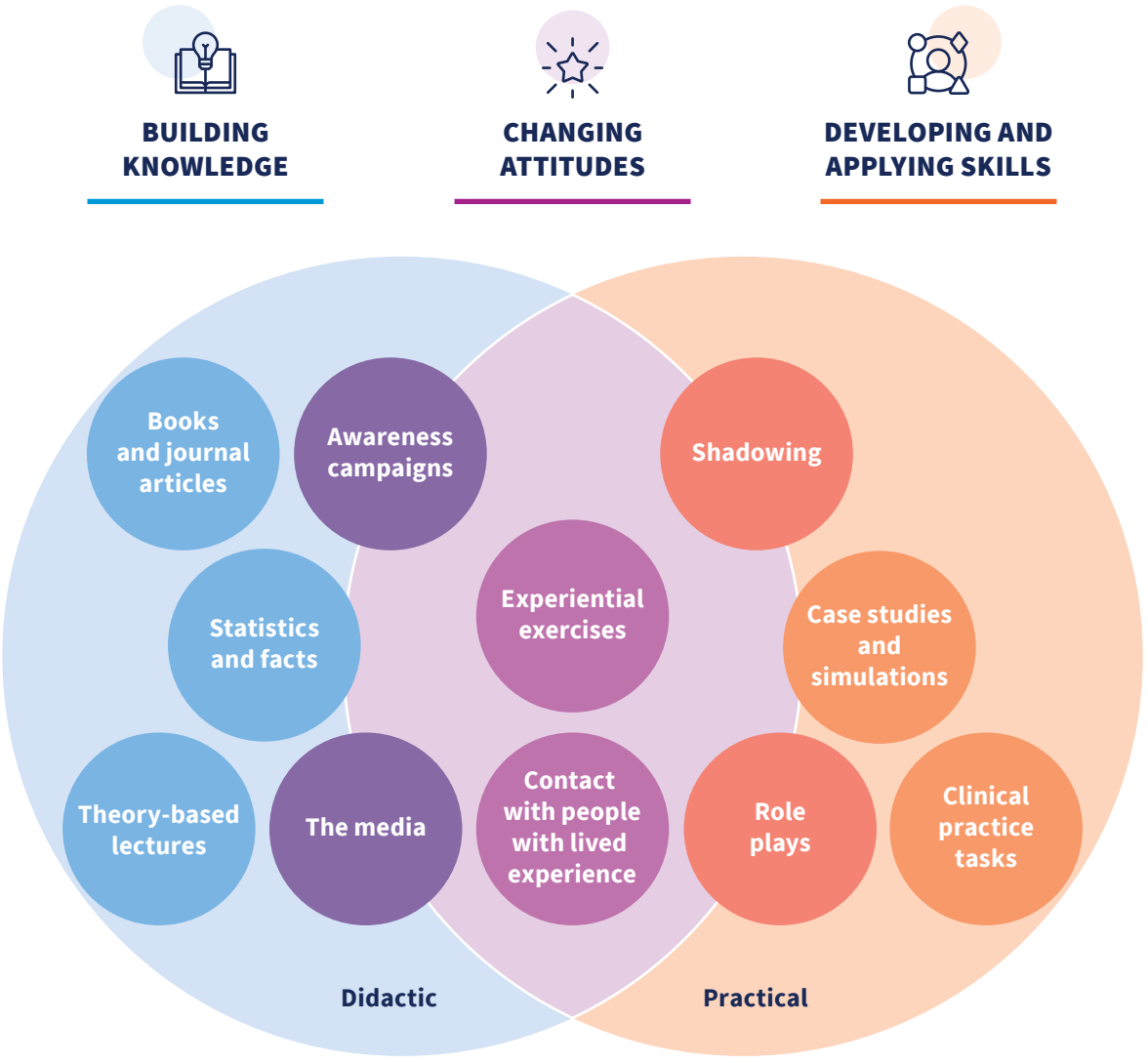
4.3 Plan learning experiences and teaching methods

There are many ways of supporting students to develop core competencies. Learning experiences may be face-to-face or online, facilitated or self-directed, theoretical or practical. Different learning experiences suit different types and levels of competency.

Good curricula combine educational approaches and tools to shape attitudes, build knowledge and foster skills (see Fig. 4.3). They support diverse learning styles and are culturally sensitive, reflecting local backgrounds and realities. Time spent on different learning experiences and teaching methods may vary between medical and nursing students.

FIG. 4.3

A mix of practical and didactic learning experiences to consider.



Combining active learning and practical experiences with classroom-based teaching is important (see Box 4.3).

While resources such as class size may limit options, in some cases it may be possible to expose students to different practical experiences, for example in community, primary, secondary and tertiary health care settings. Where this is not feasible, innovative methods such as structured role plays can recreate practice environments. Simulation-based education, which involves interacting with real or virtual scenarios, has been shown to enhance undergraduate medical students' attitudes, knowledge and skills although it can be expensive and difficult to implement at scale *(60, 61)*.

Team-based learning, such as small group discussions and group work, bring multidisciplinary students together to develop cross-cutting competencies. These experiences empower students in their education. They also help build transferable skills and foster relationships that support collaborative models of care. Group work can happen in and out of the classroom. For example, at Ajman University's College of Medicine in the United Arab Emirates, student psychology clubs are supported by a faculty member but function outside the classroom. They host discussions on MNS-related topics to deepen students' knowledge and understanding, engage the university community, and organize public events to raise mental health awareness (Alfreda Stadlin, Ajman University College of Medicine, personal communication, 13 March 2024).

BOX 4.3

Lessons from Norway: strengthening nursing students' competencies in MNS care

At Lovisenberg Diaconal University College in Oslo, core competencies for mental health care are integrated into the undergraduate nursing curriculum, with clear progression objectives for each of the three years. A mix of didactic and practical learning experiences build students' knowledge and skills, in line with European Union and national regulations that require at least half of nursing training hours to be in clinical training, including in mental health and psychiatry.[a]

Students interact with people experiencing MNS conditions throughout their studies. In their third year, they complete an eight-week clinical placement in psychiatry and mental health care in primary and specialist health care services. Before starting, students have two weeks of studies that blend theoretical knowledge teaching with hands-on learning, including by practising specific skills using simulations, medical equipment and interactive technology. The goal is to build students' confidence and competence in mental health care before they enter more formal practice.

During clinical placements, students focus on further developing their attitudes, knowledge and skills to provide good and compassionate care for people receiving various forms of treatment and psychosocial support.

Notes.

[a] See: Directive 2005/36/EC of the European Parliament (https://eur-lex.europa.eu/eli/dir/2005/36/oj); and Norway Ministry of Education Regulations on national guidelines for nursing education (https://lovdata.no/dokument/LTI/forskrift/2019-03-15-412).

Source: Espen Gade Rolland, Lovisenberg Diaconal University College and Norwegian Nurses Organization, personal communication, 22 April 2024.

4.3.1 Harness digital technologies

Digital technologies bridge theoretical knowledge with practical skills, strengthening medical education and improving quality of care provided after graduation *(62)*. Different types of digital technologies can be used to support an enhanced curriculum in different ways.

Basic digital technologies:

- reduce resource loads through pre-recorded lectures, computer-based modules, online learning materials or assessments, and self-learning environments;
- facilitate communication between students and supervisors through online lectures, video conferencing and group discussion or messaging applications; and
- may be especially useful in resource-limited settings and for self-paced learning, giving students better control over their time and study content.

Advanced digital technologies:

- enable observations of live or recorded real-life sessions with service users;
- provide safe environments for students to practise their competencies and explore and experience real MNS-related situations such as emergency responses and individual interactions; and
- can use augmented or virtual reality to offer innovative interactive learning via simulations, gamifications, virtual clinical placements,[9] and artificial intelligence driven role plays *(63, 64)*.

Digital assessment tools:

- range from online quizzes to complex objective structured clinical examinations software;
- include electronic portfolios and web or mobile applications to showcase learning over time and track progress and performance. For example, the University of Alabama at Birmingham (UAB) uses a mobile tool to link bedside competencies with overall performance (see Box 4.4); and
- can gather data on the effectiveness of the curriculum to inform adjustments *(64)*.

Digital tools are also valuable for preparing students for the growing field of tele-mental health and mobile and wireless technologies for health (mHealth). In tele-mental health, MNS care is provided remotely via video call, phone call or messaging. mHealth uses smart phones, tablets and wearable devices to similarly deliver remote MNS services, monitor service users, and support prevention and management of MNS conditions. The skills and knowledge required for these activities fit well into a competency-based curriculum *(65)*.

The benefits of using digital technologies for teaching and learning are clear; but it comes with budget considerations. The human and financial costs of technology and training must be assessed in terms of context, implementation process and available funding.

4.3.2 Shape attitudes

Attitudes are fundamental to how we learn and apply knowledge and skills. In general, despite cultural differences in attitudes, if students develop the attitudes identified in Table 3.1 (e.g. genuineness, compassion, inclusivity, warmth, respect and non-judgement) they will be better able to care for people experiencing MNS conditions.

Attitudes are potentially the hardest element of competency to teach; and changing stigmatizing attitudes is difficult, especially in the medium to long term *(66)*.

[9] Virtual clinic placements provide a simulated practice setting that is delivered remotely online to give students practical experience of care.

BOX 4.4

Lessons from the USA: mobile app tracks progress in clinical training

At the UAB Heersink School of Medicine, a mobile application is used to evaluate and track third-year medical students' progress during clinical placements, including four-week psychiatry placements. This "clerkship app" was developed by existing personnel (without external resources) who repurposed software that the university was already licensed to use.

Students log routine caregiving tasks, called "observable professional activities (OPAs)" on the app. These include core skills, such as capturing a focused history, conducting a physical and mental status examination and doing an oral presentation.

Clinical supervisors observe and provide formative feedback through the app, using an evidence-based and validated scale that scores students on their ability to perform skills independently.

The app has a curated list of expected behaviours for supervisors to observe, which helps standardize student feedback and makes assessments more objective and comparable across different clinical settings.

Scores are viewable on a dashboard, helping clinical placement directors monitor students' progress and ensure they meet curriculum requirements. The school also uses the data to identify areas of the curriculum that need strengthening. Students can also track their progress and focus on areas needing improvement to achieve competency.

Source: Winter Williams and James Willig, University of Alabama at Birmingham Heersink School of Medicine, personal communication, 24 April 2024.

'Social contact' strategies that emphasize recovery and get students to interact with people with lived experience of MNS conditions (and their families) are the most effective means of shifting attitudes and reducing stigma *(67, 68, 69)*. They can be implemented in different ways.

- **Ask staff (or graduates) to talk** about their own lived experience of MNS conditions.
- **Invite individuals and families** to share their lived experience through presentations, seminars and question-and-answer sessions.
- **Link to local organizations** such as Alcoholics Anonymous.
- **Use digital tools** such as Moving Stories ,the Dutch game-based school programme that combines video gaming with social contact to reduce stigma *(70)*.
- **Engage people with lived experience of MNS care** as co-educators to teach and evaluate students together with or separately from other faculty (see Box 4.5).

Social contact between students and people with lived experience may be done in person or online. Providing space for both formal and informal interactions is important. If live interactions are not possible, social contact through photographic narratives or pre-recorded films, podcasts or social video platforms can also be useful.

In all cases, people sharing their lived experience in an enhanced curriculum should provide their informed consent. They should also be:

- assured of confidentiality;

- paid on an equal basis with other professionals; and
- given safeguards and boundaries for their engagement. Some people may need support in preparing to tell their story and to answer difficult questions, as well as support afterwards.

Research on mhGAP and anti-stigma training has shown that attitudes are particularly sensitive to change in courses that are co-taught by people with lived experience *(71, 72)*. These "experience consultants" or "experts by experience":

- help students recognize, evaluate and change their own stigmatizing attitudes and practices;
- reduce anxiety, increase empathy, spark connections and deepen understanding of recovery *(73)*;
- teach students how to support individuals facing stigma and promote ethical awareness of their own role in challenging stigma; and
- inspire students to explore MNS-related issues that exacerbate stigma, such as homelessness, sex work and social inequalities *(74)*.

Beyond social contact, other approaches in and out of the classroom can be used to shape and shift attitudes.

- **Myth busting** targets unconscious biases and corrects false beliefs through information sharing, role play (including with actors), and awareness campaigns. Tools to support myth busting in an enhanced curriculum include the WHO QualityRights e-training (see Box 4.6).
- **Experiential learning** through community-based clinical placements provide real-world social contact and can enhance students' understanding and empathy towards people's varied needs and situations.
- **Peer and mentor support** facilitate role modelling of positive attitudes and values, guiding students in reflecting on experiences, challenging stigma, and help seeking *(75)*.
- **Faculty training** to develop positive attitudes leads to modelling behaviours that promote effective MNS care (see section 4.5).
- **Safe learning environments** enable students to discuss MNS conditions, share personal experiences and seek support for their own mental health, which fosters a culture of openness and empathy *(76)*.
- **Community engagement and advocacy** empowers students to challenge stigma and advocate for mental and brain health and prevention of substance use harms in their communities *(77)*.

4.3.3 Build knowledge

Building students' knowledge provides a vital basis for applying skills and performing MNS care tasks. While students may already know about some concepts in an enhanced curriculum, their application in MNS care may be new. For example, students may know how to take a family history but not how to do so for MNS conditions. Similarly, they may understand diagnostic criteria for MNS conditions but not know how to perform a mental status exam to accurately diagnose a condition.

The depth of required knowledge varies across disciplines. Medical and nursing students who will make clinical diagnoses or prescribe medicines in their future roles need a much firmer grasp of basic sciences, differential diagnosis, and pharmacology.

Knowledge building often relies on didactic learning, but active learning approaches such as case-based and problem-based learning methodologies enhance retention *(78)*.

Learning materials should be up to date, evidence based, and relevant to the country and setting where the curriculum will be implemented. Materials from one socioeconomic setting may need adaptation for others. All learning materials should come from trustworthy sources.

BOX 4.5

Lessons from READ: shifting attitudes through direct social contact

READ (Responding to Experienced and Anticipated Discrimination) is an anti-stigma training for medical students promoted by the INDIGO Network (https://www.indigo-group.org) and people with lived experience of MNS conditions (experts by experience). Its social contact approach combines methods proven to improve attitudes and understanding, such as multiple forms of contact with experts by experience; and a focus on recovery.

Key elements of READ include:

- co-delivery of the training by an expert by experience and a psychiatrist;
- personal recovery stories from the experts by experience to show how recovery can mean different things; and
- role plays of experienced and anticipated discrimination.

READ aims to help medical students reduce discriminatory behaviours and interact more effectively with people with MNS conditions. Between 2016 and 2019, READ was implemented in 13 medical schools across 10 countries, adapted to fit local cultures and resources. Evaluations showed positive changes in knowledge, attitudes and skills among medical students, with increased empathy as a key factor in improving students' behaviours and reducing stigma.

Sources: Deb et al 2019 *(51)*, Potts et al 2022 *(71)*.

BOX 4.6

WHO QualityRights: changing attitudes to improve the quality of MNS care

QualityRights (https://qualityrights.org) is a global initiative designed to improve the quality of care in mental health and related services and to promote the rights of people with psychosocial, intellectual and cognitive disabilities. It works at the ground level to change attitudes and practices, as well as through policy to create sustainable change.

The initiative provides capacity-building resources to combat stigma and discrimination, and promote human rights and recovery. Its training materials, toolkits and practical guidance help health care workers and others build knowledge and skills to end coercive practices like seclusion and restraint and emphasize respecting individual preferences.

QualityRights also offers global e-training for health workers, policy-makers, community members and people with lived experience of MNS conditions and their carers. The e-training covers how to support a person's own mental health and that of others, and how to promote human rights to help tackle stigma, discrimination, abuses and coercion. A 2023 evaluation showed significant positive shifts in attitudes towards human rights, especially on issues of legal capacity, treatment choice, and coercion.

Sources: WHO, 2019 *(79)*; WHO, 2024 *(80)*; Poynton-Smith et al, 2023 *(81)*.

Participatory methods such as flipped classrooms – including student-led research, presentations and seminars – can also improve understanding and retention, aiding skills acquisition later on.

4.3.4 Foster skills

Where knowledge provides the informational basis for tasks, skills represent a higher level of analysis and application of knowledge in MNS care.

Developing skills is the central focus of a competency-based curriculum. This requires an emphasis on practical, hands-on learning through digital technologies or real-life clinical practice. Options include:

- role plays and simulations (including real-life or virtual standardized patients);
- real or mock case studies; and
- practising clinical tasks by shadowing doctors or nurses (see Box 4.7) or through clinical placements.

BOX 4.7

Lessons from the Philippines: building skills through clinical experience

At the Ateneo de Manila University School of Medicine and Public Health, third year medical students hone their skills for MNS care, among other medical experiences, through a series of practical learning sessions known as Clinical Experiences. The Clinical Experiences comprise a series of 10–12 sessions spaced across the year, in which groups of four students join faculty members who are also practising clinicians for four hours to meet people receiving care and their family members.

Each faculty member leading a Clinical Experience sets their own learning objectives and activities for their session; but all focus on practising clinical tasks and developing skills for delivering care. For example, for students encountering children with neurodevelopmental concerns, the Clinical Experience typically covers two cases. Learning objectives are to:

- practise taking a child's history and conducting a physical examination;
- identify salient features and establish and justify a working diagnosis for the child;
- outline how to appropriately manage the child's situation; and
- apply concepts in public health, prevention and health care management.

In pairs, and supervised by the clinician, students interview each child and family for an hour to get a history; and perform a physical examination of the child. They then observe the clinician disclose a diagnosis and are coached to deliver any recommendations to the family, including any diagnostic tests and psychoeducation. Once the children and families have left the clinic, the students come together for a case discussion on the salient features, pathophysiology, assessment and management of the children seen that day.

The Clinical Experiences are designed to expose students to a diverse range of conditions before they enter their clerkship year where they join health care teams in hospital settings.

Source: Angel Belle Dy, Ateneo de Manila University, personal communication, 30 December 2023.

Clinical placements should reflect students' likely future workplace (e.g. primary health care facilities) and include supportive supervision. Local organizations providing community mental health care can also serve as clinical placement providers. For example, fourth year medical students at the University of Zimbabwe are placed with the nongovernmental organization Friendship Bench, where they learn how to provide brief psychological interventions, with a focus on problem-solving therapy, for people with common mental health conditions. Key topics covered include: psychoeducation, community mental health, psychological interventions, use of Friendship Bench tools, and self-care (Walter Mangezi, University of Zimbabwe, personal communication, 16 April 2024).[10]

In countries where clinical placements are set by national authorities, advocacy and engagement with governments, universities and clinical placement provider organizations may be needed to change placement sites. Clinical placement providers and supervisors should be involved in curricular changes and trained in the skills required by the enhanced curriculum (see section 4.5).

4.4 Select methods of assessment

Assessment is a key part of any curriculum; and assessing competence is critical for learners, educators, universities, accrediting bodies, employers and ultimately the community served. Assessment can be used to guide student learning, ensure quality control, verify that students have sufficient skills and knowledge to apply in practice and evaluate whether MNS competencies are cross-cutting, inter-disciplinary and applied widely in all care settings. Deciding what to assess and what assessment methods to use can have a big influence on what students learn and how (which is why lobbying exam boards to include more content on MNS care in exit exams can be an effective top-down form of advocacy, see section 2.3).

In an enhanced curriculum, graduates must demonstrate all four levels of learning to achieve full competence *(82)*. They must show that they:

- possess the attitudes, knowledge and skills underpinning core competencies;
- know how to apply those attitudes, knowledge and skills;
- can show how attitudes, knowledge and skills should be applied; and
- actually do apply attitudes, knowledge and skills when performing MNS care tasks.

Different assessments can be used to measure these levels of learning (see Table 4.4); and various tools exist to develop them *(33, 35, 80)*. The first two levels ('knows' and 'knows how') test cognition; the second two ('shows how' and 'does') test behaviour. It is important to assess all four levels of learning because the cognition zone does not necessarily correlate with the behaviour zone: knowing how to do something doesn't guarantee a learner will apply it in practice. Comprehensive assessment ensures that graduates deliver quality and effective care to people with MNS conditions.

[10] See 5.2.1 Practical tips for resource-constrained settings in section 5.2 for more examples of how to harness community resources to support skill development.

TABLE 4.4

Assessment formats and how they can be used.

Level of learning[a]	Assessment format[b]	Measurement of[c]			
		Attitudes	Knowledge	Skills	Behaviours
Does	Supervised clinical practice. Observed work with people with MNS conditions in real settings.	●	○	○	○
Shows how	Structured role plays. Simulations. Demonstrations (e.g. practice psychometric assessment or laboratory work). Objective structured clinical examinations. Standardised encounters.	●	○	○	○
Knows how	Real or simulated case studies. Applied essays. Applied examinations using case studies and simulated scenarios. Clinical problem solving.	●	○	○	
Knows	Multiple choice questions. True-false questions. Short and long answer tests. Theoretical essays. Student-led seminars.		○		

Notes.

[a] Levels of learning adapted from Miller, 1990 *(82)*.

[b] For more examples of potential assessment formats see Table 4.5 in WHO, 2022 *(23)*.

[c] ● = inferred measurement; ○ = explicit measurement. Explicit measurement is direct and clearly represents its object of measurement; inferred measurement is indirectly implied through another measured object and requires some interpretation.

Source: table adapted from WHO, 2022 *(23)*.

Structured role plays measure behaviours in a controlled environment and can evaluate a wide range of competencies, not just clinical skills. A common method is the objective structured clinical examination, which typically uses trained actors. But structured role plays can also involve course instructors, supervisors, and peer learners. They can assess single or multiple competencies; and can be tailored to all types of culturally-relevant situations, making them ideal for systematically assessing how well learners perform MNS care tasks *(83)*.

Real-world observation is also important and the best way of assessing how students deliver MNS. But it is less controlled than structured role plays and cannot be targeted to assess specific competencies. Unpredictable factors, confidentiality issues, physical settings, and the comfort of service users may limit feasibility.

The WHO-UNICEF initiative EQUIP (Ensuring Quality in Psychosocial and Mental Health Care) provides a range of competency assessment tools that can be used with structured role plays or in real world settings, as part of various types of training, including PSE (see Box 4.8).

Role plays, real-world observation and other tools assessing skills and behaviours can and should be complemented by knowledge and attitude tests. Common knowledge assessments include written or oral examinations and essays.

BOX 4.8

EQUIP

EQUIP is a joint WHO-UNICEF initiative to assess and build competencies for delivering effective psychological support to adults and children. It offers a variety of competency assessment tools and e-learning courses that cover both foundational helping skills and technique-specific skills, such as behavioural activation, CBT, interpersonal techniques, motivational enhancement, problem solving, and stress management.

The EQUIP platform (https://equipcompetency.org/) features adaptable structured role plays for assessing individual or multiple competencies, and includes a data visualization tool to track learners' competencies over time and quickly identify potentially harmful behaviours that need correcting.

Field tested for in-service training of non-specialists in low- and middle-income countries, EQUIP resources have been proven to reduce harmful behaviours and increase trainee competencies compared with conventional training methods. Studies are ongoing to apply EQUIP in PSE.

Sources: Kohrt et al, 2020 *(84)*; Jordans et al, 2022 *(85)*; Alipanga and Kohrt, 2022 *(86)*; Ndeezi et al, 2023 *(87)*.

Assessing attitudes is more difficult. Empathy scales and questionnaires, such as the Opening Minds Scale for Health Care Workers (OMS-HC), can measures students' attitudes before, during and after training *(88)*. The OMS-HC scale has been found to be a reliable, valid and acceptable measure of attitudes towards mental health conditions *(89)*.[11] Other measures have also been used to evaluate attitudes in the general population, including measures of stigma against general or specific MNS conditions, MNS services and self-stigma *(90)*. Self-assessment and informal peer-to-peer assessment (e.g. real-time feedback from group role plays) are also valuable for gauging attitudes.

Assessments can be formative or summative.

- **Formative assessments** offer timely, nonconsequential feedback that is integral to learning throughout the curriculum to track progress and adjust learning as needed (see Box 4.4).
- **Summative assessments** are typically higher stakes evaluations (e.g. graded quizzes, essays, exams, final projects) that determine whether students can move to the next level of training.

Getting the right balance between the two is important: medical and nursing students are known to have high levels of stress and enhanced curricula need to be mindful of adding to their burden through assessment.

When selecting assessment methods , it is important to consider their validity (does it measure what it claims?) and reliability (is it consistent?), as well as feasibility. For example:

- knowledge tests take time to develop but are easily applied once established;
- role plays and simulations can be resource intensive to both develop and run but are also structured, can be applied consistently and, importantly, provide a controlled environment for assessing target competencies; and
- observed work in real-world settings requires close supervision but is the most authentic assessment method of quality.

The choice of method will depend on resources available (including number and type of assessors and assessment developers). It is also useful to identify the assessment methods used by other disciplines within the same school to promote consistency and efficiency. In all cases, assessments should cover all learning levels (knows, knows how, shows how, does).

In general, when selecting assessment methods, you should:

- be transparent (students and educators should know what is being assessed, why and how);
- cover every competency, not just those that are easy to assess; and
- ideally assess each competency in multiple ways and at different times in a formative and supported manner that promotes learning.

A mix of methods is important to cover all learning objectives, support different learning styles, and identify extra learning needs. Competency is often context specific, so learners may not always perform consistently from task to task. Using multiple measures across different settings and times can enable all students to demonstrate their strengths and test their full range of competence.

[11] Access a downloadable tried and tested version of the OMS-HC scale at: https://static1.squarespace.com/static/5a0df2b3692ebe9b1a7973e0/t/5c7960a4ec212de75e96bd0e/1551458469417.

4.5 Train educators

When developing the enhanced curriculum, it is important to identify and equip educators to deliver it. Ideally, the enhanced curriculum will be taught and assessed by a multidisciplinary team drawn from various university departments and schools. In this model, each team member teaches and assesses content in their existing area of expertise (see Box 2.1).

Using a multidisciplinary team however is not always possible. In these cases, new staff may be hired to cover the additional material, or existing medical and nursing faculty can be asked to take on this responsibility. Where funding and available staff are limited, specialists could be invited to join the faculty either as honorary staff or in part time paid positions to teach specific/additional material. Either way, these educators will need training.

There are different approaches to training educators.

- **Self-directed training.** Teaching faculty independently familiarize themselves with new learning materials and exercises. This is most useful for orienting educators with strong knowledge and skills in MNS care.
- **Cascade train-the-trainer training.** Credentialed CRC members might train teaching faculty using a mix of didactic and applied approaches. Trained faculty then teach students. This approach is common in in-service training but has also been used in PSE, for example for teaching the mhGAP intervention guide (mhGAP-IG) *(33)*.
- **Train-the-trainer variations.** For example, educators complete the full enhanced curriculum themselves before teaching students. This approach has the advantage of piloting the curriculum but it is a resource-heavy option as it requires multiple trainers and takes a long time to complete *(91)*.
- **Senior-to-junior faculty model.** Postgraduates learn the enhanced curriculum and teach and assess undergraduates under senior faculty mentorship.
- **Graduate trainers.** CRC members or external experts initially serve as trainers of trainers but over time, graduates of the enhanced curriculum become candidate trainers for future students, either during their time as postgraduates or later as university faculty.
- **Leverage existing initiatives.** Collaboration between WHO country offices and the ministries of health and education can help leverage other initiatives – including mhGAP trainings – to train educators. This is a good alternative to using the CRC as trainers of trainers given training requires time that is often in short supply among CRC members.

Whatever approach is being used, educators' training should be tailored to their existing competencies and contexts. Faculty with no prior MNS care experience will need more in-depth training. Faculty may also need training in specific areas, such as standardized role plays, competency rating, and providing actionable feedback *(86, 87)*. By the end, educators should have the same competencies expected of their students after graduation (as well as the usual competencies for effective teaching). Doing a baseline competency assessment at the start of training can help ensure that the training is pitched at the right level to meet educators' needs *(92, 93)*. It can also provide a benchmark for post-training evaluation.

Training of educators must be feasible according to training resources, funding and time available. Practical considerations include: scheduling, location and embedding training into existing workplans. Incentives for participation, such as accreditation or reduced workloads can encourage involvement. Collaborating with other institutions and professional organizations can provide additional support through shared resources and expertise.

4.6 How to apply the competency framework: two examples

This section provides two examples of how learning objectives, experiences and assessment formats might look within specific learning sessions of an enhanced curriculum. These examples illustrate how the competency framework can be applied, although enhanced curricula will vary across universities, countries, student types (i.e. medical versus nursing), depending on existing curricula and available resources (see Chapter 5 for more information on the broader implementation options and issues).

In the first example, we consider modules organized by competency, focusing on a module on managing MNS conditions through psychosocial support. We illustrate the learning objectives (and content), experiences and assessments for sessions designed to develop Competency 7: provide psychosocial support as part of managing MNS conditions (see Fig. 4.4).

FIG. 4.4

Example learning sessions on providing psychosocial support.

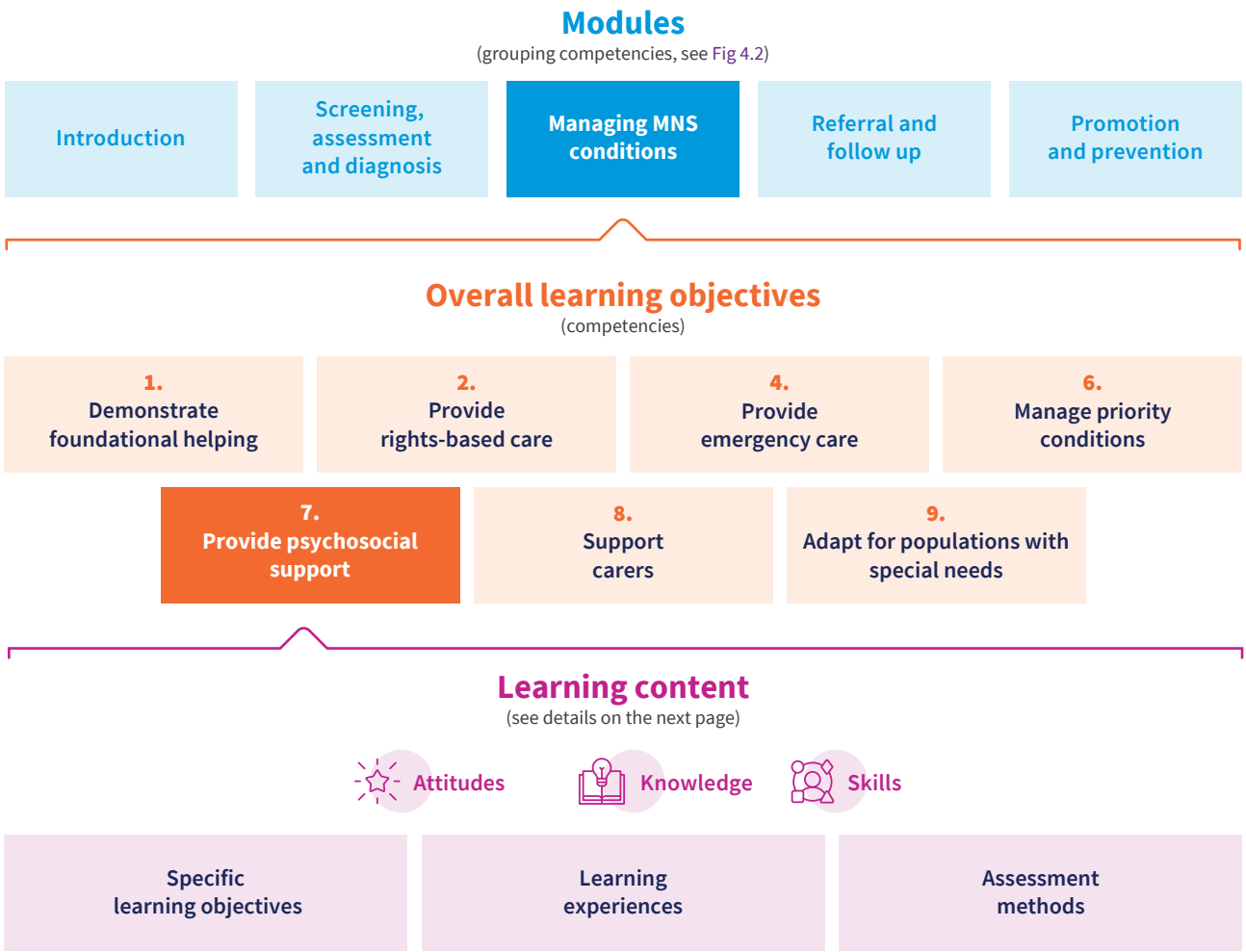


FIG. 4.4 (continued)

Specific learning objectives

Attitudes

- Shows compassion, empathy and respect for all people.
- Adopts an approach that is non-blaming, non-judgemental and non-stigmatizing.
- Shows empathy and genuine concern.
- Values psychosocial support.
- Is recovery-oriented and solution-focused.

Knowledge

- Identifies social resources in the community.
- Describes problem-solving counselling techniques.
- Defines professional and legal responsibilities related to maltreatment, abuse and neglect.
- Explains the biopsychosocial impact of stress.
- Describes guided self-help techniques.
- Identifies specific stress management techniques.

Skills

- Identifies and explores social stressors and difficulties.
- Collaborates with individuals to find ways of addressing social difficulties.
- Links people to relevant social resources.
- Assesses, identifies and manages maltreatment, abuse or neglect.
- Offers guided self-help.
- Teaches stress management.
- Provides evidence-based suggestions to strengthen social supports.

Learning experiences

Attitudes

- Information sharing lectures and seminars.
- Myth-busting simulations that target stigma, role plays to practice empathic approach, case studies, films and other media.
- Direct interactions with people with lived experience to reduce stigma.

Knowledge

- Information sharing lectures and seminars on psychosocial support techniques and theories.
- Self-directed learning from textbooks, journal articles, books, grey literature, trusted websites.
- Group discussions and group work.
- Applied and student-led research, presentations and seminars using case studies to demonstrate psychosocial support applications.

Skills

- Role plays, simulations and case studies to practice providing psychosocial support targeting diverse sets of MNS conditions.
- Shadowing in clinical practice.
- Practising clinical tasks such as exploring life stressors, teaching stress management skills and identifying social resources for people with MNS conditions and their caregivers.

Assessment methods

Attitudes

- Real or simulated case studies targeting stigma.
- Applied essays and examinations using case studies relating to provider attitudes.
- Structured role plays to practise demonstrating empathy and compassion.
- Demonstrations of solution-focused support.
- Observed structured examinations.
- Standardized patient encounters to practice appropriate attitudes.
- Supervised clinical practice.

Knowledge

- Written or oral examinations to identify knowledge of psychosocial support theories and techniques.
- Multiple choice questions.
- Short and long answer tests.
- Theoretical essays using case studies to demonstrate understanding of psychosocial support theories and techniques.

Skills

- Real or simulated case studies to apply support skills.
- Applied essays and examinations using case studies to demonstrate application of psychosocial support techniques.
- Structured role plays to practise providing patient support.
- Demonstrations of ability to identify stressors and offer guided self-help.
- Observed structured examinations.
- Standardized patient encounters.
- Supervised clinical practice.

In the second example, we consider modules organized by priority MNS condition and zoom in on a module for AUDs and DUDs. Here, core competencies from Table 3.1 are adapted to focus explicitly on AUDs and DUDs, with sessions designed to develop the adapted Competency 6: manage AUDs and DUDs (see Fig. 4.5).

FIG. 4.5

Example learning sessions on managing AUDs and DUDs.

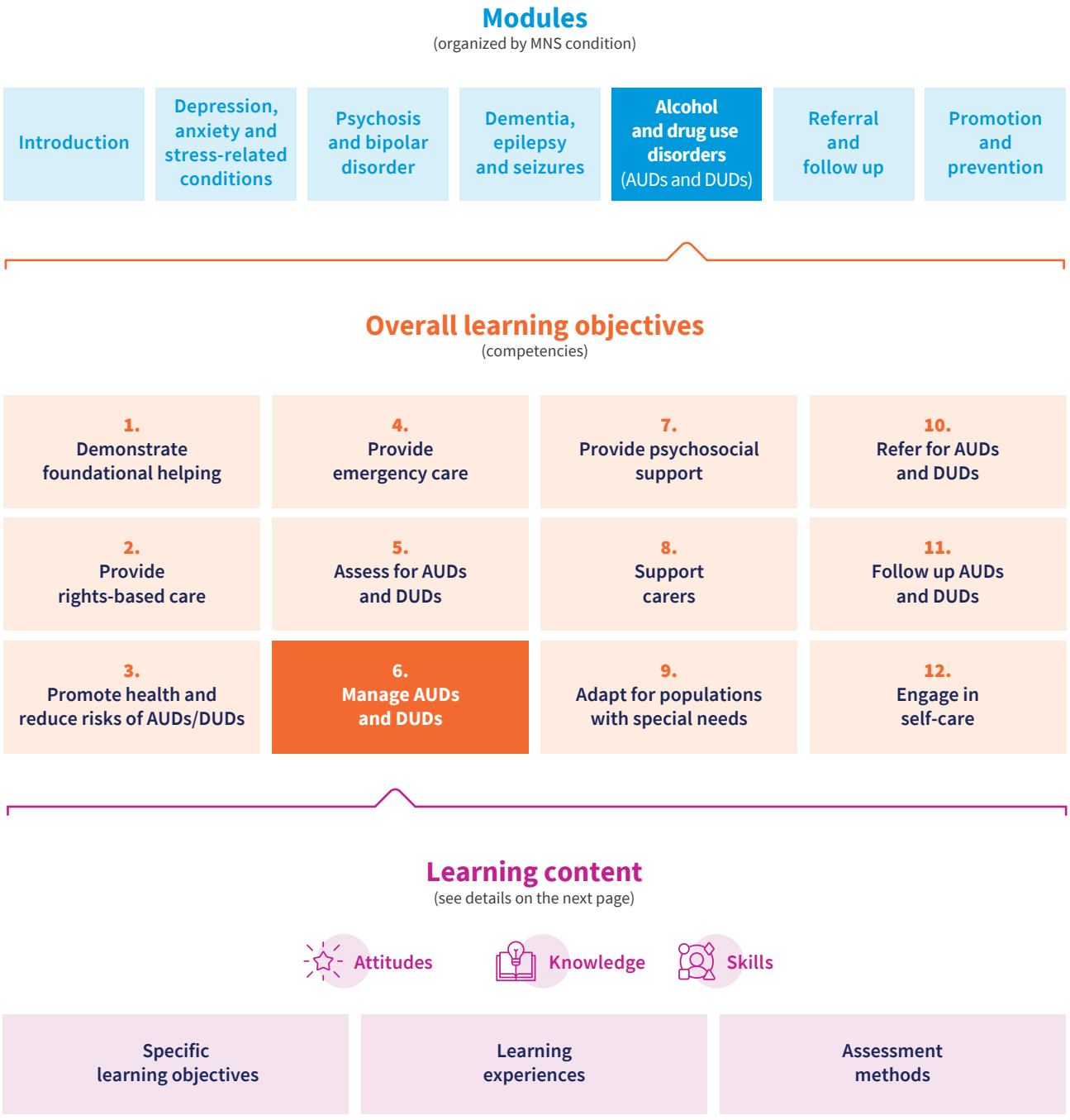


FIG. 4.5 (continued)

Specific learning objectives

Attitudes

- Shows compassion, empathy and respect for all people.
- Adopts an approach that is non-blaming, non-judgemental and non-stigmatizing.
- Shows empathy and genuine concern.
- Is deliberate, recovery-oriented and determined.
- Values both pharmacological and psychosocial interventions.

Knowledge

- Defines AUDs and DUDs (common presentations and diagnostic criteria) as well as risk factors.
- Describes core interventions (psychosocial and pharmacological) for treatment of AUDs and DUDs.
- Explains the benefits, harms, duration and adherence requirements for essential medicines.
- Describes how to manage acute substance use-related conditions.
- Describes evidence-based psychosocial interventions.

Skills

- Conducts and interprets results of screening.
- Provides psychoeducation on risks associated with alcohol and drug use.
- Implements tailored brief interventions and arranges access to further treatment for those in need.
- Collaborates with individuals to plan treatment.
- Identifies and manages physical and mental health comorbidities.
- Offers essential medicines for AUDs and DUDs as indicated.
- Identifies and manages acute substance use related conditions and other symptoms.
- Monitors treatment.

Learning experiences

Attitudes

- Information sharing lectures and seminars on providing non-judgemental care in the context of AUDs and DUDs.
- Myth-busting simulations to target stigma, role plays using positive examples of recovery, case studies, films and other media.
- Direct interactions with people with lived experience.

Knowledge

- Information sharing lectures and seminars on diagnostics and treatments for AUD/DUD and risk factors.
- Self-directed learning from books, articles and trusted websites.
- Group discussions and group work.
- Student-led research, presentations and seminars using case studies to show understanding of AUD/DUD diagnoses, and interventions for particular alcohol and/or drug use cases.

Skills

- Role plays, simulations and case studies to practise diagnosing and treating AUDs/DUDs.
- Shadowing in clinical practice.
- Practising clinical tasks with people presenting with symptoms of AUD/DUD.

Assessment methods

Attitudes

- Real or simulated case studies to show non-stigmatizing and compassionate attitudes.
- Applied essays and examinations to show appropriate attitudes in care for people with AUDs and DUDs.
- Structured role plays to show compassion and patience.
- Demonstrations.
- Observed structured examinations.
- Standardized patient encounters.
- Supervised clinical practice.

Knowledge

- Written or oral examinations on AUD/DUD diagnosis and psychological and pharmacological interventions.
- Multiple choice questions.
- Short and long answer tests.
- Theoretical essays to demonstrate understanding of AUD/DUD diagnoses and how and when to apply particular interventions.

Skills

- Real or simulated case studies to diagnose AUDs/DUDs and choose appropriate interventions.
- Applied essays and examinations to show diagnostic and intervention applications for AUDs/DUDs.
- Structured role plays to show management of symptoms.
- Demonstrations.
- Observed structured examinations.
- Standardized patient encounters.
- Supervised clinical practice.

Photo credit (next page): nursing students conversing in a medical university hallway. ©Freepik

5

Implement the curriculum

Implementing an enhanced curriculum requires adapting the key activities outlined in previous chapters of this guide to fit the national and institutional context.

Securing extra time and human resources will be important in all contexts. Advocating and engaging university administrators and educators will help ensure they are ready and willing to play their part. Limited funding does not have to halt progress; it simply means changing the type and scale of activities.

This chapter focuses on three key activities for implementation: choosing an appropriate approach; identifying barriers and solutions; and monitoring and evaluation, including to ensure continuous improvement and inform research.

5.1 Decide on an implementation approach

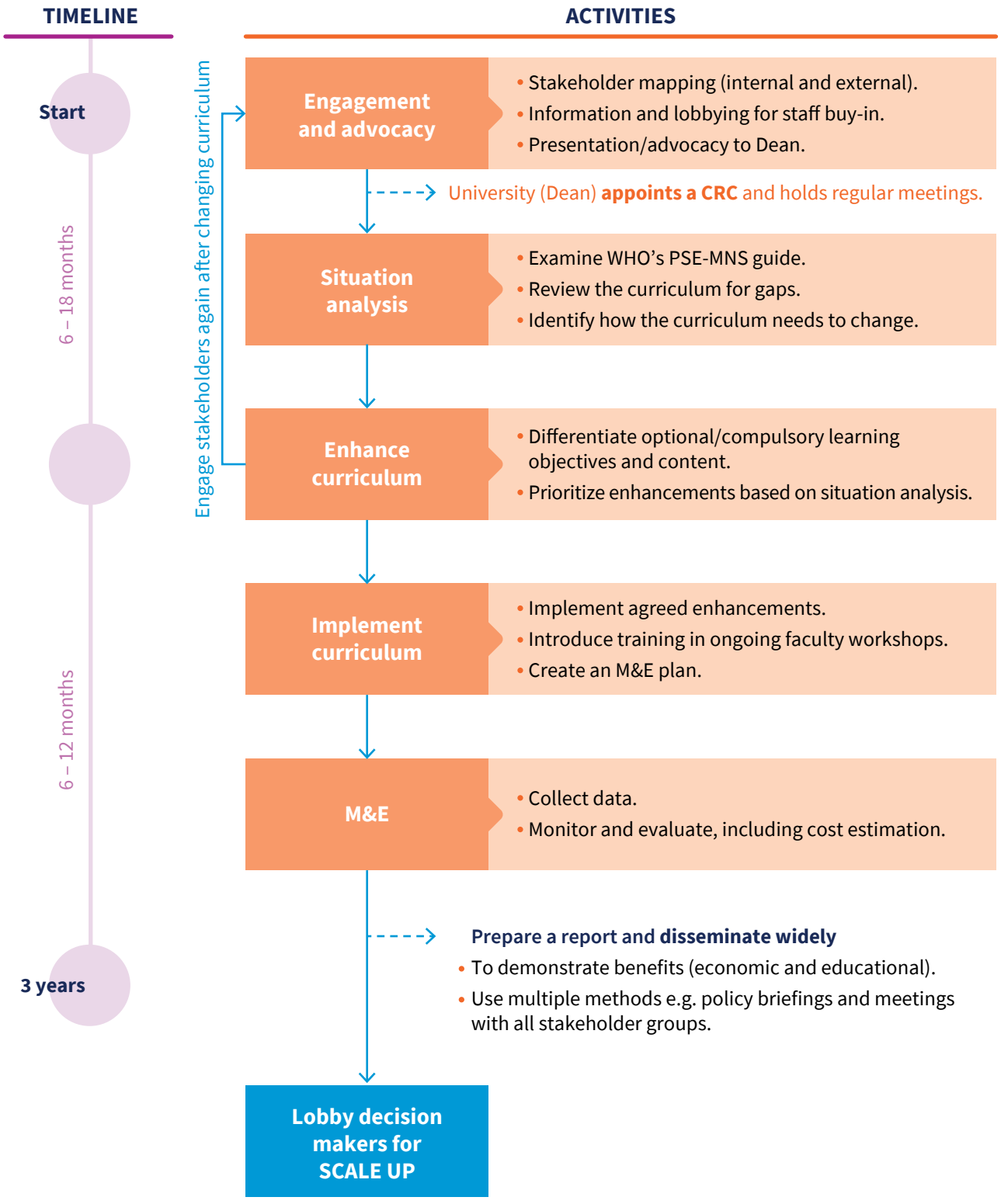
The implementation approach will largely depend on resources available (especially time, funds and people). Fig. 5.1, Fig. 5.2 and Fig. 5.3 show examples of different strategies for limited versus sizeable resources. In resource-constrained contexts, the implementation approach will likely start small, focusing on demonstrating value before scaling up. For example, it may involve making a few key curriculum changes within a single institution or cohort of students, documenting their feasibility and impact, and using the results to build a case for investment that can attract more resources.

When time, funds or people are limited, creativity is key. You might use free online surveys for stakeholder input instead of costly focus groups or informant interviews. Or you might establish an informal group of collaborators instead of a formal CRC.

Photo credit (previous page): two nurses providing a lecture on premature babies. Zambia 2024 © WHO / Stanley Makumba

FIG. 5.1

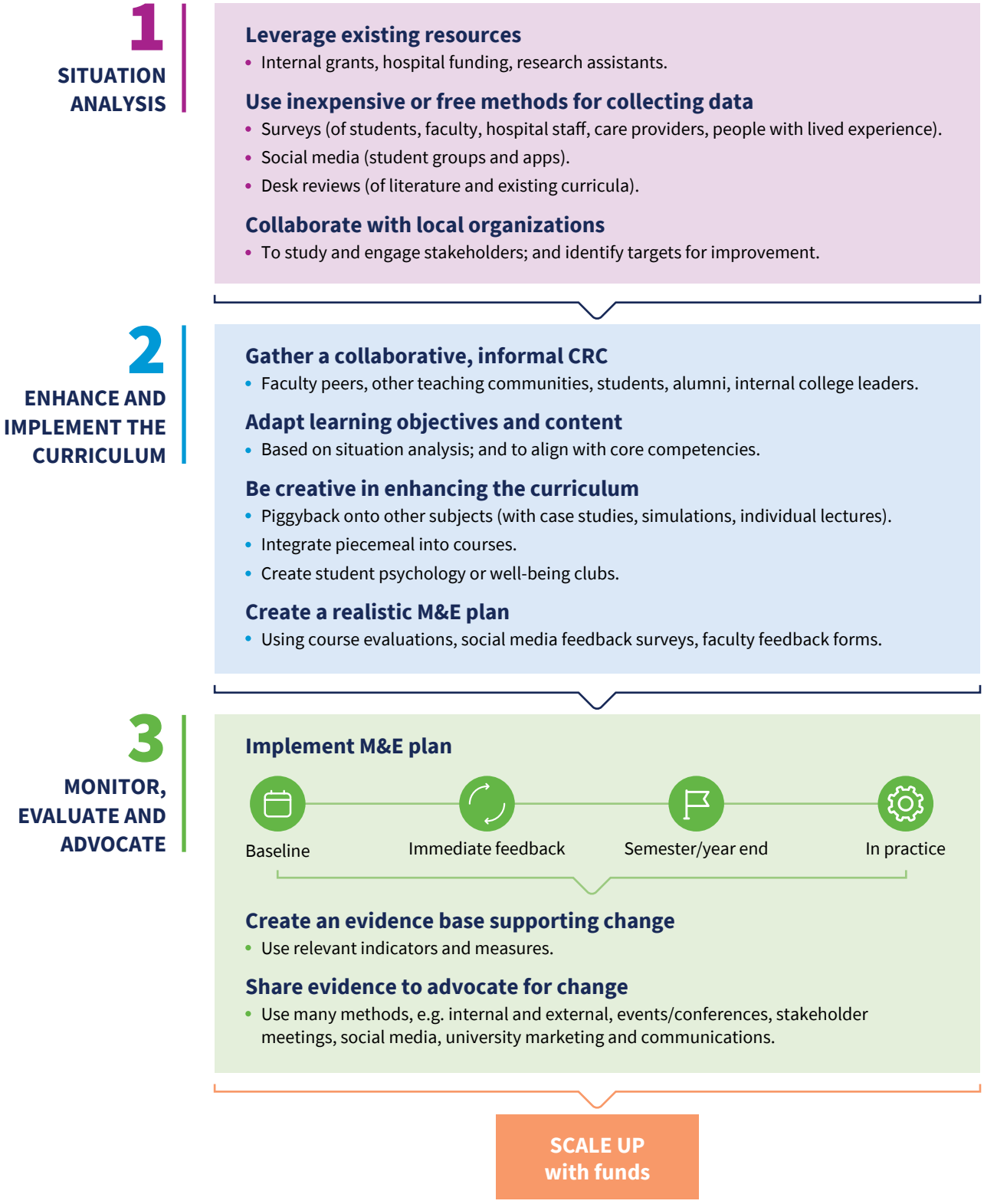
Example approach to implementation with *limited resources*.



Source: Pre-service education in mental brain and behavioural health: scaling up implementation and dissemination. Workshop. WHO Collaborating Centre for Research and Training in Mental Health; Shanghai, China; 13–14 March 2024.

FIG. 5.2

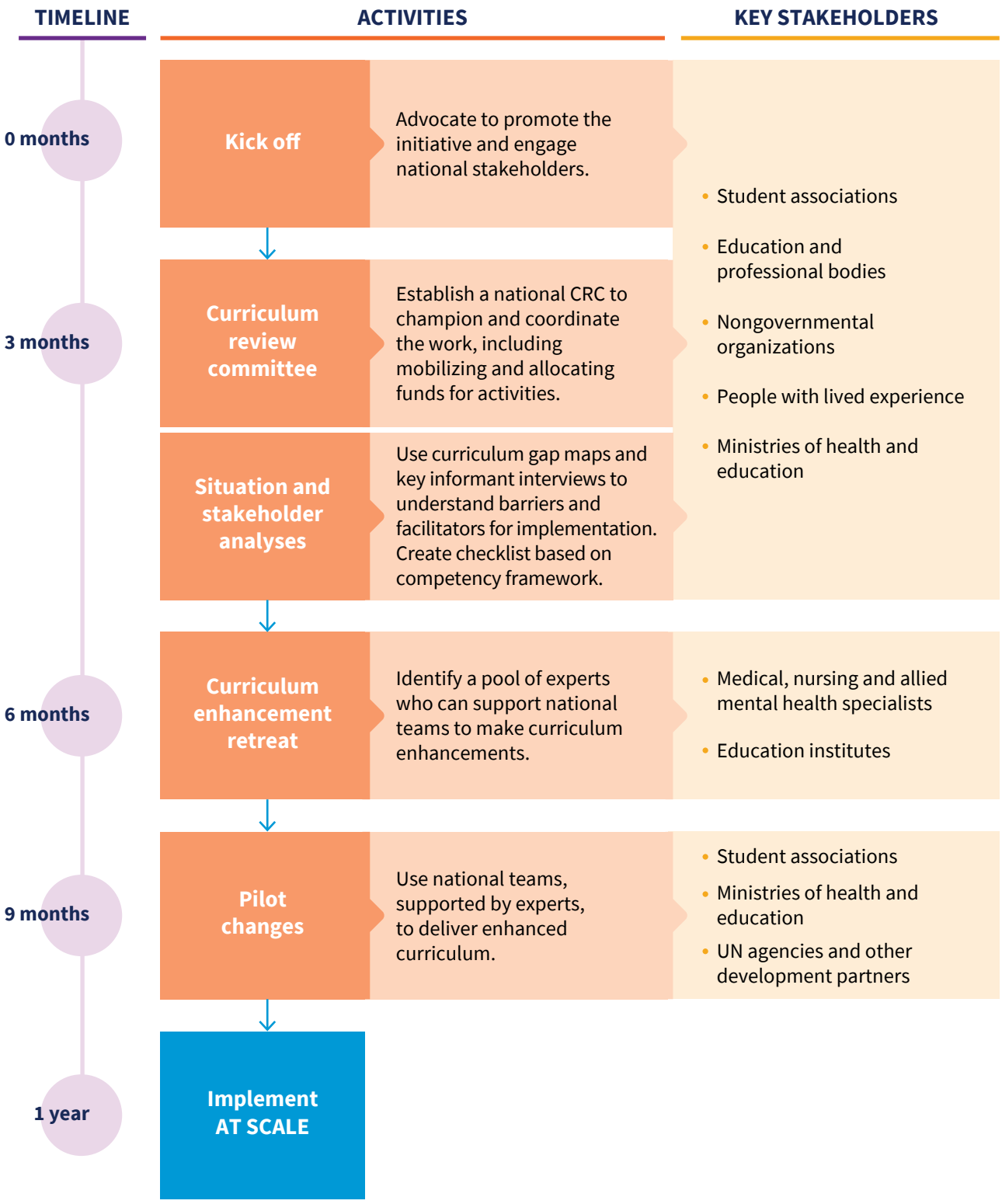
Example approach to implementation with *limited funds*.



Source: Pre-service education in mental, brain and behavioural health: scaling up implementation and dissemination. Workshop. WHO Collaborating Centre for Research and Training in Mental Health; Shanghai, China; 13–14 March 2024.

FIG. 5.3

Example approach to implementation with *sizeable resources*.



Source: Pre-service education in mental, brain and behavioural health: scaling up implementation and dissemination. Workshop. WHO Collaborating Centre for Research and Training in Mental Health; Shanghai, China; 13–14 March 2024.

BOX 5.1

Lessons from Mexico: strengthening undergraduate training in mental health and substance use disorders

Mexico's National Commission on Mental Health and Addictions (Conasama) has long emphasized the need to prepare medical and nursing students for MNS care in community settings. Yet most clinical training still takes place in specialized mental health clinics or psychiatric hospitals, which are insufficiently geared to the core MNS competencies required in primary health care.

Since 2023, Conasama has been working to embed mhGAP materials, concepts and approaches into PSE for health workers, using a seven-step approach.

1. **Needs assessment.** This step defined the attitudes, knowledge and skills needed to deliver mental health care using the mhGAP-IG in primary care settings; and identified gaps in existing PSE.
2. **Course design.** An eight-module, 48-hour course combining theoretical knowledge, practical skills and attitude training was developed, informed by the needs assessment.
3. **Expert engagement.** Mental health experts were engaged to develop and lead evidence-based, practical learning sessions.
4. **Practice.** Role plays helped learners build confidence in delivering mental health care.
5. **Clinical mentors.** Clinical and administrative mentors were trained to support students transfer skills and knowledge into clinical practice in community settings and ensure facility readiness (e.g. setting up referral pathways, and ensuring availability of psychotropic medicines).
6. **Integration.** The course was integrated into various PSE programmes in Mexico and linked mental health care to local referral systems.
7. **Monitoring and evaluation (M&E).** Ongoing M&E is assessing the course's impact on students' attitudes, knowledge and skills and the quality of mental health care delivery in communities.

Source: José Javier Mendoza Velásquez, Conasama, personal communication, 20 February 2024.

Even with plentiful resources, or when working with centralized national curricula, starting small can be beneficial. Such an approach can help provide proof of concept for integrating MNS care into PSE and serve as a model to advocate for scaling up.

For example, WHO Pakistan worked with Khyber Medical University Peshawar to develop and deliver a curriculum for a postgraduate diploma in family medicine. After successful implementation in one university, the diploma was expanded to nine more, helping to build institutional capacity for family physicians. A similar stepped approach might also work for mental health care.

In Mexico, the National Commission on Mental Health and Addictions used a centralized approach to create a national network of facilitators for the mhGAP-IG, strengthening pre-service training nationwide (see Box 5.1).

Regardless of resources, implementing an enhanced curriculum should be paired with monitoring and evaluation, especially in the early phases (see section 5.3).

5.2 Address barriers to implementation

Many factors can either help or hinder curricular change. Backing from political leaders and the ministries of health and education can generate interest and resources for an enhanced curriculum. So too can national or institutional policies that prioritize mental and brain health and substance use harm avoidance. Other enablers include involving students and faculty, peer-to-peer support, and fostering learning environments that promote and protect the mental health of both learners and educators. Regular consultation with professional organizations keeps the curriculum aligned with the latest evidence-based practices, and robust feedback mechanisms ensure continuous improvement.

Common barriers include lack of funds, insufficient educators and limited access to learning materials or facilities. Even with sizeable funding, there may be a shortage of human resources to call on for curricular change, and donor deadlines can create additional pressure. In some contexts, limited access, aptitude, funding or support for technology may also pose significant challenges. Resistance to change from university administrators and faculty is often a major obstacle, and gaining widespread stakeholder buy-in can take time.

An important early step in implementation is to identify likely challenges and consider how to overcome them (see Table 5.1).

TABLE 5.1

Common challenges to implementation and potential solutions.

Challenge 1
Resistance to change

Examples	Potential solutions
Ministry of health believes in-service training alone is sufficient. **Donors do not prioritize mental health.** **Institutional leaders (e.g. dean) are not interested in enhancing the curriculum.**	• Build a case for implementation that demonstrates the health and economic benefits of an enhanced curriculum and showcases successes elsewhere. • Use this WHO guide as an advocacy tool. • Find champions to advocate for the curriculum. • Enlist local organizations as advocacy partners. • Invest in communications, including high-level branding and launch, for the enhanced curriculum.
Teaching faculty do not endorse, or lack motivation to deliver, the enhanced curriculum.	• Include faculty in curriculum enhancement activities from the outset. • Highlight benefits of the enhanced curriculum. • Offer incentives to educators (e.g. extra training opportunities or points towards recertification or continuing professional development). • Lobby exam boards to integrate MNS-related content into exit exams and other assessments. • Embed curriculum delivery in educators' workplans.
Other departments are unwilling to collaborate.	• Demonstrate the prevalence and impact of MNS conditions and highlight the health benefits of an enhanced curriculum. • Ensure early engagement and a multidisciplinary approach to curriculum development. • Use relevant institutional or national recommendations to make the case for integration. • Offer incentives to educators.
Students are unaware or do not see the point of curricular change.	• Leverage professional organizations' student working groups. • Support student empowerment and advocacy initiatives. • Lobby exam boards and accreditation bodies to add MNS-related content to exit exams and other assessments.

TABLE 5.1 (continued)

Challenge 2
Limited resources and capacity

Examples	Potential solutions
Limited funds.	• Adopt a phased approach that starts with small changes and gathers evidence on their benefits to lobby for more funds. • Look for internal grants. • Optimize use of available resources by organizing them differently. • Make the case for investment to relevant donors. • Start small and build institutional reputation to build national and international interest.
Lack of resources or information to assess needs for an enhanced curriculum.	• Share information, including this guide. • Make use of free software and data (e.g. free survey tools, WHO data and technical support). • Leverage existing personnel (e.g. research assistants and postgraduate students). • Enlist local organizations as partners and collaborators. • Use informal, cost–effective and less time consuming data collection techniques.
Too few educators available to deliver an enhanced curriculum; or multi-disciplinary teaching is difficult to coordinate.	• Make the most of self-directed and digital learning platforms (e.g. replace in-person lectures with online training modules). • Involve faculty from other disciplines from early stages. • Engage local organizations, including of people with lived experience, as co-educators. • Consider using resident doctors and nurses as teachers.
Limited access to learning spaces (classrooms and clinical suites) and materials (including digital tools).	• Use digital environments instead of physical spaces for teaching. • Make use of free learning resources (e.g. free online courses and materials).

Challenge 3
Long or unrealistic timelines

Examples	Potential solutions
Implementation takes longer than expected.	• Be prepared for delays and create mitigation plans. • Develop clear plans at start. • Build flexibility into timelines.
Poor planning and missed deadlines create pressure.	• Engage stakeholders at each stage for update and buy-in.
Funders reluctant to engage in lengthy project.	• Adopt a phased approach to enhancing the curriculum.

TABLE 5.1 (continued)

Challenge 4
Turnover

Examples	Potential solutions
Political or policy change deprioritizes mental health.	• Align the enhanced curriculum with national priorities. • Secure the engagement and buy-in of a wide variety of national stakeholders.
Turnover in administrators decreases support for curricular change.	• Get written agreement for the enhanced curriculum. • Engage champions beyond administration.
Turnover in teaching staff creates gaps in expertise.	• Engage local organizations, including of people with lived experience, as co-educators. • Train postgraduate students and resident doctors and nurses simultaneously so that they can fill gaps.

Challenge 5
Full curriculum

Examples	Potential solutions
There is already too much content in the curriculum and not enough time to deliver it.	• See 5.2.1 Practical tips for resource-constrained settings.
Other areas of medicine compete for time and space in the curriculum.	• Collaborate with other departments on mental health aspects of somatic illness. • Demonstrate the prevalence and impact of MNS conditions and highlight the health benefits of an enhanced curriculum. • Show how MNS conditions are relevant in every aspect of heath science and medicine. • Engage other departments early on in the process of change and use a multidisciplinary approach to curriculum enhancement. • Use this guide as an advocacy tool. • Use relevant institutional or national recommendations to argue for integration, not competition.

5.2.1 Practical tips for resource-constrained settings

Ideally, the enhanced curriculum is delivered as a standalone set of modules with practical and clinical placements. Yet this is not always feasible. Most medical and nursing curricula already have heavy loads of lecture, practical and learning hours for students. Limited teaching resources and facilities can further strain this load.

While each university's context will differ, in this section we share three practical tips, drawn from global stakeholders, to help ease the burden when planning and implementing an enhanced curriculum.

Rethink traditional teaching methods

One of the easiest changes is to adjust teaching methods instead of adding hours to the curriculum. Examples include replacing lectures with participatory and peer-to-peer learning, such as flipped classrooms, group discussions, case presentations, and role-playing. Increasing the use of digital technologies and online self-directed learning materials can also help alleviate classroom pressure (see section 4.3).

Make small changes to existing courses

Even in courses with heavy loads for students, universities can make small changes to build core competencies in MNS care. For example, clinical placements can be expanded beyond psychiatric hospitals to also include general hospitals and other health care settings. Existing case studies and structured role plays can be replaced to focus on MNS conditions. For example, a dementia case study can be used in a geriatric medicine course or a simulation of a child with a developmental disability in a paediatrics course. Short modules or lectures on mental health topics can also be added to other health education courses (e.g. a lecture on maternal mental health in a reproductive health course).

These small changes also support a more integrated approach to medical and nursing education, promoting a more holistic understanding of health and highlighting the cross-cutting relevance of MNS care. Other target courses for integration might include:

- psychopharmacology (to link clinical and prescriptive knowledge and practice with a pharmacological basis);
- community medicine (to link epidemiology with the identification of common MNS conditions, and understanding of stigma and treatment gaps);
- oncology (to link foundational and human-rights based care to delivery of difficult diagnoses, bereavement experiences and hospice plans); and
- internal medicine and surgery (to acknowledge the interconnection between physical and mental health).

Harness community resources

Diverse local organizations and stakeholders can be enlisted as partners in delivering an enhanced curriculum. Involving people with lived experience of MNS conditions as co-educators is especially useful for shaping attitudes (see section 4.3). Local organizations and health services can enrich clinical placements by exposing students to community-based care. For example, students can participate in community screening programmes or work with community mental health organizations to observe and learn from local experts (see Box 5.2).[12]

[12] See also Foster skills in section 4.3 for more examples of harnessing community resources to implement an enhanced curriculum.

BOX 5.2

Lessons from the University of British Columbia: immersive learning in Nairobi

At the University of British Columbia in Canada, allied health students have opportunities for immersive experiential learning through international placements, including in Nairobi, Kenya. These placements include joint lectures with the Kenya Medical Training College, followed by four weeks working with local community-based mental health organizations, Basic Needs Basic Rights Kenya (BNBR, https://basicneedskenya.org/) and Kamili (https://www.kamilimentalhealth.org/).

Both BNBR and Kamili run community mental health programmes that are person-centred, rights-based and focused on recovery. They provide vital mental health services for local individuals and families, supporting economic and vocational empowerment and tackling structural barriers to care, such as stigma. Visiting students work alongside people with lived experience to advocate for mental health, develop policies and provide psychological support to vulnerable individuals. They focus on holistic care that simultaneously considers the clinical, economic and social well-being of individuals. During their time in Nairobi, students confront the practical and ethical challenges of delivering mental health care in low-resource settings and learn about indigenous and local culturally and spiritually appropriate psychosocial interventions.

Sources: Mohamed Ibrahim, University of British Columbia, personal communication, 19 April 2024; University of British Columbia, 2023 *(94)*.

5.3 Monitor and evaluate

Monitoring and evaluation (M&E) are separate but linked processes. Monitoring involves continuously and systematically collecting and analysing routine data to track the enhanced curriculum's progress and identify challenges or areas for improvement. Evaluation involves periodically assessing specific information at specific times to determine the extent to which the enhanced curriculum has met its objectives.

Both are essential for assessing the curriculum's success in preparing competent graduates to provide effective care for people with MNS conditions. M&E should be planned from the start, include baseline measurements, and used consistently. M&E can help assess short-term impacts and progress towards learning objectives. They can also evaluate the curriculum's longer-term impact on quality of MNS care.

5.3.1 Indicators and measures

Indicators for M&E can be defined at multiple levels, from the resources and processes used to build the curriculum to the outcomes and broader impacts of its implementation (see Fig. 5.4). Some M&E frameworks include all levels, while others may

focus on just a few. Means of verification (MoV) are similarly wide ranging. They can target different groups (e.g. educators, administrators, students, graduates, supervisors and people experiencing MNS conditions). They may be quantitative (e.g. attendance records, closed questionnaires, employment rates, student assessment scores or health records) or qualitative (e.g. interviews, open surveys or focus group discussions). A mix of methods offers a depth of information that cannot be achieved by either method alone. Given these variations, each M&E framework is unique, with its own structures, outcomes and indicators.

FIG. 5.4

Example indicators and means of verification for monitoring and evaluating an enhanced curriculum.

Inputs	The financial, human and material resources used to implement the curriculum.	e.g. indicator: budget allocated. e.g. MoV: university budget plan.
Processes	Tasks and actions that mobilize inputs to produce outputs.	e.g. indicator: # educators trained to deliver the enhanced curriculum. e.g.MoV: training records.
Outputs	The direct results of the activities performed.	e.g. indicator: # students completing the enhanced curriculum. e.g. MoV: attendance records.
Outcomes	The short- and medium-term changes created by implementing the curriculum.	e.g. indicator: % students demonstrating pre-defined adequate level of core competencies. e.g. MoV: competency assessments.
Impacts	The curriculum's impact on health service provision and service users.	e.g. indicator: proportion of people with MNS conditions identified and treated in health facilities. e.g. MoV: service use records.

The CRC is responsible for developing an M&E plan (see section 2.4). This plan should be established from the outset and define indicators and means of verification for measuring the enhanced curriculum's success. Key aspects to cover include:

- appropriateness and relevance of learning content and experiences, teaching methods and assessments;
- applicability of content to the national context;
- curriculum structure and feasibility;
- quality of teaching;
- student and educator engagement and satisfaction;
- assessment burden on students and educators; and
- changes in student competencies, confidence and commitment.

Monitoring and evaluating students' progress towards competence is crucial and can be achieved through pre- and post-assessments that may or may not be part of the enhanced curriculum (see section 4.4). These assessments help measure shifts in attitudes, knowledge and skills, and help identify areas where the curriculum may need improvement.

Ideally, M&E continues after graduation and include not only postgraduates and health care practitioners, but also their clinical supervisors and employers, and the people they are providing care to (see Table 5.2). Post-graduation M&E supports ongoing programme improvement. Example questions to address through these activities include:

- How many graduates are employed in health care and are performing MNS care tasks?
- Are graduates competent and confident at providing care to people with MNS conditions?
- Which competencies do graduates show most consistently (and which are shown least often)?
- Do people in care feel they have received appropriate and well-managed care?

Good M&E plans prioritize resource efficiency and only collect data that will be used. They should indicate the timing for activities (such as data collection, analysis, reporting) and assign responsibilities. The CRC should also define roles, expectations and processes for integrating M&E findings into the enhanced curriculum to drive continuous improvement and sustainability.

TABLE 5.2

Example activities for evaluating the enhanced curriculum's outcomes and impacts for different groups of people.

Outcome or impact	Audience	Format	Example points of evaluation
Reaction	Students	Curriculum evaluation questionnaire.	• Satisfaction. • Engagement. • Relevance of course content. • Methods and burden of assessment. • Learning materials and experiences. • Infrastructure and facilities. • Teaching quality.
	Educators	Survey or interview.	• Methods and burden of assessment. • Learning materials and experiences. • Student engagement and interest.
Learning	Students	Curriculum evaluation questionnaire; and pre- and post-assessments of competencies.	• Learner readiness. • Changes in knowledge, skills, attitudes (and so competencies), confidence and commitment.
Behaviour	Graduates	Survey or interview.	• Percentage of graduates licenced and employed. • Perception of readiness for role and responsibility.
	Clinical supervisors		• Student general readiness for practice. • Student confidence. • Student values and attitudes.
	Employers		• Graduate general readiness for practice. • Graduate confidence. • Graduate values and attitudes.
Results	Individuals and communities	Service data; and service user survey.	• Quality of care. • Health outcomes.

Source: WHO, 2022 *(23)*.

5.3.2 Continuous improvement

M&E insights should drive continuous improvement of the enhanced curriculum. They can suggest whether the curriculum is effective and for whom; and indicate how it should be revised to better achieve its objectives. Some things to consider include:

- Are the learning objectives clear?
- Is the learning content coherent and feasible?
- Are learning experiences and assessments pitched appropriately?
- Do teaching methods and assessments align with learning objectives?
- Do clinical placements reflect likely post-graduation workplaces?

5.3.3 Research

M&E and research are closely linked. M&E focuses on improving a specific curriculum, while research has a more global focus, aiming to contribute to broader knowledge in PSE for MNS care. Both can provide data to show what is possible for an enhanced curriculum and exemplify the affordability, feasibility and benefits of PSE in MNS care.

There are many types of research. An enhanced curriculum developed from this guide could:

- be evaluated as a whole, for example through field testing at universities;
- focus on specific recommendations, such as involving people with lived experience as co-educators, shifting clinical placements from psychiatric hospitals to general hospitals, or focusing on a subset of competencies or students;
- build evidence for effective practices; or
- analyse the cost–benefits of an enhanced curriculum compared with in-service training or continuous professional development.

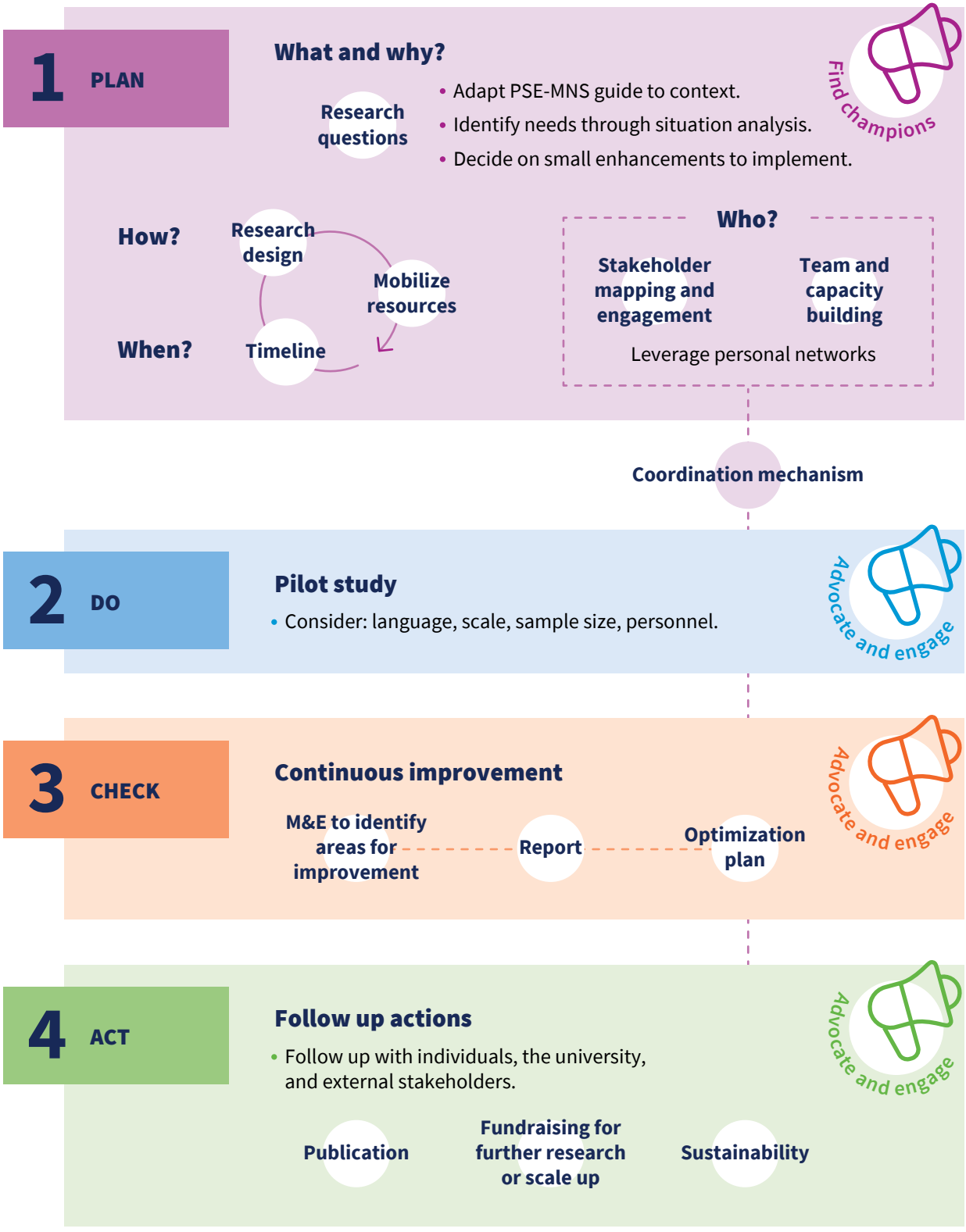
In practice, the size of funding available will determine the scale of ambition for research. In resource-constrained settings, the emphasis will likely be on applied research and small-scale implementation studies, starting with minor changes based on a situation analysis, documenting feasibility, evaluating impact and using results to mobilize funds for bigger changes (see Fig. 5.5)

In settings with sizeable funds, research design is more flexible.

Fig. 5.6 shows an example roadmap for a three-year experimental study of an enhanced curriculum. This example uses a randomized controlled trial but researchers may choose different approaches, including observational studies (e.g. cohort studies or case-control studies), qualitative studies or mixed-methods studies.

FIG. 5.5

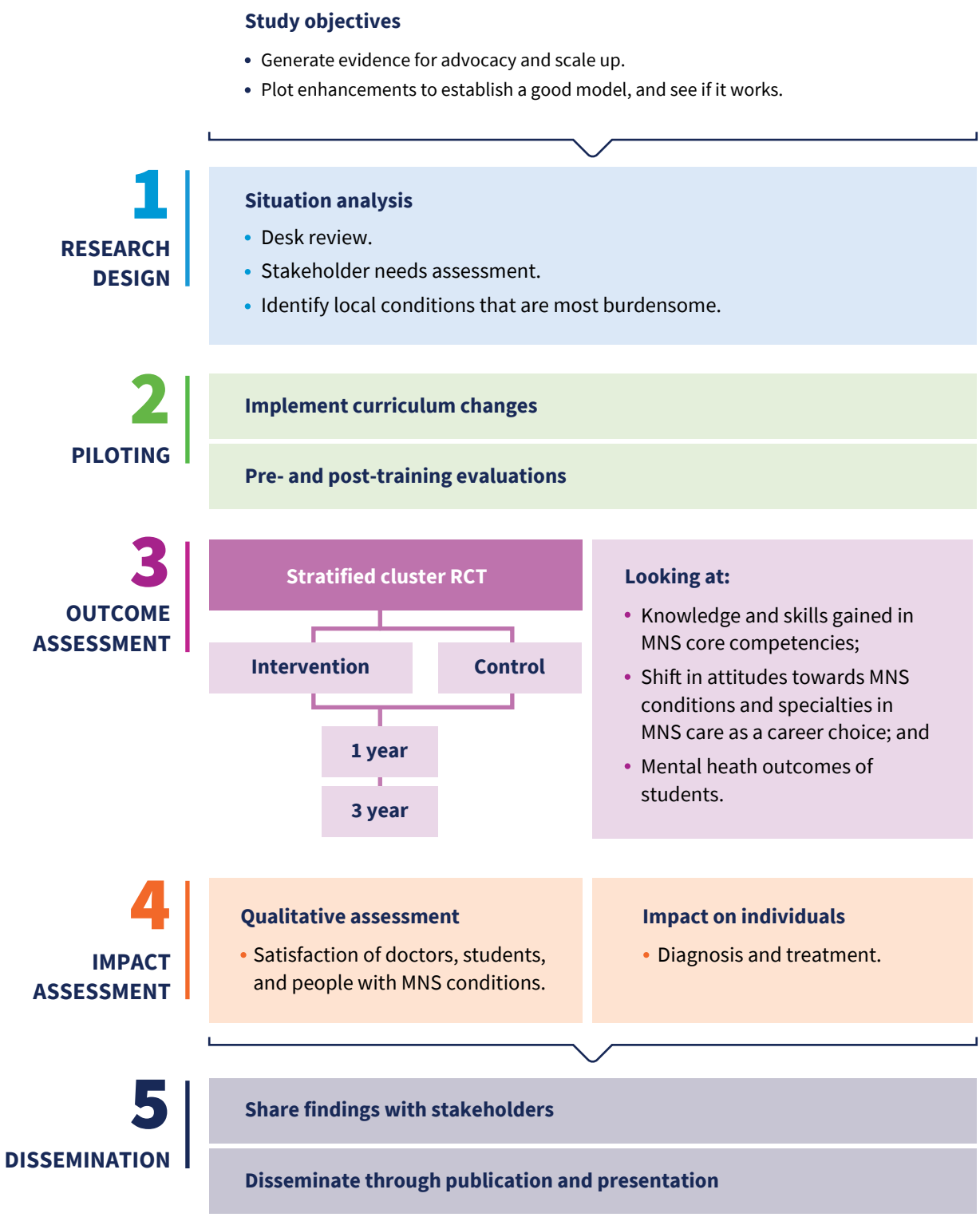
Example approach to research with *limited funds*.



Source: Pre-service education in mental, brain and behavioural health: scaling up implementation and dissemination. Workshop. WHO Collaborating Centre for Research and Training in Mental Health; Shanghai, China; 13–14 March 2024.

FIG. 5.6

Example approach to research with *sizeable funds*.



Source: Pre-service education in mental, brain and behavioural health: scaling up implementation and dissemination. Workshop. WHO Collaborating Centre for Research and Training in Mental Health; Shanghai, China; 13–14 March 2024.

6

Conclusion

PSE for medical doctors and nurses is key to scaling up the workforce to provide care for people experiencing MNS conditions (including MNS disorders and related issues). A competency-based approach is crucial for effectiveness, and this guide outlines 12 core competencies to integrate into existing curricula, regardless of resource constraints.

Even small changes can help medical and nursing students develop the attitudes, knowledge and skills they need to provide effective MNS care. You do not have to follow a rigid process. Draw on all or some of the elements in this guide to fit your university's context. Not all the content or activities included here will be necessary for every institution or country.

For many countries and universities, increasing buy-in for curricular change from key stakeholders will be a critical first step. In countries with centralized curricula, engaging government stakeholders is crucial. Elsewhere engaging institutional leaders or organizations that bring together institutions and medical associations (e.g. national associations of medical schools and accreditation agencies) may be more important. Either way, change can be driven from the bottom up (e.g. students and faculty advocating for reform) or from the top down (e.g. governments or accreditation bodies initiating change).

Convincing decision-makers of the case for investment often requires evidence of what works where and how. This can be gathered through desk reviews of existing practices and initiatives.

For students completing an enhanced curriculum, learning does not stop after their first degree. Postgraduate education and continuing professional education build on the core competencies acquired during pre-service to develop specialists – not only psychiatrists, neurologists or mental health nurses, but also radiologists, gynaecologists, paediatricians, geriatricians, etc. Each speciality requires its own set of specialized competencies, including for MNS care. But all can benefit from and build on the core competencies gained through an enhanced undergraduate curriculum.

Photo credit (previous page): nursing student holds a bag and books. ©Freepik

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Annex: tools and resources

Tools and resources
to prepare and plan for change

- Global Health Data Exchange (GHDx) [website]. Seattle: Institute for Health Metrics and Evaluation; 2024 (https://ghdx.healthdata.org/).
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- WHO MiNDbank: a database of resources covering mental health, substance abuse, disability, general health, human rights and development [website]. Geneva: World Health Organization; 2024 (https://extranet.who.int/mindbank/).
- National health workforce accounts: a handbook, 2nd edition. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/374320).
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Tools and resources
for defining competencies

- EQUIP: Ensuring Quality in Psychosocial and Mental Health Care [website]. Geneva: World Health Organization and United Nations Children's Fund; 2023 (https://equipcompetency.org/en-gb).
- Enhancing Assessment of Common Therapeutic factors (ENACT) foundational helping competencies for adults. Geneva: World Health Organization and United Nations Children's Fund; 2024 (https://equipcompetency.org/sites/default/files/downloads/2022-07/ENACT_inperson_published_220321.pdf).
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- Innovations in scalable psychological interventions [website]. Geneva: World

Health Organization; 2024 (https://www.who.int/teams/mental-health-and-substance-use/treatment-care/innovations-in-psychological-interventions).
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- Psychological interventions implementation manual: integrating evidence-based psychological interventions into existing services. Geneva: World Health Organization; 2024 (https://iris.who.int/handle/10665/376208).
- WHO QualityRights e-training on mental health. In: WHO/Mental health, brain health and substance use [website]. Geneva: World Health Organization; 2024 (https://www.who.int/teams/mental-health-and-substance-use/policy-law-rights/qr-e-training).

Tools and resources
to support the teaching of competencies

Foundational helping

- Enhancing assessment of common therapeutic factors (ENACT): foundational helping competencies for adults. Geneva: World Health Organization and United Nations Children's Fund; 2022 (https://equipcompetency.org/sites/default/files/downloads/2022-07/ENACT_inperson_published_220321.pdf).
- Foundational helping skills training manual: a competency-based approach from the Ensuring Quality in Psychosocial and Mental Health Care (EQUIP) initiative for training helpers to effectively support adults. Geneva: World Health Organization and United Nations Children's Fund; 2024 *(in press).*

Rights-based care

- QualityRights materials for training, guidance and transformation. In: WHO [website]. Geneva: World Health Organization; 2019 (https://www.who.int/publications/i/item/who-qualityrights-guidance-and-training-tools).
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Clinical emergency care

- Clinical management of acute pesticide intoxication: prevention of suicidal behaviours. Geneva: World Health Organization; 2008 (https://iris.who.int/handle/10665/44020).
- mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings: mental health Gap Action Programme (mhGAP), version 2.0. Geneva: Word Health Organization; 2016 (https://iris.who.int/handle/10665/250239).
- Preventing self-harm/suicide: empowering primary health care providers. PAHO virtual campus online course; 2022 (https://www.campusvirtualsp.org/en/course/preventing-self-harmsuicide-empowering-phc-providers).
- Preventing suicide: a resource for general physicians. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/67165).

- Preventing suicide: a resource for primary health care workers. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/67603).

Assessment, management and follow-up

- AUDIT: the alcohol use disorders identification test: guidelines for use in primary health care. Geneva: World Health Organization; 2001 (https://iris.who.int/handle/10665/67205).
- Ensuring Quality in Psychosocial and Mental Health Care (EQUIP) [website]. Geneva: World Health Organization and United Nations Children's Fund; 2023 (https://equipcompetency.org).
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- Integrating mental health in primary health care package. In: WHO/Regional Office for the Eastern Mediterranean [website]. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2023 (https://www.emro.who.int/mnh/publications/integrating-mental-health-in-primary-health-care-package.html).
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- International standards for the treatment of drug use disorders, 2nd edition. Geneva: World Health Organization and United Nations Office on Drugs and Crime; 2020 (https://iris.who.int/handle/10665/331635).
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- mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings: mental health Gap Action Programme (mhGAP), version 2.0. Geneva: World Health Organization; 2016 (https://iris.who.int/handle/10665/250239).
- mhGAP training manuals for the mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings, version 2.0. Geneva: World Health Organization; 2017 (https://iris.who.int/handle/10665/259161).
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- The WHO ASSIST package for hazardous and harmful substance use. Geneva: World Health Organization, 2010. (https://www.who.int/publications/i/item/the-who-assist-package-for-hazardous-and-harmful-substance-use).
- WHO model lists of essential medicines. In: WHO [website]. Geneva: World Health Organization; 2023 (https://www.who.int/groups/expert-committee-on-selection-and-use-of-essential-medicines/essential-medicines-lists).

Caregiver support

- iSupport for dementia: training and support manual for carers of people with dementia. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/324794).
- Training for caregivers of children with developmental disabilities, including autism. In: WHO/Mental health, brain health and substance use [website]. Geneva: World Health Organization; 2019 (https://www.who.int/teams/mental-health-and-substance-use/treatment-care/who-caregivers-skills-training-for-families-of-children-with-developmental-delays-and-disorders).

Prevention and promotion

- Every life matters: understanding suicide and its impact. Delhi: World Health Organization Regional Office for South-East Asia; 2021 (https://iris.who.int/handle/10665/341671).
- Helping Adolescents Thrive toolkit. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/341327).
- International standards for drug use prevention, 2nd edition. Geneva: World Health Organization and United Nations Office on Drugs and Crime; 2018 (https://www.who.int/publications/i/item/international-standards-for-drug-use-prevention-second-edition-2018).
- Live life: an implementation guide for suicide prevention in countries. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/341726).
- National suicide prevention strategies: progress, examples and indicators. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/279765).

Self-care/self-help

- Doing what matters in times of stress: an illustrated guide. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/331901).
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Public health approaches to mental health

- Community-based mental health services in the WHO South-East Asia Region. Delhi: World Health Organization Regional Office for South-East Asia; 2024 (https://iris.who.int/handle/10665/376717).
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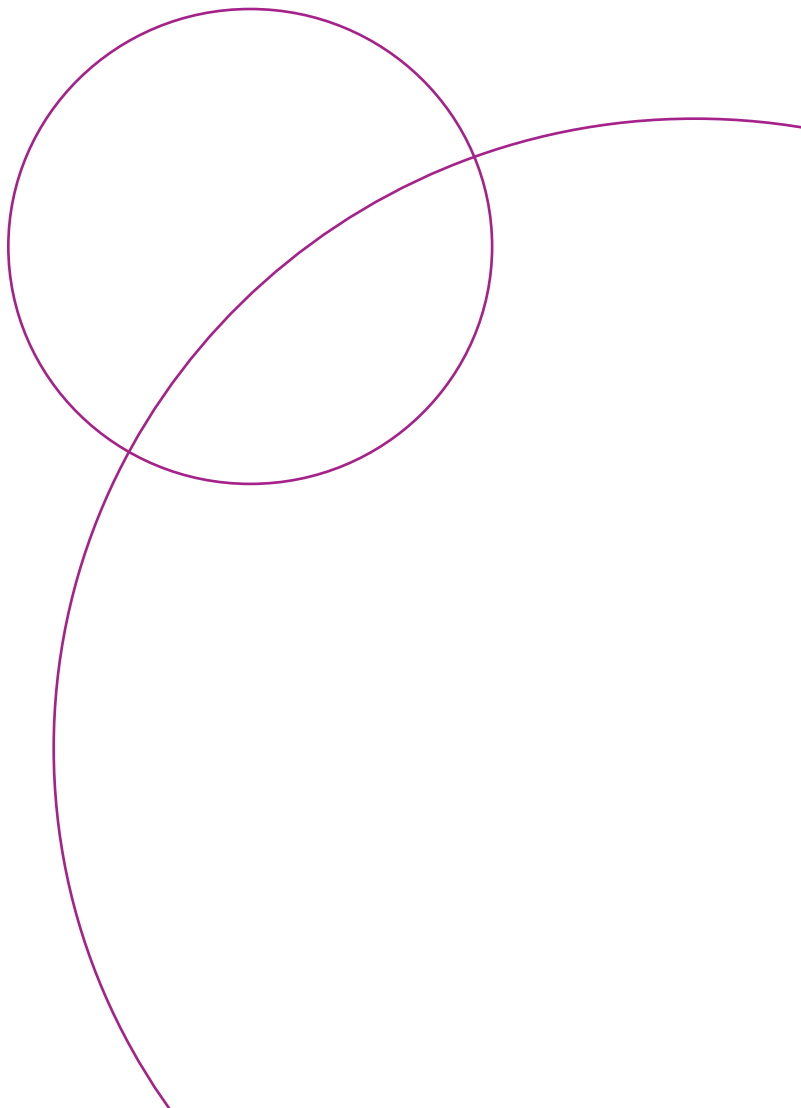
Attitude change

- Inspiring education: free online training for healthcare providers to help support people's mental health [website]. Toronto: Centre for Addiction and Mental Health; 2024 (https://moodle9.camhx.ca/moodle/).

- Mental health structural stigma in healthcare: eLearning course [website]. Toronto: Mental Health Commission of Canada; 2024 (https://chalearning.ca/programs-and-courses/structural-stigma-training-for-health-care-leaders/).
- Stigma: CAMH mental health and addiction 101 series [website]. Toronto: Centre for Addiction and Mental Health; 2012 (https://www.camhx.ca/Education/online_courses/MentalhHealth101Series/Stigma/story.html).
- Understanding and acting against mental health stigma in health contexts: virtual course [website]. Washington DC: Pan-American Health Organization; 2024 (https://campus.paho.org/en/course/understanding-and-acting-against-mental-health-stigma-health-contexts-2022).



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