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OPERATIONAL GUIDELINES

The Measuring Mental Health among Adolescents and Young People at the Population Level (MMAPP) Toolkit

The MMAPP Initiative, Indicators, and Questionnaire Overview, User Guide, and Protocols

UNICEF | Preprint Version, May 2026



mmapp

Measuring Mental Health Among
Adolescents and Young People
at the Population Level

Acknowledgements

The Measuring Mental Health Among Adolescents and Young People at the Population Level (MMAPP) initiative was developed by UNICEF and partners to address persistent gaps in reliable data and measurement tools for youth mental health at the population level. The initiative represents a significant step toward deepening our understanding of adolescent and young people's mental health needs, and toward informing evidence-based policies and programmes that support their wellbeing.

The MMAPP Operational Toolkit consolidates guidance, tools, and resources to support implementers in applying the MMAPP questionnaire and indicators across diverse contexts. The guidance draws on real-world implementation experience across settings and incorporates inputs from practitioners and specialists across mental health, child development, psychometrics, household survey methodology, and related fields. We gratefully acknowledge all contributors to this document, as listed below.

The toolkit was led and developed by Malvikha Manoj (UNICEF Global Programme Division (GPD) and Brandon Kohrt (George Washington University), with support from Ha Yeon Kim (UNICEF Office of Strategy and Evidence (OSE) – Innocenti). The work was carried out under the overall technical guidance of Tashrik Ahmed (UNICEF OSE – Innocenti), with senior leadership support from Zeinab Hijazi (UNICEF GPD), Maria Muniz, Danzhen You, and Joao Pedro Azevedo (UNICEF OSE – Innocenti).

The Operational Toolkit benefited from expert review and inputs between 2024 and 2026, each of which has iteratively strengthened its quality and utility. We are grateful for the time, expertise, and thoughtfulness contributed by the following colleagues: Ann Willhoite (UNICEF GPD), Jennifer Groves (UNICEF GPD), Jill W. Ahs (Karolinska Institutet), Pete Azzopardi (The Kids Research Institute of Australia and Australian National University), Per Ashorn (WHO), Prerna Banati (WHO), Coimhe Nic A Bhaired (UNICEF GPD), Eduard Bonet Porqueras (UNICEF Office of Evaluation), Felicity Brown (UNICEF GPD), Gwyther Rees (UNICEF OSE – Innocenti), Liliana Carvajal (UNICEF LACRO), Daniel Hugh Chisolm (World Health Organization (WHO)), Sara Davaa (UNICEF OSE – Innocenti), Elizabeth Katwan (WHO), Vitalii Klymchuk (UNICEF OSE – Innocenti), Brandon Kohrt (George Washington University), Marcy Levy (UNICEF GPD), Eva Quintana (UNICEF OSE – Innocenti), Shekhar Saxena (WHO), and Daniela Trujillo (Innovations for Poverty Action).

The content builds on a multi-year development process which began in 2018 under the leadership of Liliana Carvajal (UNICEF LACRO) with key contributions from the MMAPP development team which included Brandon Kohrt (George Washington University), Jill W. Ahs (Karolinska Institutet), Andreas Lundin (Karolinska Institutet), Eva Quintana (UNICEF OSE – Innocenti), Jennifer Requejo (UNICEF OSE – Innocenti), Holly Newby (UNICEF), Zeinab Hijazi (UNICEF GPD), Joanna Lai (UNICEF GPD), Malvikha Manoj (UNICEF OSE – Innocenti), Savvy Brar (UNICEF OSE – Innocenti), Georgia Eleftheriou (George Washington University), Mark Jordans (War Child Holland), Myrthe van den Broek (War Child Holland), Ha Yeon Kim (UNICEF OSE – Innocenti), and Tashrik Ahmed (UNICEF OSE – Innocenti).

We are grateful to the in-country implementation teams whose work made field testing and validation possible: Belize – Nurse Eleanor Bennet and Julies Simmons (Ministry of Health, Belize), Paulette Wade (UNICEF Belize); Kenya – Manasi Kumar (NYU Grossman School of Medicine); Nepal – Nagendra Luitel and Damodar Rimal (Transcultural Psychosocial Organization Nepal); Peru – Elizabeth Jenny Mori Quispe (PRISMA), Carlos Rojas and Rocio Vargas-Machuca, Carla Cortez (UNICEF Peru); and South Africa – Dr. Mark Tomlinson, Dr. Marguerite Marlow, and Dr. Sarah Skeen (Institute for Life Course Health Research, Stellenbosch University).

We are also grateful to the MMAPP Technical Advisory Group members (2018–2021), who provided technical guidance during the initiative's foundational phase: Abiodun Adewuya (University of Lagos), Claudia Cappa (UNICEF OSE - Innocenti), Regina Guthold (World Health Organization), Chisina Kapungu (Women Strong), Christian Kieling (Federal University of Rio Grande do Sul), Brandon Kohrt (George Washington University), Vikram Patel (Harvard Medical School), George Patton (University of Melbourne), James Scott (University of Queensland), Chiara Servilli (World Health Organization), and Danuta Wasserman (Karolinska Institutet).

Suggested citation:

UNICEF. (2026, May). *The measuring mental health among adolescents and young people at the population level (MMAPP) toolkit: The MMAPP initiative, indicators, and questionnaire overview, user guide, and protocols* [Preprint]. UNICEF Office of Strategy and Evidence – Innocenti.

The MMAPP questionnaire, indicators, and the corresponding guidelines and supporting tools are freely available on the UNICEF website under a CC BY-NC-SA 4.0 license.

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Section 1. Overview of the MMAPP Toolkit

The Measuring Mental Health among Adolescents and Young People at the Population level (MMAPP) initiative, initiated in 2018 and developed by UNICEF and partners, aims to address the critical lack of reliable data and tools for assessing adolescent and youth mental health at the population level¹. By improving the availability, reliability, and validity of such measures, MMAPP equips stakeholders to make informed decisions across critical areas of programmes, policy, and advocacy to transform youth mental health locally and globally.

This MMAPP toolkit, developed as part of the initiative, includes the MMAPP questionnaire to measure adolescents' and young people's mental health, mental health indicators for standardized reporting of population-level prevalence rates, a set of operational guidelines and protocols to support measure adaptation and data collection, and associated implementation resources and templates. Together, these tools support cultural adaptation, validation, and interpretation to generate contextually appropriate, reliable data on adolescents' and young people's mental health needs. This adaptability is a core feature of the toolkit. By accounting for local variation in culture, language, and context, this toolkit aims to ensure the quality, reliability, and relevance of data collection, interpretation, and use of the data generated from MMAPP.

¹ Kabiru CW, Blum RWm. Strengthening the Measurement of Adolescents' Mental Health at the Population Level. *Journal of Adolescent Health*. 2023 Jan;72(1):S1–2. doi:[10.1016/j.jadohealth.2022.10.007](https://doi.org/10.1016/j.jadohealth.2022.10.007)

What is the MMAPP Questionnaire for?

The current version of MMAPP Questionnaire can be used to:

- **Estimate population-level or sample-specific prevalence rates** on mental health outcomes including symptoms of depression and anxiety, functional limitations, suicidality, and care-seeking and connectedness.
- **Estimate baseline-to- endline change, track scores over time, or compare scores across groups** for programme evaluation, monitoring, and research purposes.
- **Generate data and evidence to inform programmatic and policy decision-making**, such as assessing mental health service needs among a target population, identifying eligible participants for targeted mental health and psychosocial support programmes and services
- Ongoing validation work is examining whether MMAPP can also support rapid needs assessment, longitudinal population-level monitoring, and cross-cultural comparison.

The MMAPP Questionnaire is NOT intended for:

- Diagnostic screening or clinical assessment for mental health conditions

Note that other widely used mental health questionnaires, e.g., PHQ-A, PHQ-9, and GAD-7 are developed for clinical use and not designed or validated for population-level monitoring purposes. See Section 2 for further discussion.

Who can use the MMAPP Questionnaire and toolkit?

- Researchers interested in using data collected through the MMAPP questionnaire to better understand the state of adolescent and youth mental health
 - Household survey experts interested in using MMAPP to generate population-based estimates
 - Programme managers and field staff across any sector (including but not limited to education, health, child protection, social services, and climate justice) who plan, implement, and/or evaluate programmes
 - Youth leaders, advocates, or young professionals who are interested in participatory data collection on mental health, and how to make data contextually relevant in the settings in which they live and work
 - Policy makers, government agencies, service providers that collect mental health data for population and programme monitoring, policy and service design, and other practical purposes.
-

When to use this toolkit?

MMAPP questionnaire and toolkit is an open-access tool freely available under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International license. Individuals or organizations interested in using MMAPP for generating data on adolescent and youth mental health outcomes should use this toolkit from the initial planning through every stage of the process, including data analysis and reporting. Used in this way, the guidance can support consistent and comparable data collection and use across every stage of the data cycle and improve data-driven action for adolescent and youth mental health.

What is included in the MMAPP toolkit?

The toolkit includes:

- [Overview of the MMAPP initiative](#)
- [MMAPP Domains, Indicators, and Questionnaire Development](#)
- [The MMAPP Questionnaire](#)
- [Processes and Considerations of Implementing the MMAPP Questionnaire](#)
- [MMAPP Questionnaire Scoring, Cut-offs, Indicators, and Reporting Considerations](#)
- [The MMAPP Initiative, Next Steps](#)

Additionally, there are several Annexes that include supplementary information and implementation tools available on the UNICEF MMAPP Resource page (<https://data.unicef.org/resources/mmapp/>), including:

- Annex A - MMAPP Questionnaire for Data Collection
 - Annex B - Rationale for Inclusion of Items in MMAPP
 - Annex C - Relationship of MMAPP Items to Mental Health Classifications in DSM-5 and ICD-11
 - Annex D - MMAPP Domain 1 Scoring Guide
 - Annex E - Cultural Adaptation Recommendations for MMAPP Item wording
 - Annex F - Cultural Adaptation Process Template
 - Annex G - Focus Group Discussions for Cultural Adaptation- Guidance and Templates
 - Annex H - Adjusted Population Prevalence Calculator
 - Annex I - MMAPP Global List of Indicators and Reporting Templates
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Section 2. Introduction: MMAPP Initiative

2.1. Rationale: Needs for population-level data on adolescent mental health

Mental health is fundamental to overall health and wellbeing, and adolescence is a critical developmental window in which the rapid physical and neurological changes young people undergo shape identity formation and how they learn, connect, and contribute to their communities — with consequences that can extend well into adulthood and across generations. While significant progress has been made to propel mental health on the global agenda, critical gaps remain in priority and investment for child and adolescent mental health.

The adoption of the Sustainable Development Goals (SDGs) in 2015 marked the first time mental health was included in global accountability frameworks. Notably, SDG 3.4 directly addresses mental health, calling for a reduction in premature mortality from non-communicable diseases and the promotion of mental health and wellbeing; and Target 3.4.2 specifically aims to reduce suicide mortality.

Modeled estimates indicate that mental health conditions significantly contribute to the global disease burden among adolescents and youth, with over half of all mental health conditions developing by age 18.² It is estimated that more than 14 per cent of adolescents aged 10-24 live with a diagnosed mental health condition, with anxiety and depression constituting approximately 54 per cent of these diagnosed mental disorders.³ Moreover, an estimated 45,800 adolescents die from suicide each year, or more than 1 adolescent every 11 minutes.¹ The COVID-19 pandemic, and multiple intersecting polycrises in the last decade, have led to widespread recognition of and demand for responses that promote, protect, and care for children's mental health.

The absence of contextually appropriate, reliable, and validated population-based data on adolescent and youth mental health is a key barrier to advancing action. About 50% countries have no prevalence data on child and adolescent mental health at all, with the gap most acute in Low-and Middle-income countries (LMICs), with African and Western Pacific regions having the largest data gaps. Even in high-income countries, more than 65% of countries did not have recent prevalence data.⁴ Where modeled estimates exist, they face further limitations, including sparse and variable-quality underlying data, underreporting, reliance on assumptions, and contextual differences that constrain their generalizability and applicability.

² Solmi M, Radua J, Olivola M, Croce E, Soardo L, Salazar de Pablo G, Il Shin J, Kirkbride JB, Jones P, Kim JH, Kim JY, Carvalho AF, Seeman MV, Correll CU, Fusar-Poli P. Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Mol Psychiatry*. 2022 Jan;27(1):281-295. doi: 10.1038/s41380-021-01161-7. Epub 2021 Jun 2.

³ Wang Z, Dou Y, Yang X, Guo X, Ma X, Zhou B, Zhang W. Global, regional, and national burden of mental disorders among adolescents and young adults, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *Transl Psychiatry*. 2025 Oct 10;15(1):397. doi:10.1038/s41398-025-03623-w

⁴ Casella CB, Kousoulis AA, Kohrt BA, Bantjes J, Kieling C, Cuijpers P, Kline S, Kotsis K, Polanczyk GV, Stein DJ, Szatmari P, Merikangas KR, Mneimneh Z, Salum GA. Data gaps in prevalence rates of mental health conditions around the world: a retrospective analysis of nationally representative data. *Lancet Glob Health*. 2025 May;13(5):e879–87. doi:10.1016/S2214-109X(24)00563-1 PubMed PMID: 40288397.

Generating reliable population-level data requires valid measurement tools. Mental health scales must be not only translated but culturally adapted, adjusted for nuances in language, local idioms, and the ways adolescents express and experience symptoms in different settings. Cultural adaptation results in tools that perform better. For adapted tools to be meaningfully comparable across settings, their validity must be established using a gold-standard clinical reference measure. Yet only a limited number of tools for adolescent mental health have been formally validated in LMICs, and fewer still across multiple LMIC settings simultaneously.

Numerous tools have been developed over the years to measure mental health outcomes among adolescents and young people, including the Patient Health Questionnaire for Adolescents (PHQ-A), Generalized Anxiety Disorder (GAD-7), and Revised Children's Anxiety and Depression Scale (RCADS). However, these tools were developed for clinical use or specific research purposes, typically with individuals already seeking care or in treatment studies, and not adequate to generate population-level prevalence data. For example, validation studies conducted as part of the MMAPP initiative across Belize, Kenya, Nepal, and South Africa demonstrated that these existing measures overestimate the prevalence of depression and anxiety at a much higher rate when the true prevalence levels were at low to moderate levels. This overestimation of the prevalence rate of existing tools has significant implications for how data are interpreted and how resources are allocated, increasing the risk of stigmatizing vulnerable populations and placing undue burden on health systems for mental health service provision.

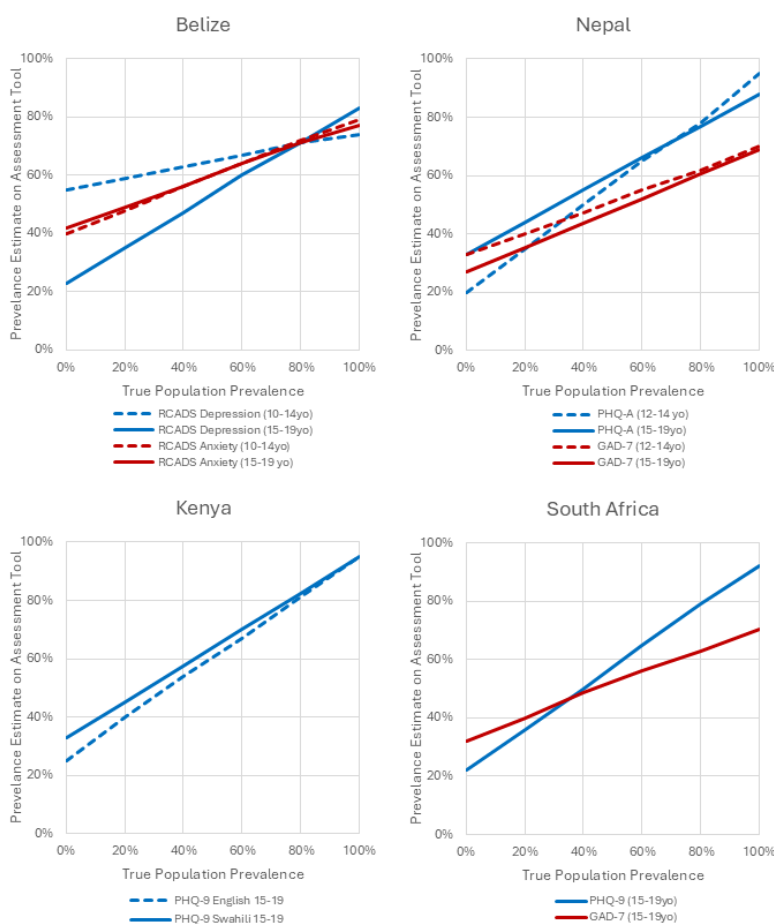


Figure 1 Estimated prevalence generated by commonly used mental health assessment tools compared with true population prevalence. Based on sensitivity and specificity values generated through local validation studies, estimated prevalence rates are typically higher than true population prevalence. Belize data: n=256 (Carvajal-Velez, et al., 2023); Kenya data: n=250 (Tele, et al., 2023); Nepal data: n=413 (Luitel, et al. 2024); South Africa data: n=302 (Marlow, et al. 2023).

2.2. MMAPP Initiative: Aims and Key Outputs

UNICEF's MMAPP initiative was designed to address these gaps, with goals to improve the quality and availability of population-level data on key policy-relevant mental health domains for adolescents and young people aged 10-24⁵. The initiative led to the development of 1) the MMAPP Questionnaire and 2) a set of MMAPP global indicators, following a rigorous mixed-methods approach, combining systematic transcultural translation and adaptation with gold-standard clinical validation using structured diagnostic interviews across five countries: Belize, Kenya, Nepal, Peru, and South Africa. Young people were meaningfully engaged throughout this process in every country, ensuring that their voices and lived experiences were reflected in the final MMAPP Questionnaire and Indicators. Starting in 2023, the MMAPP Questionnaire was integrated into UNICEF's Multiple Indicator Cluster Surveys (MICS) as a mental health module, enabling systematic, representative data generation on adolescent and youth mental health across a growing list of countries. Four of the nine indicators developed by the initiative have been adopted as recommended adolescent health indicators by the Global Action for Measurement of Adolescent Health (GAMA) Advisory Group, led by the WHO.

Beyond the MMAPP Questionnaire and indicators, the MMAPP initiative produced 3) operational guidelines and protocols for cultural adaptation, implementation, and data interpretation to ensure the standardization and quality of data collection and reporting across countries and regions. In addition, the MMAPP initiative continues to generate 4) knowledge products, including a series of peer-reviewed journal articles⁶, to promote learning and data-driven advocacy and to inform effective policies and programming supporting child and adolescent mental health.

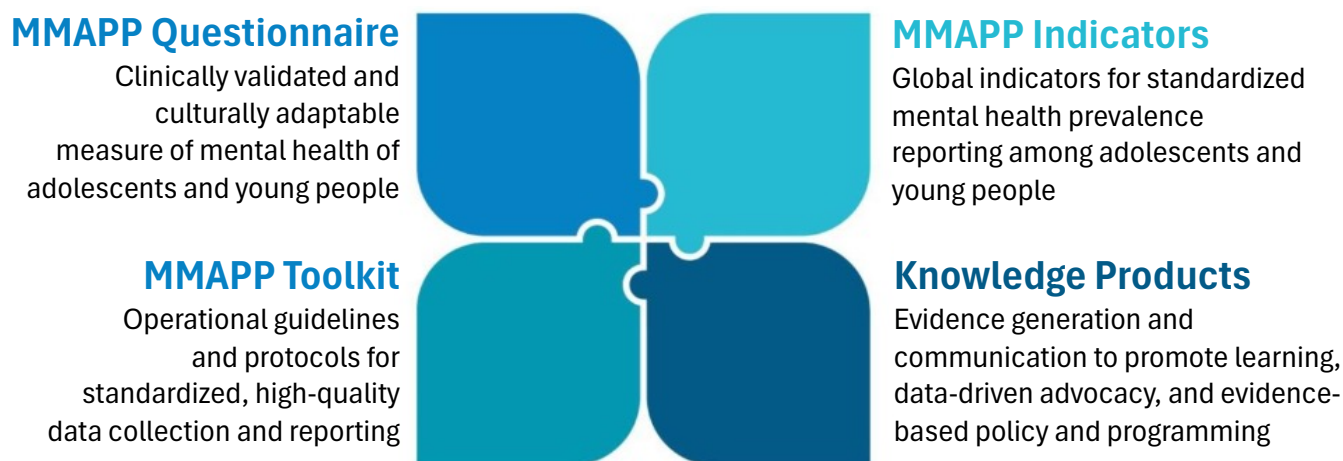


Figure 1 MMAPP Initiative - Key Outputs

⁵ Based on psychometric testing of the MMAPP tool, the strongest performance is for 15–19-year-olds. MMAPP items have been tested with 10–14-year-olds, where the tool had a higher risk of false positives and should be adapted and used with caution when interpreting results. MMAPP also has been used widely with 20–24-year-olds in MICS demonstrating acceptable internal reliability statistics. However, there have been no validation studies to date in this age group.

⁶ Examples include the edited volume:

Kabiru CW, Blum RWm, editors. Measurement of Adolescents' Mental Health at the Population Level. *Journal of Adolescent Health*. 2023 Jan;72(1 (Supplement)):S1–112.

Section 3. MMAPP Domains, Indicators, and Questionnaire Development

To improve the quality and availability of population-level mental health data for adolescents and young people, the MMAPP initiative has taken a collaborative and evidence-based approach to identifying priority mental health domains and developing indicators and questionnaires that generate globally relevant data for policy and programming.

From its inception, the MMAPP initiative has benefited from the expertise of a diverse, cross-geographic, and interdisciplinary team, including technical experts, researchers, and adolescents and young people, with contributions from Australia, Belize, Brazil, India, Kenya, Nepal, Nigeria, South Africa, Sweden, Switzerland, the UK, and the USA⁷. Furthermore, engaging with country stakeholders and institutions, including governments, health authorities, youth advisors, and academic institutions was an essential component through the development and pilot testing process. These contributions were vital in designing and adapting the tool, recognizing cultural nuances, and advising on safe and effective referral processes. Moreover, this collaborative approach ensured that the MMAPP indicators and questionnaire are aligned with national priorities and health systems, strengthening their relevance across specific country contexts.

3.1. MMAPP Priority Domain Identification and Indicators Development

The MMAPP initiative's process for identification of child and adolescent mental health priority domains and development of the global indicator set followed a rigorous, evidence-based process. See more details in the forthcoming manuscript⁸.

1. **Scoping Review of Prevalence Data and Existing Measurement Tools:** A comprehensive review of peer-reviewed literature on the prevalence of mental health conditions among adolescents and young people in LMICs was conducted, covering publications indexed on PubMed/Medline from 2008 to 2018. Prevalence data from 61 publications were extracted. To ensure that proposed domains and indicators would be measurable at the population level in LMIC settings, 57 existing data collection tools and scales were assessed, including validated screening tools for common mental health conditions. This review confirmed the absence of a freely available, population-calibrated instrument suitable for use across diverse LMIC settings, and identified the key domains that existing tools had sought to measure.

⁷ Carvajal-Velez L, Ahs JW, Requejo JH, Kieling C, Lundin A, Kumar M, Luitel NP, Marlow M, Skeen S, Tomlinson M, Kohrt BA. Measurement of Mental Health Among Adolescents at the Population Level: A Multicountry Protocol for Adaptation and Validation of Mental Health Measures. *Journal of Adolescent Health*. 2023 Jan;72(1):S27–33. doi:[10.1016/j.jadohealth.2021.11.035](https://doi.org/10.1016/j.jadohealth.2021.11.035)

⁸ Manoj et al. (2026, unpublished manuscript). Addressing the global data gap in adolescent and youth mental health: the development of a population-level indicator set and questionnaire through the MMAPP initiative.

2. **Technical Consultations:** In March 2018, UNICEF convened a two-day technical consultation at its New York headquarters attended by approximately 40 experts across adolescent health, child psychiatry, psychology, epidemiology, gender, measurement, and youth-focused programming. Participants represented a wide range of countries and institutions. The consultation produced agreement on four priority measurement domains: symptoms of depression and anxiety, functional limitations, suicidality, and care-seeking and connectedness. It also led to the establishment of a Technical Advisory Group to guide further development.
3. **Establishment of a Technical Advisory Group:** UNICEF convened a multidisciplinary Technical Advisory Group (MMAPP-TAG), representative of a wide range of disciplines and countries. The group held three teleconferences during 2018 and 2019, drawing on the scoping review findings, technical consultation outcomes, and a review of mental health indicators across major global monitoring frameworks, including the Global Strategy for Women's, Children's and Adolescents' Health, the WHO Global Reference List of 100 Core Health Indicators, and the Sustainable Development Goals.
4. **Defining Indicator Selection Criteria:** Based on the domains identified in Steps 2 and 3, the TAG defined the following agreed criteria for indicator selection: programmatic relevance (useful for programming, policy, and resource allocation); precision (well-defined, specific, and operational); measurability and sustainability (quantifiable using tools administrable by trained non-specialists); comparability (comparable across countries, contexts, and over time); and relevance (meaningful for the target age group of adolescents and young people).
5. **Development of an initial indicator set and data collection instrument:** All inputs from the preceding steps were synthesized to produce an initial set of indicators and a corresponding questionnaire, with a goal of developing tools that are sufficiently comprehensive to capture the agreed domains, yet feasible for regular administration in resource-constrained settings by trained non-specialists.
6. **Multicounty Field Testing and Iterative Refinement of MMAPP Indicators and Questionnaire⁹:** The initial indicator set and the MMAPP Questionnaire underwent field testing and clinical validation across six countries between 2019 and 2023 in Belize, Colombia, Kenya, Nepal, Peru, and South Africa . Details of MMAPP Questionnaire development, field testing and validation process is elaborated in the next section: **MMAPP Questionnaire Development and Testing: An 8-Step Methodological Process.**
7. **Consultation with adolescent and youth health experts to refine the indicators:** The proposed indicator set was reviewed by the Global Action for Measurement of Adolescent Health (GAMA) Advisory Group, convened by WHO with support from seven UN agencies. GAMA's feedback was critical in refining indicator wording and data collection approaches. Six of the ten finalized MMAPP indicators were subsequently included in GAMA's list of priority indicators for adolescent health.
8. **Finalization:** Between 2023 and 2026, findings from the field testing and validation process were synthesized to produce a set of nine indicators, designed to enable comparable and standardized data generation and reporting on adolescent and young people's prevalence rates across four key mental health domains.

⁹ *ibid.*

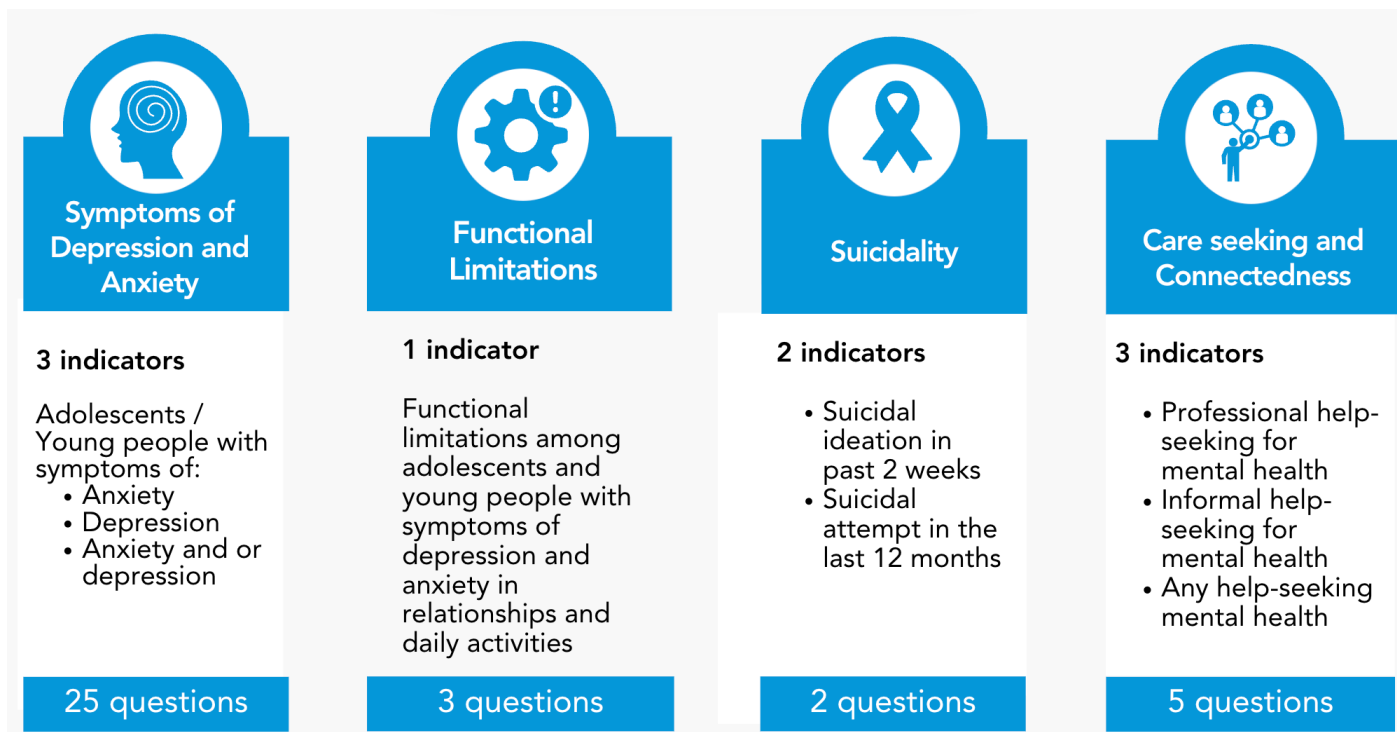


Figure 2 MMAPP Domains and Indicators at a Glance

3.2. MMAPP Questionnaire Development and Testing: An 8-Step Methodological Process

The MMAPP Questionnaire development, field testing and validation, initiated between 2019 and 2023, employed a rigorous eight-step mixed-methods process combining systematic transcultural translation and adaptation with gold-standard clinical validation¹⁰. See [Annex A - MMAPP Questionnaire with Scoring Tool for Data Collection: Full-Administration Version & Two-Stage Administration Version](#) for the full MMAPP questionnaire instrument.

Initial candidate items for the MMAPP Questionnaire were drawn from the RCADS, PHQ-9, GAD-7, and a suite of terms from the Patient-Reported Outcomes Measurement Information System (PROMIS) item bank, alongside UNICEF-developed items on functional limitations, suicidal behavior, and care-seeking and connectedness. See [Annex B – Rationale for Inclusion of Items in MMAPP](#) for the item inclusion criteria and rationale.

The questionnaire was designed for population- and group-level data generation, including prevalence rate estimation, programme evaluation, monitoring, and research, and to generate evidence for programme and policy

¹⁰ *Ibid.*

decision-making. It was not designed for individual-level clinical diagnosis or screening, and item selection and scoring procedures were developed with these intended purposes in mind.

The initial MMAPP questionnaire underwent field testing and clinical validation across six countries between 2019 and 2023 in Belize, Colombia, Kenya, Nepal, Peru, and South Africa. This field-testing and validation process was designed to ensure that the adapted tool had both cultural relevance and clinical validity in each setting where it was used.

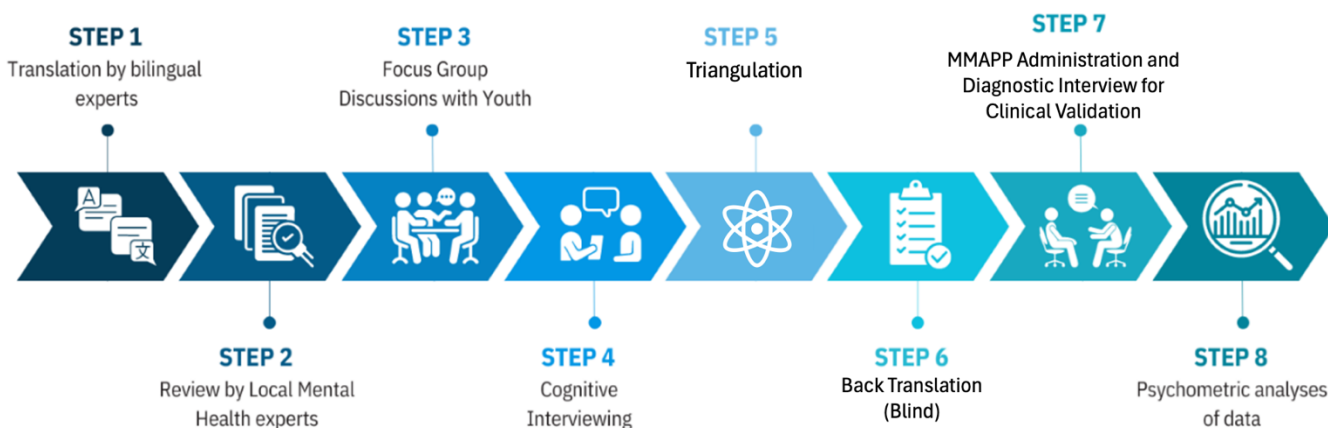


Figure 4 MMAPP Item Adaptation and Validation during Field Testing

- **Step 1:** Translation of tools by bilingual experts
 - Translation of the MMAPP Questionnaire candidate items typically involved an individual or group of translators to determine optimal terminology for adapting the language and phrasing of items for the population and setting, and not a literal word-for-word translation, which can sometimes produce wording with low comprehensibility for respondents.
- **Step 2:** Review by local mental health experts
 - A team of 3-4 mental health clinicians with experience working with adolescents and youth, and with fluency in the target language, reviewed the translated tool. This step ensured that mental health related symptoms and concepts were appropriately conveyed in the translation. Experts assessed each item against five cultural equivalence domains: comprehensibility, acceptability, relevance, completeness, and technical equivalence. Experts documented recommended changes using a translation monitoring form and flagged items for further discussion with young people in the next step.
- **Step 3:** Focus group discussions with youth
 - A series of focus group discussions were conducted with adolescents and young people across the target age groups, and in some cases, with parents or caregivers of younger adolescents, to establish semantic, content, and technical equivalence of the measures, and to capture any nuances in local relating to knowledge, beliefs, and expressions related to mental health and its care. Experiences from validation sites demonstrated the value of this step. For instance, in Belize, adolescents identified that items framed as declarative statements (“I feel...”) introduced agreeability bias, leading to the decision to reframe all items as questions (“How often do you...?”), which corroborated as an improvement across multiple sites.
- **Step 4:** Cognitive interviewing

- Individual cognitive interviews were conducted with 10-20 participants across the target group, as well as their caregivers, to discuss each item's face and construct validity, and to explore how participants interpreted items and response options, and ensure that wording was understandable, acceptable, relevant, and complete. Techniques including "thinking aloud" and verbal probing were used to understand the process by which responses were chosen.
- **Step 5:** Triangulation and integration of qualitative findings
 - Findings from Step 1-4 were synthesized through framework analysis to produce a revised, culturally adapted version of the tool, with recommendations for any modifications. This step brought together all qualitative inputs before the adapted tool moved to back-translation and quantitative validation.
- **Step 6:** Back translation (blind)
 - An independent back translator with no prior exposure to the tool or involvement in earlier steps translated the culturally adapted version back into the original language of the tool in each context. This version was then reviewed by the research team, in collaboration with local experts, to note and reconcile with any differences or discrepancies between the two versions.
- **Step 7:** Administration of the MMAPP questionnaire and diagnostic interview
 - Enumerators were trained to administer the adapted tools, and a referral protocol was established for participants experiencing distress or needed support during or after the interview.
 - Within 48 hours, each adolescent also met a mental health clinician who administered a structured clinical interview, the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS-PL), Diagnostic and Statistical Manual of Mental Disorders (DSM) 5th edition version¹¹. The clinicians were trained to conduct the K-SADS in the local language and evaluated for inter-rater reliability. Safety measures were put in place to refer any adolescents with acute mental health or social protection needs.
- **Step 8:** Psychometric analyses of data
 - Statistical analyses were conducted to evaluate psychometric properties and determine appropriate score cut-offs by setting and language to generate population-level estimates. Each item was analyzed for its association with identifying who is likely to have depression or anxiety (sensitivity and specificity) in comparison to the K-SADS clinical diagnostic interview. [Annex B - Rationale for Inclusion of Items in MMAPP](#) provides the conceptual and statistical rationale for why items were included. In addition, all items were evaluated for their alignment with the current mental health guidelines in the DSM and the International Classification of Disease (ICD). See [Annex C - Relationship of MMAPP Items to Mental Health Classifications in DSM-5 and ICD-11](#) for additional details.

¹¹ Kaufman J, Birmaher B, Axelson D, Perepletchikova F, Brent D, Ryan N. *Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS-PL) for Diagnostic and Statistical Manual of Mental Disorders 5th Edition*. Advanced Center for Intervention and Services Research (ACISR) for Early Onset Mood and Anxiety Disorders Western Psychiatric Institute and Clinic, Pittsburgh, USA. 2013.

Box 1. MMAPP Validation Results and key publications

The protocols for culturally adapting and validating the MMAPP questionnaire were piloted and implemented in Bangladesh, Belize, Colombia, Kenya, Nepal, Perú, South Africa (English) and Zimbabwe as a part of MMAPP development process. The development and validation protocols are described in a series of journal articles.^{12 13 14}

Four peer-reviewed validation studies provided important formative evidence for MMAPP by applying the MMAPP cultural adaptation and clinical validation protocol to existing depression and anxiety measures that overlapped with MMAPP symptom domains: the RCADS in Belize¹⁵, the PHQ-9 in Kenya¹⁶, the PHQ-A and GAD-7 in Nepal¹⁷, and the PHQ-9 and GAD-7 in South Africa in isiXhosa¹⁸. These studies should be understood as validation studies of previously existing tools that informed MMAPP item development, rather than as validation studies of the final MMAPP questionnaire. Across Belize, Kenya, Nepal, and South Africa, more than 1,200 adolescents completed culturally adapted questionnaire items and structured K-SADS clinical diagnostic interviews, enabling both scale-level and item-level analyses of depression and anxiety symptoms. This evidence base helped identify which symptom concepts, item wordings, response formats, and cut-off approaches were most suitable for population-level measurement across languages and settings.

For depression, in Belize, an adapted 22-item Kriol and Belizean English version of RCADS was administered to 256 adolescents; among older adolescents aged 15–19 years, the RCADS depression subscale had an AUC of 0.83, and a cut-off score of 13 had sensitivity of 0.83 and specificity of 0.77. In Kenya, the PHQ-9 was validated in both English and Swahili with 250 adolescents; AUC values were 0.89 for English and 0.87 for Swahili, with a cut-off of 9 yielding sensitivity/specificity of 95%/73% in English and 89%/70% in Swahili. In Nepal, the PHQ-A showed strong discrimination, with AUC values of 0.92 among younger adolescents and 0.85 among older adolescents; recommended age-specific cut-offs had sensitivity/specificity of 0.93/0.80 for ages 12–14 and 0.89/0.70 for ages 15–19. In South Africa, the isiXhosa PHQ-9 had an AUC of 0.88, and a cut-off of 10 had sensitivity of 0.91 and specificity of 0.76. Qualitative research suggested that domains such as loneliness and a separate item on hopelessness should be added, especially as risk factors for suicidality¹⁹.

Findings for anxiety were especially important for shaping MMAPP's approach to item selection and interpretation. In Belize, the RCADS anxiety subscale had AUC values of 0.67 among younger adolescents and 0.77 among older adolescents, with some anxiety items performing less well than depression items. In Nepal, the GAD-7 had AUC values of 0.80 among younger adolescents and 0.76 among older adolescents; a cut-off of 8 had sensitivity of 0.70 in both age groups, with specificity of 0.67 among younger adolescents and 0.71 among older adolescents. In South Africa, the isiXhosa GAD-7 had an AUC of 0.78, and a cut-off of 6 had sensitivity of 0.67 and specificity of 0.75. Qualitative accounts suggested additions of items on somatic symptoms related to anxiety such as dizziness, palpitations, and difficulty breathing, using local idioms of distress to describe these experiences²⁰.

Figure 5 extends these published findings by summarizing individual symptom sensitivity and specificity analyses using harmonized data from 1,217 adolescents across Belize, Kenya, Nepal, and South Africa. These item-level analyses were central to MMAPP development because they allowed the team to assess not only whether an overall scale score performed well, but also which individual symptoms most consistently identified adolescents with clinically significant depression or anxiety while minimizing false positives. Since these formative studies, validation studies of the MMAPP questionnaire itself have been conducted in Colombia, South Africa in English, and Uganda, with publications in preparation. Additional validation studies and secondary analyses are ongoing across other regions and languages, and this growing evidence base will continue to inform interpretation of MMAPP results, selection of cut-offs, and guidance for country-level implementation.

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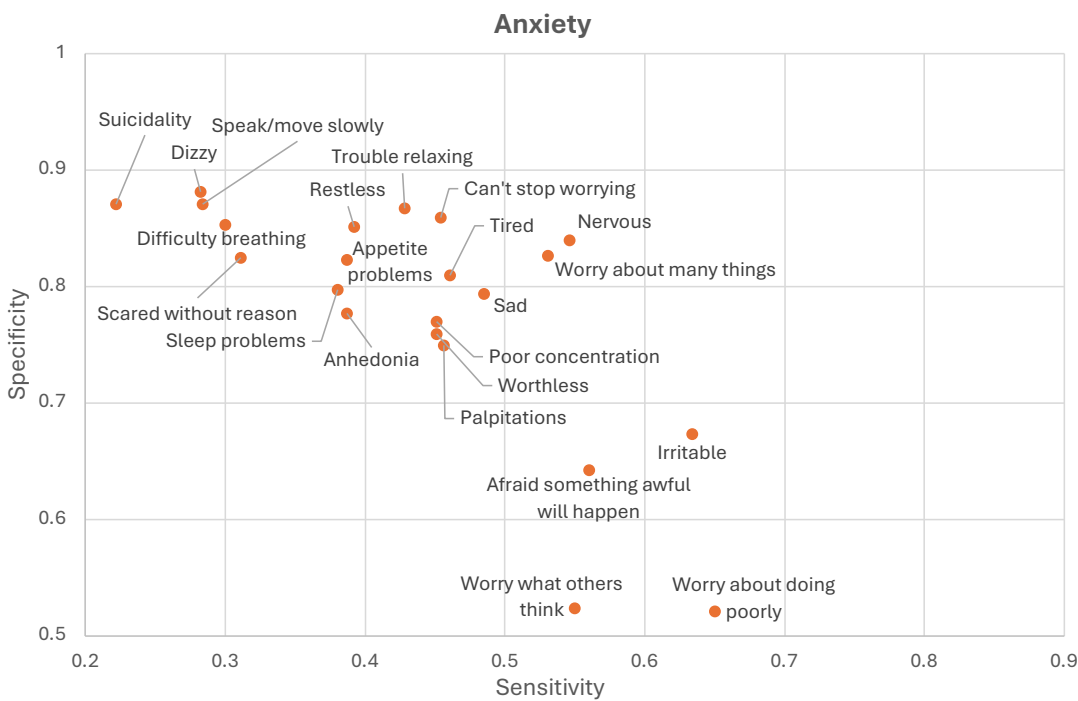
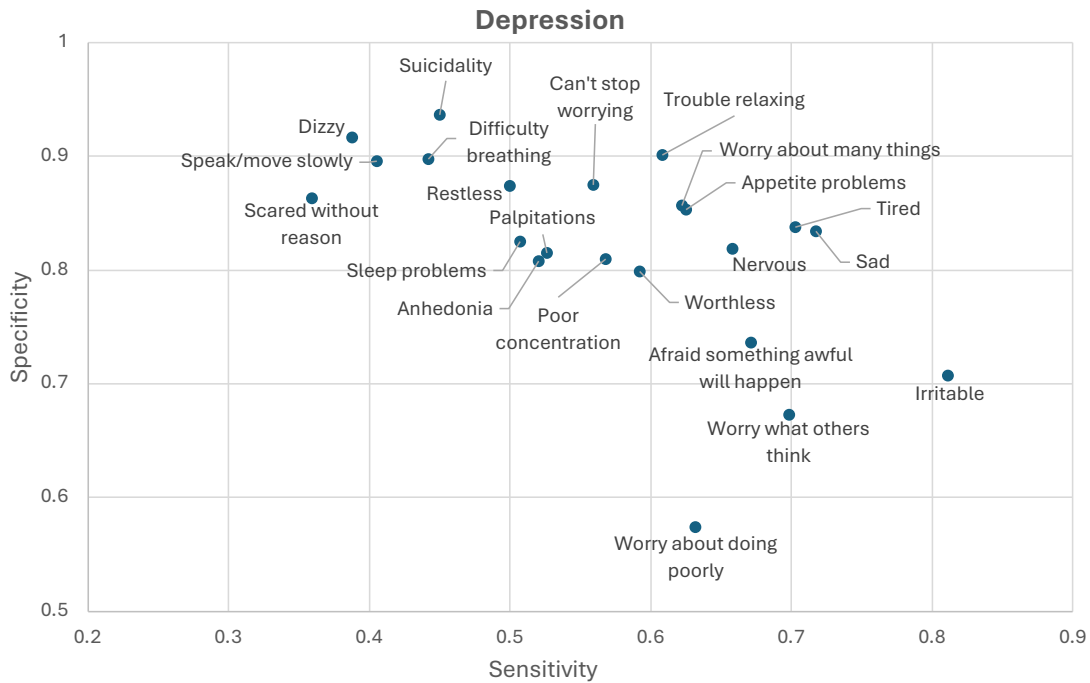


Figure 5 Sensitivity and specificity of symptoms for depression and anxiety. Selection of symptom items for MMAPP was informed by the performance of individual symptoms on analyses of sensitivity (detection of true positives, minimize false negatives) and specificity (detection of true negatives, minimize false positives). Harmonized data (n=1217) from Belize, Kenya, Nepal, and South Africa.

Section 4: The MMAPP Questionnaire

The MMAPP questionnaire is currently administered directly to adolescents and young people (aged 10-24 years), and is comprised of 35 questions. All items are framed as questions rather than declarative statements, which was a deliberate design choice, validated across multiple field-testing sites, to reduce agreeability bias and ensure that respondents feel equally comfortable reporting that they rarely or never experience a given symptom. The MMAPP questionnaire are freely available under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) license.

4.1. When to use the MMAPP Questionnaire?

While the MMAPP global indicators are designed to ensure the quality and availability of population-level mental health data for adolescents and young people, the MMAPP Questionnaire has been applied across a range of contexts and purposes. In this section, we describe three primary purposes and specific use case examples for each purpose.

1. Estimating prevalence rates

The MMAPP Questionnaire can be used to estimate population-level or sample-specific prevalence rates on mental health outcomes, including symptoms of depression and anxiety, functional limitations, social connectedness and care-seeking, and suicidality. This is the core use case for which the questionnaire was originally developed and validated.

2. Programme evaluation, monitoring, and research

The MMAPP Questionnaire can be used to estimate baseline-to-endline change, track scores over time or compare scores across groups for programme evaluation, monitoring, and research purposes.

3. Data and evidence generation for programmatic and policy decision-making

The MMAPP Questionnaire can be used to generate data and evidence to inform programmatic and policy decision-making, including assessing mental health service needs among a target population and identifying eligible participants for targeted mental health and psychosocial support programmes and services.

Ongoing validation work is examining whether MMAPP can also support rapid needs assessment, longitudinal population-level monitoring, and cross-cultural comparison.

4.2. Domains included in the MMAPP Questionnaire

The MMAPP questionnaire is designed to capture data across four key mental health domains for adolescents and young people:

- **Symptoms of Depression and/or Anxiety (MMAPP-DA):** Based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition Text Revision (DSM-5-TR), and the International Classification of Diseases, 11th edition (ICD-11), this section includes **3 indicators and 25 corresponding questions** assessing common symptoms of depression and anxiety. Items 1-10 screen for core symptoms of depression (items 1-4) and anxiety (items 5-10). Items 11-25 capture additional symptoms across both conditions, including somatic symptoms.
- **Functional Limitations Due to Symptoms of Anxiety or Depression (MMAPP-FL):** This section includes **1 indicator and 3 corresponding questions** designed to ascertain if mental health problems result in limitations for the young person in carrying out activities or maintaining relationships at home, at school or work, or with peers. Functional impairment is a key criterion for clinical diagnosis of depression and anxiety under both DSM-5 and ICD-11, and capturing it at the population level enables a more accurate picture of the burden of mental health conditions on adolescents' and young people's daily lives.
- **Suicidality (MMAPP-SU):** This section includes **2 indicators and 2 corresponding questions** about current and prior thoughts and behaviors related to suicidality. The questions are used as an opportunity to provide suitable referral pathways for those identified as being at low, medium, or high risk. The two questions intentionally use different recall periods: suicidal behavior is assessed over the past 12 months, while suicidal ideation is assessed over the past two weeks. This distinction reflects important methodological considerations around the serious nature of a suicide attempt which supports reliable recall over a longer period, while suicidal ideation is highly state-dependent and is best captured within a shorter, more recent window. Recall of suicidal ideation over longer periods may substantially underestimate its true frequency. Responses to these questions are used to activate a low/moderate or high-risk referral protocol as appropriate. See the Note on the Suicidality Domain below for further guidance.
- **Mental Health Care-Seeking and Connectedness (MMAPP-CC):** This section includes **3 indicators and 5 corresponding questions** to capture care-seeking behavior, identify who young people approach to talk about their mental health needs, and account for unmet needs. Connectedness, defined here as the presence of positive, meaningful relationships with others, is an important protective factor for adolescent mental health, and its inclusion reflects the evidence that greater connectedness is associated with fewer symptoms of depression and anxiety and lower risk of suicidal thoughts and behaviors.

4.3. MMAPP Questionnaire Administration

As described above, the current version of MMAPP Questionnaire consists of 35 items across four key mental health domains. Below, we provide guidance and requirement for its administration and field data collection planning.

- **Full administration of MMAPP Questionnaire is needed to report on MMAPP Indicators:** MMAPP Questionnaire is designed with corresponding MMAPP indicators for reporting the prevalence of mental health symptoms and conditions of adolescents and young people. In order to generate prevalence estimates to report on all 9 MMAPP indicators, it is required to administer the full MMAPP questionnaire across four domain modules.
- **Considerations for selective use of domain modules of the MMAPP Questionnaire:** We strongly recommend administering all four domain modules of the MMAPP Questionnaire, given the interrelated nature of the symptoms and conditions captured across domains. That said, the MMAPP Questionnaire is designed to be modular, and individual domain modules may be administered selectively where programmatic or resource constraints make full administration unfeasible. For such considerations, please consult mental health experts and reach out to the UNICEF Child and Adolescent Mental Health (CAMH) Measurement team at ITY-CAMH-Data@unicef.org

- **Considerations for administering the Domain 1: Symptoms of Depression and Anxiety (MMAPP-DA) Questionnaire:** The Domain 1 questionnaire consists of 25 items. For the vast majority of use cases—including population-level or sample-specific prevalence rate estimation, *programme evaluation and research purposes, and programmatic decision-making and monitoring*, we **strongly recommend administration of the full 25-item questionnaire for Domain 1 (Depression and Anxiety) for most MMAPP use cases—including program monitoring and evaluation, research, and other programmatic purposes, to ensure precision (sensitivity, specificity), validity, and reliability of the scores.** It is especially important to administer the full 25-item version in cases where the goal is to capture change or differences in depression and anxiety symptoms across subgroups and individuals in programme monitoring and evaluation, research, and other contexts, e.g., in program evaluation with pre- and post-intervention assessments; monitoring changes in symptoms over time; or comparing scores across different subgroups of the target population.
 - **Exception: Two-stage administration of Domain 1 (MMAPP-DA).** As an exception, in cases where MMAPP is incorporated as part of large-scale population-based surveys for estimation of population-level prevalence (e.g., Multiple Indicator Cluster Surveys (MICS)), where the administration time needs to be minimized, a two-stage administration with skip pattern can be used for Domain 1 items. Specifically, the two-stage administration procedure provides an option to administer a partial or full set of items for Domain 1 (Depression and Anxiety Symptoms) depending on the responses on the first 10 hallmark symptoms items. See details and instructions for the two-stage administration option in the [Annex A - MMAPP Questionnaire with Scoring Tool for Data Collection: Full-Administration Version & Two-Stage Administration Version](#).

4.4. MMAPP Questionnaire Items and Response Options

The items and response scale of the MMAPP questionnaire across the four MMAPP mental health domains is presented in the table below. See the full MMAPP Questionnaire for data collection in [Annex A - MMAPP Questionnaire with Scoring Tool for Data Collection: Full-Administration Version & Two-Stage Administration Version](#).

Table 1. The MMAPP Questionnaire (Domains 1-4)

Note. Item texts in red are meant to be examples to enhance relevance of the item to adolescent and young people's lived experiences and designed to be adapted and tailored to ensure cultural and contextual relevance.

Domain 1: Symptoms of Depression and Anxiety (MMAPP – DA)	Mental Health Domain
Response Options: Never = 0 Sometimes = 1 Often = 2 Always = 3	
MMAPP01. During the past two weeks, how often have you been feeling very sad or depressed?	Depression
MMAPP02. During the past two weeks, how often have you felt easily annoyed or irritable at small things?	Depression
MMAPP03. During the past two weeks, how often have you not enjoyed doing things you used to enjoy, such as playing sports, singing and dancing, or spending time with friends?	Depression
MMAPP04. During the past two weeks, how often have you felt hopeless about the future?	Depression
MMAPP05. During the past two weeks, how often have you felt nervous or anxious?	Anxiety
MMAPP06. During the past two weeks, how often have you worried you can't do anything right or are doing things poorly?	Anxiety
MMAPP07. During the past two weeks, how often have you worried about what others think of you?	Anxiety
MMAPP08. During the past two weeks, how often have you worried something bad will happen to you or your family?	Anxiety

MMAPP09. During the past two weeks, how often have you worried too much about different things?	Anxiety
MMAPP10. During the past two weeks, how often have you felt unable to stop or control your worries?	Anxiety
MMAPP11. During the past two weeks, how often have you not wanted to eat even when food was available, or have you eaten too much?	Depression
MMAPP12. During the past two weeks, how often have you had problems falling asleep, problems sleeping well, or problems with sleeping too much?	Depression
MMAPP13. During the past two weeks, how often have you felt that you got tired easily or did not have the energy to do daily activities?	Depression
MMAPP14. During the past two weeks, how often have you had trouble concentrating on things, such as doing homework, household chores , or other tasks you need to do?	Depression
MMAPP15. During the past two weeks, how often have you felt lonely?	Depression
MMAPP16. During the past two weeks, how often have you felt like a failure or like you have let yourself or your family down?	Depression
MMAPP17. During the past two weeks, how often have you had thoughts that you would rather be dead or thoughts of hurting yourself?	Depression
MMAPP18. During the past two weeks, how often have others said that you have been moving more slowly than usual?	Depression
MMAPP19. During the past two weeks, how often have others said that you are restless or that you can't sit still?	Depression & Anxiety
MMAPP20. During the past two weeks, how often have you felt that it was difficult to breathe?	Depression & Anxiety
MMAPP21. During the past two weeks, how often have you felt dizzy or faint?	Depression & Anxiety
MMAPP22. During the past two weeks, how often have you suddenly gotten scared for no reason or without knowing what made you scared?	Anxiety
MMAPP23. During the past two weeks, how often have you had difficulty relaxing or difficulty feeling calm?	Anxiety
MMAPP24. During the past two weeks, how often have you felt like your heart was pounding or beating too fast?	Anxiety
MMAPP25. During the past two weeks, how often have you had headaches or muscle tension?	Anxiety
Domain 2: Functional Limitations Due to Symptoms of Depression and Anxiety (MMAPP-FL)	
Response Options: Never = 0 Sometimes = 1 Often = 2 Always = 3	
MMAP_FL1. During the past two weeks, how often did any of these feelings and experiences negatively affect your ability to perform your daily activities at home or your relationships with family members?	Functional Limitations
MMAP_FL2. During the past two weeks, how often did any of these feelings and experiences negatively affect your ability to perform your activities at school or work, or other tasks you need to do outside the home?	Functional Limitations
MMAP_FL3. During the past two weeks, how often did any of these feelings and experiences negatively affect your relationships with your peers?	Functional Limitations
Domain 3: Suicidality (MMAPP – SU)	
Response Options: Yes = 1 No = 0	
Mental Health Domain	

MMAP_SU1. **In the past 12 months**, did you try to harm yourself with the intention or desire to end your life? For example, **by cutting yourself on purpose, taking poison or too much medicine, or trying to hang yourself?** Suicidality

MMAP_SU2. **In the past 2 weeks**, have you thought about doing something to end your life? For example, **by cutting yourself on purpose, taking poison or too much medicine, or trying to hang yourself?** Suicidality

Domain 4: Mental Health Care-Seeking and Connectedness (MMAPP – CC) Response Options: Never = 0 Sometimes = 1 Often = 2 Always = 3	Mental Health Domain
MMAP_CC1. In the past month , how often did you speak about these feelings or experiences with a family member or other relative?	Care-Seeking & Connectedness
MMAP_CC2. In the past month , how often did you speak about these feelings or experiences with a friend, classmate, or other peer?	Care-Seeking & Connectedness
MMAP_CC3. In the past month , how often did you speak about these feelings or experiences with someone in your school, workplace, or community, such as a teacher, religious leader, coach, peer support worker?	Care-Seeking & Connectedness
MMAP_CC4. In the past month , how often did you speak about these feelings or experiences with a mental health professional (a professional who talks about feelings, emotions, and behaviors), such as a counsellor, therapist, social worker?	Care-Seeking & Connectedness
MMAP_CC5. In the past month , how often did you speak about these feelings or experiences with other healthcare professional, such as doctor, nurse, community health worker, or other healthcare professionals?	Care-Seeking & Connectedness

Box 2. Note on the Suicidality Domain Items

An estimated 45,800 adolescents die from suicide each year, or more than 1 person every 11 minutes.²¹ Suicide is the fifth most prevalent cause of death for adolescent boys and girls aged 10–19; for adolescents 15–19, it is the fourth most common cause of death, after road injury, tuberculosis and interpersonal violence. For girls aged 15–19, it is the third most common cause of death, and the fourth for boys in this age group.

Acknowledging and talking about suicide does not increase risk of suicide or self-harm.²² There is a common misconception that asking about thoughts of suicide and other forms of self-harm increases the risk that a person may act upon these thoughts, resulting in death or serious injury. A [review of published literature](#)²³ in 2014 assessed whether asking about suicide induces suicidal ideation in adults and adolescents, and in both general and at-risk populations.

- No studies found an increase in suicidal ideation among participants who were asked about suicidal thoughts.
- Asking about suicide or exposure to suicide-related content in research studies did not lead to more distress, suicidal ideation, or suicide attempts.
- Exposure to suicide-related content led to small reductions in suicidal ideation and a lower likelihood of engaging in suicidal behavior.
- Compared to adults, adolescents were nearly twice as likely to have a reduction in suicidal ideation after being asked about suicide or exposed to materials discussing suicide.
- In summary, evidence to date suggests that asking research participants about suicide does not increase risk and may be associated with reduction in suicidal thoughts and lower risk of self-injurious behavior.

The study authors conclude *“acknowledging and talking about suicide may in fact reduce, rather than increase suicidal ideation, and may lead to improvements in mental health in treatment-seeking populations. Recurring ethical concerns about asking about suicidality could be relaxed to encourage and improve research into suicidal ideation and related behaviors without negatively affecting the well-being of participants.”*

Further, as the [WHO Implementation Guide for Suicide Prevention in Countries – Live Life](#) notes, talking about suicide is an essential component of any MHPSS program that has resources in place to support those in crises, and asking about suicidal thoughts is encouraged as long as it is done with compassion – as this can open the space for conversation and for individuals to be able to get the critical support they need.²⁴

However, when asking questions about suicide and suicide methods in the context of an assessment questionnaire outside of clinical contexts, having appropriate safeguarding mechanisms and response plans in place is critical to minimize unintended harm. The following steps are required to meet necessary ethical standards, prior to implementing the MMAPP:

- Establish or pre-identify clear and functioning referral pathways for specialist mental health services, and have immediate emergency response plans in place before administering these questions;
- Train and provide ongoing support for data collectors on safety and sensitivity in navigating these conversations and questions. For example, it is important not to provide further examples or details of suicide methods beyond those mentioned in the questions. They must be equipped to address any distress that may arise when asking these questions, and how to provide immediate support (including emergency

measures); they must receive ongoing support during their implementation of these questions- both to ensure the quality and safety of their assessments, as well as their own wellbeing when asking about these sensitive topics and managing distress that may arise.

- Ensure participant safety and privacy throughout data collection and management, as well as referral processes. Safeguarding confidentiality—particularly when addressing sensitive topics such as mental health and suicidality—is essential not only to promote candid and accurate responses, but also to uphold participants’ protection and well-being. Data collection should take place in a safe, private, and quiet location where conversations cannot be overheard, ensuring participants feel secure to speak openly without risk of stigma or unintended disclosure. Monitor any unintended negative effects within settings in which these questions are being asked- for example, decreases in rates of individuals agreeing to complete surveys, increased suspicion of data collectors or UNICEF/partner activities, any reports of increased distress following survey completion.

²¹ United Nations Children’s Fund, *The State of the World’s Children 2021: On My Mind – Promoting, protecting and caring for children’s mental health*, UNICEF, New York, October 2021.

²² *Live life: an implementation guide for suicide prevention in countries*. Geneva: World Health Organization; 2021.

²³ Dazzi, T., Gribble, R., Wessely, S. and Fear, N.T., 2014. Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence?. *Psychological medicine*, 44(16), pp.3361-3363.

²⁴ *Live life: an implementation guide for suicide prevention in countries*. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.

Section 5: Implementing the MMAPP Questionnaire: Process and Considerations

5.1. Process for Implementing the MMAPP Tool



Figure 3 Process for implementing the MMAPP Tool

The questionnaire is administered directly with adolescents and young people and comprises of 35 questions. The tool administration takes 10 to 15 minutes under normal conditions, although additional time may be needed if, for example, the respondent requires support or referral.

The implementation of the MMAPP questionnaire in a new setting begins with a cultural adaptation process (Figure 6). Deviations from the standardized tool are not recommended outside of the customization derived from the cultural adaptation described below.

Once the tool is culturally adapted, country teams will follow a few additional steps including identifying referral pathways for the provision of free and accessible mental health services in the areas where the data collection will take place, along with ensuring appropriate locally-relevant safeguards in place. This may include consulting with and getting appropriate approvals for the MMAPP administration with local ethics committees. Working with minors and

vulnerable populations and inquiries related mental health and experience of distress may require additional ethical consideration and protocols beyond referral protocols.²⁵

A concrete referral protocol will also need to be established to assist participants identified as needing immediate mental health follow-up. This is critical for respondents identified in need of MHPSS or other protection needs during data collection, and a clear and functioning referral protocol alleviates burden on MMAPP assessment teams who are not likely to be equipped to respond directly to these needs.

Once these steps are completed, data collection, analysis, and dissemination can be carried out. MMAPP administration requires interviewers who have participated in dedicated training. This ensures interviewers use recommended interviewing techniques, including asking questions and registering responses in a standardized way.

5.2. Cultural Adaptation of the MMAPP Tool

Cultural adaptation is a prerequisite for valid data collection using the MMAPP tool. Its purpose is to ensure that the tool is linguistically accurate, free of stigmatizing language where possible, and that the terminology used reflects how adolescents and young people in the implementation setting actually speak about and experience mental health. The foundation of cultural adaptation is engagement with young people and people with lived experience of mental health conditions in order to ensure that terms used reflect their personal experiences and how they describe mental health symptoms. This engagement is also vital to ensure that translations are not stigmatizing or offensive to people experiencing depression, anxiety, and other mental health conditions. Without cultural adaptation, item wording may introduce response bias, be misunderstood, or deviate from the original intent of the questions, undermining the quality and interpretability of the data collected.

Importantly, cultural adaptation does not mean changing what is measured. The goal is conceptual equivalence, ensuring that each item captures the same construct in the adapted context as it does in the original. No questions should be removed, nor changes to question order or response options. Maintaining conceptual equivalence and adherence to item construction ensures that MMAPP questionnaire items remain aligned with current global clinical definitions and diagnostic standards, and that scores and estimates are comparable across contexts and countries, as well as with those from other mental health measures and diagnostic tools. That said, if the current MMAPP items do not adequately capture culturally important expressions and experiences of mental health symptoms in the target community, additional items may be considered in consultation with local mental health experts. Where idioms of distress or local somatic complaints are identified that may improve the sensitivity and specificity of the tool in the target context, adding items to the questionnaire is acceptable. Any additional items should be placed at the end of the tool to preserve the order and flow of the existing items, and should be structured to use the same response options as the existing MMAPP items. In such cases, additional items cannot be combined with existing MMAPP items for scoring and reporting purposes as MMAPP scores. Removal of existing MMAPP items from the scale and scoring

²⁵ Ritchie T, Purcell T, Westhead S, Wenitong M, Cadet-James Y, Brown A, Kirkham R, Neville J, Saleh C, Brown N, Kennedy EC, Hennegan J, Pearson O, Azzopardi PS. Enablers and barriers to primary healthcare for Aboriginal and Torres Strait Islander adolescents: study protocol for participatory mixed-methods research that builds on WHO global standards. *BMJ Open*. 2021 Apr;11(4):e046459. doi:10.1136/bmjopen-2020-046459

The Society for Adolescent Health and Medicine. Guidelines on the Inclusion and Protection of Adolescent Minors and Young Adults in Health Research: A Position Statement of the Society for Adolescent Health and Medicine. *Journal of Adolescent Health*. 2025 May 1;76(5):944–53. doi:10.1016/j.jadohealth.2025.02.007

procedure will constitute a significant adaptation and is not recommended without further psychometric analysis. For guidance on additional item development, analysis, and reporting, contact the [UNICEF Child and Adolescent Mental Health \(CAMH\) Measurement team](#) at ITY-CAMH-Data@unicef.org.

In addition to adaptation to the MMAPP Questionnaire items, visual aids for response options (e.g., see Figure 7 below) can be considered where deemed helpful, but they need to be locally developed and thoroughly tested with the target population for its relevance and culturally- and contextually specific meaning for the visual representation.

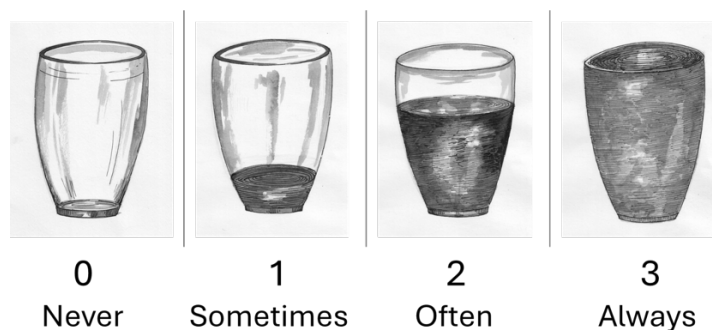


Figure 4. Example of a visual aid that can be shown to adolescents to assist with responding to items. (Adapted from Kohrt et al. 2011 *BMC Psychiatry*. <https://doi.org/10.1186/1471-244X-11-127>)

Experience from validation sites across Belize, Kenya, Nepal, and South Africa demonstrated that the same concepts can require meaningfully different wording across settings, and that involving local mental health experts and young people in this process is what ensures the tool performs well²⁶. For example, certain terms that are clinically standard in one context may carry stigma or be misunderstood in another; and examples embedded in items (such as references to specific activities or platforms) need to reflect the lived realities of adolescents in each setting to ensure relevance.

The cultural adaptation protocol for MMAPP²⁷ assesses each item against five cultural equivalence criteria, drawn from the transcultural translation and adaptation methodology:

- **Comprehensibility** (semantic equivalence): Is the item easily understandable in the local language for the target population, including the idioms and phrasing used?
- **Acceptability**: Would respondents find the item uncomfortable, offensive, or culturally, morally, or religiously inappropriate? If so, how could it be reworded?
- **Relevance** (content equivalence): Is the item and its examples relevant in the local culture, for the target age group, and in the living circumstances of the population?
- **Completeness** (conceptual equivalence): Does the culturally adapted version of the item capture the same concept as the original? Does it reflect how mental health conditions are experienced and expressed in this context?

²⁶ Carvajal-Velez L, Ahs JW, Requejo JH, Kieling C, Lundin A, Kumar M, Luitel NP, Marlow M, Skeen S, Tomlinson M, Kohrt BA. Measurement of Mental Health Among Adolescents at the Population Level: A Multicountry Protocol for Adaptation and Validation of Mental Health Measures. *Journal of Adolescent Health*. 2023 Jan;72(1):S27–33. doi:[10.1016/j.jadohealth.2021.11.035](https://doi.org/10.1016/j.jadohealth.2021.11.035)

²⁷ *Ibid.*

- **Technical equivalence:** Are the methods of assessment, including sentence structure, response format, use of Likert scales, first vs. second person voice, question vs. statement format appropriate and comparable in this cultural context?

These five criteria should guide review at every step of the cultural adaptation process.

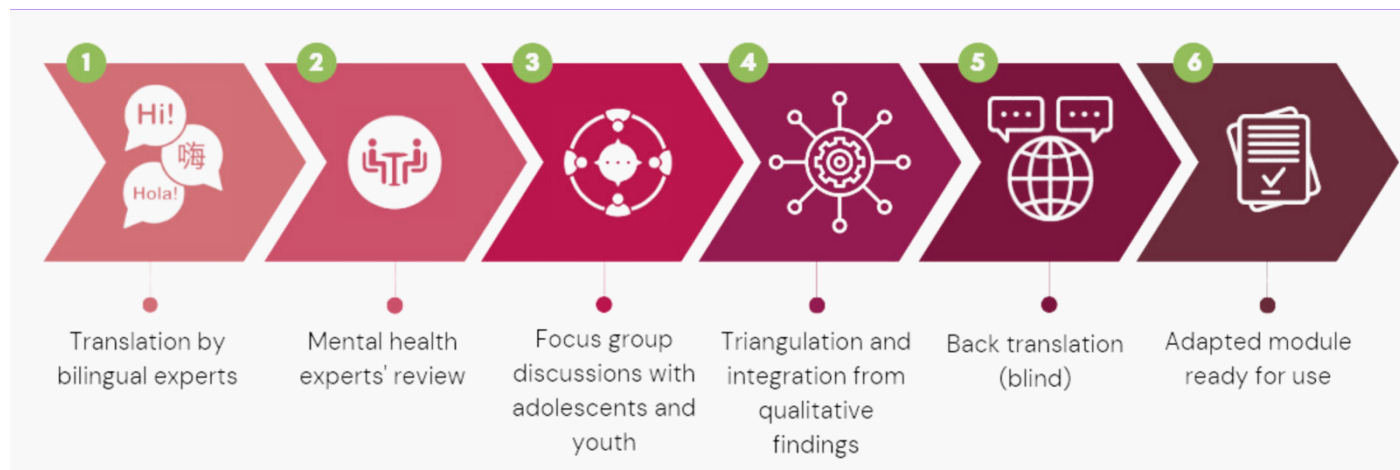


Figure 5 Cultural Adaptation Process for MMAPP Module

Planning the cultural adaptation process

The cultural adaptation process typically takes 2 to 4 weeks of dedicated work, depending on whether translation is required and in how many languages. It is strongly recommended to begin this process early and complete it well before data collection is planned to start. The process must be conducted separately for each language and each new setting in which the tool will be administered.

The recommended composition of the team at a minimum should include the following:

- **1 or 2 bilingual language experts** to translate and back-translate the module (proficient in both the original language of the tool and the target language, culturally competent, and with translation experience; clinical mental health expertise is not required for this role)
- **2 or 3 local mental health experts and people with lived experience (experts by experience)** with cultural and contextual understanding and experience in cultural adaptation, familiar with both the original and target language (at least one female and one male)
- **A minimum of two focus groups with 12 adolescents and young people**, with one adolescent group between the ages of 15 and 19 (6 adolescents, 3 male and 3 female), and one young people group between the ages of 20 and 24 (6 young people, 3 male and 3 female), including those with lived experience of mental health conditions if feasible (such as youth from local advocacy organizations or youth advisory groups). Ensuring a representative sample of youth for the focus group discussions may, at times, necessitate **more than two focus groups** to be involved. See Step 2b. below for more details.
- **A minimum of 1 facilitator and 1 notetaker per the focus group** discussion

Both the mental health experts and the adolescents and young people involved in the cultural adaptation process should be native or fluent speakers of the language or languages in which they will be reviewing the tool. However, in many implementation settings, language considerations are more complex than a straightforward translation from one written language to another, and the guidance below addresses several situations that require specific attention.

Planning considerations for the cultural adaptation process

Table 1 provides information necessary to plan and budget for the cultural adaptation process. For each step in the process, the following information is provided: a brief description of each step, who is expected to be involved in each step, and the estimated duration of each step per language. Please note that the estimated duration of each step is based on one language only. The process can be completed in between 2 to 4 weeks, depending on whether the tool needs to be translated or not, and in how many languages. Details about each step are presented in the following section.

Table 2. Steps to culturally adapt the MMAPP data collection tool

Step	Description	Who is involved	Estimated time
Step 0	Planning and preparation of activities	For large-scale population-representative surveys (e.g., MICS household survey): <ul style="list-style-type: none"> National/local survey coordinator Survey technical committee focal point for the MMAPP Relevant organizational colleagues For research and/or programmatic purpose: <ul style="list-style-type: none"> Programme coordination team Mental health experts Other key stakeholders 	Several days/weeks over the planning and design phase
Step 1	Translation of the tool (if applicable)	~3 local bilingual experts	½ day
Step 2	Review of the tool and items by local mental health experts and people with lived experience (standard or translated version, as applicable)	~2 local mental health experts and people with lived experience of mental health conditions with experience in translation and adaptation	1 day
Step 3	Focus group discussion with adolescents/youth, facilitated by local mental health experts	Representative sample of at least 12 adolescents and young people (emphasizing inclusion of adolescents with lived experience), ~2 local group discussion facilitators, (these may be those involved in Step 2) and 1 note taker	1 – 2 days
Step 4	Triangulation and integration of qualitative findings from Step 3	~2 local mental health experts and people with lived experience who are familiar with translation and adaptation (can be the same as those involved in Step 2)	½ – 1 day
Step 5	Blind back-translation (if applicable)	Bilingual translator without previous exposure to the content of the tool, i.e., not involved in steps 1-4	½ day

Step 6	Finalization of the adapted tool for use	~2 local mental health experts and people with lived experience who are familiar with translation and adaptation (can be those involved in Steps 2 and 4)	1 – 2 days
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For each step, UNICEF and partners have developed detailed guidance and templates that can be used to support implementation. These can be found in the [Annexes E-H](#).

Step 0: Planning stage

Before any adaptation work begins, the implementing team should complete all planning and preparation activities, including identifying and confirming personnel for each step, securing ethical approvals where required, scheduling activities, and ensuring that the Cultural Adaptation Process Template and supporting resources are available to all team members. For household survey use, the national survey coordinator and MMAPP focal point should lead this step. For research or programmatic use, the programme coordination team, mental health experts, and other key stakeholders should be involved. This step may span several weeks during the overall planning and design phase.

Step 1: Translation of the tool (if applicable)

Purpose of the step: The translation of the tool is intended to capture the conceptual equivalence of each item or phrase in a new language/context and is not intended to be a literal word-for-word translation. A literal translation approach risks producing wording with low comprehensibility for respondents and may miss locally relevant concepts or inadvertently introduce stigmatizing language.

Process and key considerations:

- The MMAPP data collection tool is developed in English, and has been translated, adapted, and is currently in use in multiple countries in additional languages, including Spanish and Arabic. **Please reach out to UNICEF Child and Adolescent Mental Health (CAMH) Measurement team** at ITY-CAMH-Data@unicef.org **for information on the adapted and non-English language versions available for use.** If the tool is administered in any other language(s) that are currently unavailable, it should be translated into that/those language/s. When using the existing non-English versions, it is still recommended to undergo the MMAPP contextualization process to ensure regional contextualization (e.g., Caribbean English vs. English spoken in East Africa; regional variations of Arabic, Spanish, etc.). When translation is necessary, use the English version of the tool for translation to ensure close alignment with the original meaning of the items in the language the MMAPP is developed in (English).
- If there are significant variations in how the local language is used in different parts of the country, it is important to involve translators with knowledge of these variations.

Whom to involve: A team of minimum two **local bilingual language experts** for translation and back-translation (i.e, proficient in both English and the target language, culturally competent, and with experience in translation – no clinical mental health expertise is needed) reviews and translates the tool to ensure linguistic and contextual appropriateness.

Resources available for use:

- During this phase, the translators should closely consult [Annex E - Cultural Adaptation Recommendations for MMAPP Item wording](#). This document contains recommended alternatives and terminology to avoid in translations.
- [Annex F - Cultural Adaptation Process Template](#) is a useful tool to use across every step of the cultural adaptation process, with clearly defined tabs for each step. For guidance on translation, see Step 1.

Box 3. Guidance for translation and cultural adaptation across spoken-only, Pidgin, Kriol, and local vernacular language(s), and multi-lingual settings

In multilingual settings, the choice of language for data collection requires careful consideration before the adaptation process begins. Where a national or official language is widely spoken and understood, but is not the mother tongue of many adolescents in the target population, data collected in that language may introduce comprehension barriers that affect data quality, particularly for less educated or rural respondents. The adaptation team should consider whether data collection in a regional language, dialect, or lingua franca would better serve the target population, and whether the survey design allows for this flexibility.

Adaptation in multiple languages and dialects. Where data will be collected in more than one language, the cultural adaptation process must be conducted separately for each language and validated separately for each language version.²⁸ This can be an advantage so that the translations can be compared with one another. For example, if translating the tool into Russian and Kazakh, then the Russian and Kazakh translations can also be compared with one another for equivalence. It is not sufficient to adapt and validate the tool in one language and assume that it is sufficient to translate with minor adjustments for other languages spoken in the same setting. Evidence from MMAPP development and validation studies demonstrates difference in response patterns to the items in different languages. For example, in Kenya, where the items were validated in both English and Swahili, we found different levels of sensitivity and specificity for the same items administered in different languages, suggesting that the meaning and interpretation of the same item may differ by language.²⁹

Where significant regional or sociolinguistic variation exists within a single language for example, differences between urban and rural dialects, or between the language as spoken by different ethnic or age groups, translators

²⁸ Kaiser BN, Ticao C, Anoje C, Boglosa J, Gafaar T, Minto J, Kohrt BA. Challenges in simultaneous validation of mental health screening tools in multiple languages: Adolescent assessments in Hausa and Pidgin in Nigeria. *SSM - Mental Health*. 2022;2:100168. doi: <https://doi.org/10.1016/j.ssmmh.2022.100168>.

²⁹ Tele AK, Carvajal-Velez L, Nyongesa V, Ahs JW, Mwaniga S, Kathono J, Yator O, Njuguna S, Kanyanya I, Amin N, Kohrt B, Wambua GN, Kumar M. Validation of the English and Swahili Adaptation of the Patient Health Questionnaire-9 for Use Among Adolescents in Kenya. *J Adolesc Health*. 2023;72(1s):S61-s70. Epub 20221112. doi: 10.1016/j.jadohealth.2022.10.003. PubMed PMID: 36376148.

and reviewers with knowledge of those variations should be involved. A single translator based in the capital city may not adequately represent how mental health concepts are expressed among adolescents in rural or marginalized communities.

Adaptation and administration in spoken-only languages. In some settings, the language spoken by the target population has no standardized written form, has limited written materials available, or is primarily a spoken vernacular rather than a language of formal instruction. These situations require adaptation of the standard translation process. In these instances, local phonetic written versions of the oral language should be used. Collaboration with researchers, linguists, anthropologists, and local experts who have documented the language can yield a written form to help standardize the translation for administration.

This helps yield agreement on standardized terminology for key mental health concepts, including terms for sadness, worry, hopelessness, and distress, that will be used consistently by all interviewers. These agreed terms should be documented in the interviewer training materials to ensure consistency of administration, and audio recordings of the standardized oral version of each item may be a practical tool for ensuring consistency across the data collection team. In these settings, it is especially important that cognitive interviews and focus group discussions with young people explore not only whether individual item wordings are understood, but whether the concepts themselves are meaningful in the local cultural framework.

Adaptation and administration in a Pidgin, Kriol, and local vernacular of common language(s). In many settings adolescents routinely communicate in Pidgin or Kriol languages. These languages occupy a complex position: they may be the primary language of everyday communication and emotional expression for many young people, even if they are not formally recognized or standardized. When local vernaculars exist, it is also important to ensure the language adaptation reflects what is spoken in daily life rather than legal or technical standards of English.

Experience from MMAPP validation in Belize, where the tool was adapted into both Belizean English and Kriol, illustrates both the value and the challenges of working in lingua franca settings. Kriol was found to be a highly effective language for discussing mental health concepts. Participants were often more expressive and more willing to disclose in Kriol than in formal English, but the boundary between the two languages was fluid, and most participants preferred to be interviewed in a mix of both. In these situations, providing the respondent with items in both languages will allow them to choose which language they feel comfortable with. This can be done easily in written administration with translations for each item available together.

Implications for psychometric validity and prevalence estimation using MMAPP. These linguistic differences have significant implications for item functioning, setting cut-off scores, and generating prevalence estimate. At minimum, we strongly recommend a) identifying language(s) of adaptation and administration in careful consideration of linguistic and cultural complexity in a given setting; b) conducting language- and context-specific adaptation for each language identified; and c) clear documentation of justification and rationale for choices made, as well as the language of the MMAPP administration and the language(s) spoken by the respondent for disaggregation in analysis. Whenever resources permit, we strongly recommend language- and population-specific psychometric validation of the MMAPP to identify linguistically and culturally appropriate cut-off scores necessary for generating prevalence estimates.

Step 2: Local mental health expert review and focus group discussions with youth

The next part of the process consists of a two-stage approach with local mental health experts and adolescents and youth.

Step 2a: Review of translation by local mental health experts with expertise in child and adolescent mental health and people with lived experience:

Purpose of the step: Regardless of whether the tool is administered in one of the available MMAPP language versions or translated into another language, the mental health experts must conduct an initial review of the contents of the tool, question-by-question, and use the original language version as a reference. The purpose of the review of the tool by local mental health experts and people with lived experience is to identify any necessary adjustments to the language to avoid words that may carry stigma in the local context, create confusion, or lead to misinterpretation, and ensure that key mental health terms are relevant in the local context. In addition, a crucial aspect of this review process is for experts to flag any items that might benefit from adolescents/youth inputs to ensure comprehension, acceptability and relevance, or suggest alternative wordings to be tested with adolescents/youth.

Whom to involve: A minimum of 2 local mental health experts and people with lived experience should review the tool. These may be professional mental health counsellors, social workers trained in clinical practice for mental health and psychosocial support, psychologists, psychiatrists, MHPSS workers, researchers, or others familiar with mental health topics. They should have prior experience in adaptation and translation. Preferably they should have experience of working with adolescents and/or young people. People with lived experience who are part of advocacy or research organizations (e.g., Aves Mental Health) are likely to have awareness about this process and expertise in translating mental health awareness and educational materials.

Process and key considerations:

- During this step, local mental health experts and experts by experience review and adapt the terminology so that items match how young people would typically describe these experiences. The outcome should not be technical or medical jargon, which would be difficult for young people to understand.
 - Experts should review and adapt terminology so that item wording matches how young people in that context would typically describe these experiences. The outcome should be accessible, everyday language, not technical or clinical jargon. Each item should be assessed against all five equivalence domains (comprehensibility, acceptability, relevance, completeness, and technical equivalence) described above.
- Mental health experts and experts by experience should also review the preambles in the questionnaires to ensure clarity, avoid stigmatizing language, and help put respondents at ease.
- Even when one of the available MMAPP language versions is used, the mental health experts and experts by experience should document any recommended adjustments to the wording of the items, following the instructions in the cultural adaptation process template (see resources below).

Resources available for use:

- The mental health experts should consult [Annex B - Rationale for Inclusion of Items in MMAPP](#) and [Annex C - Relationship of MMAPP Items to Mental Health Classifications in DSM-5 and ICD-11](#), as well as the “Review for conceptual equivalence: Disorder and symptoms addressed in each item, and equivalent items in

other existing mental health questionnaires” section (Columns J-S) in the [Annex E - Cultural Adaptation Recommendations for MMAPP Item wording](#) to guide their review of the translations.

- [Annex F - Cultural Adaptation Process Template](#) is a useful tool to use across every step of the cultural adaptation process, with clearly defined tabs for each step.

Step 2b: Focus Group Discussions with young people, facilitated ideally by persons with experience in qualitative research methods

Purpose of the step: After the local mental health experts review the tool and identify items for further discussion with youth, there will be structured discussion with adolescents and youth advisors to review and discuss the wording and concepts reflected in the mental health tool, with a focus on items that are flagged by the local mental health experts in Step 2a as most potentially problematic. This discussion ensures that the content is relevant, non-stigmatizing, and the language is understandable and accessible to adolescents and young people in the local context.

Whom to involve: The group of adolescents/youth should be representative, with potential smaller-group discussions with internally-homogenous groups (for example, avoid recruiting adolescents/youth from the same school or the same neighborhood). Recruitment of adolescents who have lived experience of mental health conditions is recommended. They should represent regional and educational diversity of the target group that will be administered the MMAPP questionnaire in the planned surveys. Representation of school-going and non-school going youth is recommended in settings with high levels of early school leaving. In addition, rural and urban diversity is crucial if the survey is administered in both settings. Other considerations are inclusion of groups who may be at higher risk of mental health conditions to get their perspectives on appropriate language; this may include adolescents living with disabilities, adolescents from economically disadvantaged groups, adolescents more at risk of discrimination, such as LGBTQ+ adolescents.

Ensuring a representative sample of youth for the focus group discussions may, at times, necessitate **more than two focus groups** to be involved. When resources are available to have **multiple internally homogeneous groups**, we strongly recommend holding multiple focus groups divided by key characteristics that may have different mental health experiences given the local context, such as:

- age (e.g., young vs. older adolescents in separate groups)
- gender (e.g., boys vs. girls; LGBTQ youth); and
- other socially relevant groups in that setting (e.g., race/ethnicity/caste, religion, socioeconomic status, school-going vs. out-of-school, urban vs. rural, language groups in multi-language settings, etc., as relevant to the target setting, population, and policy/programmatic target and needs).

Process and key considerations:

- The group discussion will focus on reviewing the items in Domain 1: Symptoms of Depression and Anxiety (MMAPP-DA), and Domain 3: Suicidality (MMAPP-SU). If time allows, there can be discussion of the Domain 2 (Functional Limitation) and Domain 4 (Mental Health Care-Seeking and Connectedness items).
- Ideally all items should be reviewed, but if time is limited the adaptation should focus on items that are flagged by the local mental health experts in the previous step as most potentially problematic. This discussion ensures that the content is relevant, non-stigmatizing, and the language is understandable and accessible to adolescents and young people in the local context.
- Review of each item should consider following criteria:

- **Comprehensibility:** Is the item easily understandable for adolescents in your community? Is there any alternative wording that would be commonly understood for adolescents in your community?
- **Acceptability:** Would it be offensive, stigmatizing, or inappropriate to ask this question to adolescents in your community? If unacceptable, how could the question be reworded to make it acceptable to ask?
- **Relevance:** Is the item relevant to adolescents in your community? Is it something that adolescents talk about or experience in your community? If not, could the examples be changed to more relevant to adolescents in your community?
- **Completeness:** Are the thoughts, feelings, or experiences in the question something that you have heard among adolescents and young people living with mental health conditions in your community? If not, how could the wording be changed to be more reflective of the experience of adolescents with lived experience of mental health conditions?
- **Identify Gaps in local relevance and community-specific expression and experiences.** After reviewing all items for each domain, ask participants whether any important thoughts, feelings, or experiences related to the target symptoms or conditions for adolescents and young people in their community are missing in the current set of questions. Consider incorporating this into the revision of existing items when relevant.
- It is recommended to have a designated notetaker who can comprehensively capture the notes from the discussion, as thorough documentation can greatly aid the triangulation process and ensure that the local mental health experts can utilize the notes to effectively guide next steps.

Resources available for use:

- [Annex G - Focus Group Discussions for Cultural Adaptation- Guidance and Templates](#) for guidance for FGDs, example scripts, and templates for consent.
- [Annex F - Cultural Adaptation Process Template](#) is a useful tool to use across every step of the cultural adaptation process, with clearly defined tabs for each step.

Step 3: Triangulation and integration of qualitative findings from Step 1 and 2

Purpose of the step: Following Step 1 and 2, local mental health experts will bring together the feedback from the various steps to make final recommendations on language adaptation to the tool.

Whom to involve: Local mental health experts will be convened to review.

Process and key considerations:

- All recommended adjustments must be justified and specifically address one or more of the five equivalence criteria (comprehensibility, acceptability, relevance, completeness, technical equivalence). Adjustments that are not grounded in these criteria should not be made, as they risk introducing drift from the original item meaning.
- Experts should clearly document all issues and recommended changes in the Cultural Adaptation Process Template, including flagging any meaningful differences in semantics between the original and adapted wording. This documentation is important not only for quality assurance but also for future reference if the tool is used again in the same setting.

Resources available for use:

- [Annex F - Cultural Adaptation Process Template](#) is a useful tool to use across every step of the cultural adaptation process, with clearly defined tabs for each step.

Step 4: Blind back translation (if applicable)

Purpose of the step: *After Step 3 is completed, the culturally adapted version of the tool that incorporates the results of the mental health expert review and the group discussion with adolescents/youth is ready. This adapted version of the tool must be back translated to the original language by someone who was not involved in the initial translation, the expert review or the focus group discussion with adolescents/youth, and who is not familiar with this type of mental health questionnaires. For example, if the original version of the items was in English and the items were initially translated into Nepali by one person (translator 1), once the initial Nepali translation has been culturally adapted, the revised Nepali wording will be back translated into English by a different person (translator 2).*

Whom to involve: The back translator should be a bilingual person who has not been involved in earlier stages of the process and who has not seen the original language version of the tool.

Process and key considerations:

- Note that the back translation will not result in the same exact wording as the original text. The back translation, as with the original forward-translation, is intended to capture the conceptual equivalence of each item or phrase, and not a literal word-for-word translation.
- If items were translated, compare the back translation with the original version to ensure no major discrepancies exist due to any confusions or misinterpretations during initial translation of items
- If discrepancies between the back translation and the original wording of the items are observed, the mental health experts will discuss and assess if the discrepancies are related to any confusions or misinterpretations during the initial translation of the items. If they conclude that the translated and culturally adapted wording of an item is not conceptually equivalent to the original item or phrase, they will recommend any additional refinements needed to improve the translation. These can be documented in the relevant section of the 'Cultural Adaptation Process Template'.
- If the items were not translated, the local mental health experts will still compare the culturally adapted items to the original wording and note any discrepancies and assess whether the final proposed wording of the items is conceptually equivalent to the original wording.

Resources available for use:

- The [Annex E - Cultural Adaptation Recommendations for MMAPP Item wording](#) should be used alongside the back translation to double check that that none of the items include language that was intended to be avoided in the process.
- Back-translation (blind) template is available for use to share with the back translator is available in the tab "Step 5 - Back Translation" in the [Annex F - Cultural Adaptation Process Template](#)

Step 6: Adapted Tool Ready for Use

Purpose of the step: *Unless any issue arises during back translation, the adapted tool is now considered ready for baseline data collection. If any issues came up with the back translation, the mental health experts need to be consulted to verify the information and adjust accordingly.*

Whom to involve: Project team, local mental health experts (if consultation is needed)

Process and key considerations:

- Regardless of whether the tool was reviewed in one of the available MMAPP language versions or was translated, it is recommended that the cultural adaptation process template is kept with clear notes, any differences in semantics are flagged, and reconciliation is undertaken in an iterative process to refine the translation/adaptation or correct any errors.
- Once the tool has been translated and adapted for use, we strongly request that you share the **adapted version of the MMAPP Questionnaire** with the **completed Cultural Adaptation Template form (Annex F)** used back with the UNICEF Child and Adolescent Mental Health (CAMH) Measurement team at ITY-CAMH-Data@unicef.org. Your contribution will support the development of a global knowledge base of valid, culturally relevant, and globally comparable tools and evidence on child and adolescent mental health.

Resources available for use:

- **Annex F - Cultural Adaptation Process Template** is a useful tool to use across every step of the cultural adaptation process, with clearly defined tabs for each step.

5.3. Establishing Referral Protocols for MMAPP Questionnaire Administration

As with any mental health data collection, use of the MMAPP questionnaire in the field requires identification of referral pathways and a robust referral protocol. **This is not optional – it is an ethical prerequisite for implementing the MMAPP.** Having referral protocols ensures that all systems are in place to handle urgent cases from the outset. This is critical for respondents identified as needing mental health and psychosocial support or protection during data collection and to ensure ethical data collection and duty of care. The MMAPP initiative abides by the Responsible Data for Children (RD4C) principles, which guide responsible data handling in the interest of children's and adolescents' lives, rights, and wellbeing. Administering questions about suicidal thoughts and behaviors, depression, and anxiety to adolescents and young people in a non-clinical setting carries a duty of care: if a respondent is identified as being in need of mental health support, a clear, functioning pathway to that support must already exist. The procedures for referral should be co-designed with local experts by experience who can help to ensure that engagement with mental health services is safe, effective, and protects the dignity and human rights of adolescents and their families.

This ethical responsibility is grounded in four core principles: beneficence (actively contributing to participant wellbeing), non-maleficence (avoiding harm), respect for autonomy (honoring participants' right to make informed decisions about referral), and justice (ensuring equitable access to support regardless of a participant's circumstances). Having a referral protocol in place before the first interview is how these principles are operationalized in practice.

According to the [IASC Inter-Agency Referral Form and Guidance Note](#), a referral is the process of 'directing a client to another service provider because s/he requires help that is beyond the expertise or scope of work of the current service provider'. Referrals should be made with the participant's informed consent and confidentiality agreement, and can be made to a variety of services, e.g., health, mental health and psychosocial activities, protection services, nutrition, education, shelter, material or financial assistance, physical rehabilitation, a community centre, a social service agency, and/or a hotline service.

A referral protocol outlines the standardized criteria and procedures for identifying respondents in need of support, considering the severity of their situation. It describes the step-by-step process to refer respondents to appropriate support services. The protocol specifies how to discuss the assisted referral process with the respondent, ensuring they are informed about available mental health and psychosocial support services, preferably those available free of charge.

During MMAPP implementation, given the sensitive nature of mental health, and especially questions around suicidality, interviewers may come across adolescents and/or young people in need of assistance that is outside their expertise or scope of their own work. The MMAPP toolkit provides a referral decision tree to flag when an interviewee may need supportive follow-up. This section provides guidance on implementing a protocol for referring interviewees for further support. Interviewers should present all available service options impartially, clearly indicating which services are free and which may involve costs. This empowers participants to make informed decisions based on their preferences and circumstances.

Box 4. Key definitions

In the context of MMAPP, a **referral protocol** is a standard procedure that applies to all surveys, and outlines the criteria for identifying respondents with low/moderate or high risk based on their responses to select items, who might benefit from additional support. It outlines the process to refer respondents to mental health and psychosocial support services, as well as other relevant services (including but not limited to child protection, gender-based violence, etc.) either by providing relevant information for services in the community, or by offering assistance with directing respondents to support services. This protocol is designed as a standard feature across surveys and is integrated into the questionnaire. While core components remain consistent, some customization at the country level may be necessary to align with local legal requirements, cultural contexts, and available services.

The **operationalization of the referral protocol** includes identifying or establishing the systems, pathways, and resources necessary to implement the referral protocol. Operationalization is to be done in collaboration with local experts by experience. Steps to operationalize the referral protocol include:

- **Mapping of Services:** Identify all relevant mental health and psychosocial support services available locally.
- **Establish Partnerships:** Form agreements with service providers, outlining roles and expectations.
- **Develop Communication Channels:** Set up clear lines of communication between the data collection team and service providers.
- **Train and Plan with Data Collectors:** Train data collectors on the referral process, including confidentiality and ethical considerations. Allocate sufficient time and resources for data collectors to make referrals and follow up with participants throughout the data collection period.
- **Monitoring and Evaluation:** Implement mechanisms to track referrals and assess the effectiveness of the protocol – i.e., when a respondent has been flagged as being at a low-to-moderate or high risk, and provides consent to be referred, were they successfully contacted or not?

The operationalization of the referral protocol necessitates in-country customization and is in part shaped by the state of existing referral pathways and systems.

What should a referral protocol include?

A referral protocol outlines the standardized criteria and procedures for **identifying** respondents who may need support, the step-by-step process for **referring** them to appropriate services, and how to communicate the referral process to respondents in a way that is clear, non-coercive, and sensitive to their circumstances. It should **specify which services are available free of charge**, as this is an important consideration for adolescents and young people in low-resource settings. While the core components of the referral protocol are consistent across settings, the protocol requires **country/context/setting-specific operationalization and customization** to reflect local legal requirements, cultural contexts, available services, and the specific population being surveyed.

At a minimum, organizations implementing the MMAPP questionnaire should establish clear linkages and agreements with referral mechanisms, which may include MHPSS service organizations, or in some cases a pool of counsellors recruited specifically for the purpose of the data collection effort (otherwise, there is a risk of referrals being made and never being picked up). Organizations should establish formal agreements, such as Memoranda of Understanding (MOUs), with referral service providers. These agreements should detail the scope of services, referral procedures, confidentiality agreements, response times, and monitoring mechanisms. Given that MMAPP-based

referrals do not constitute clinical screening or diagnosis, referral agreements should also include plans for clinical screening and assessment once participants are referred.

Additionally, it is recommended to have a mechanism in place to follow up to make sure the referral is conducted in a timely manner. Follow-up mechanisms may include regular check-ins with referral service providers to confirm that referrals have been received and acted upon. Any follow-up with participants should be conducted with their prior consent and in a manner that ensures their privacy and comfort.

As part of the MMAPP protocol for data collection, all respondents should receive contact information for available services regardless of their situation. Information materials should be provided in local languages and accessible formats (e.g., large print, audio recordings) to accommodate participants with varying literacy levels and disabilities. It is critical here that referral information sheets or flyers don't just list the mental health services, but also others related to child protection, gender-based violence, food security, and other health and wellbeing services.

Guiding Principles for Making a Referral

The following five principles, drawn from the Inter-Agency Minimum Standards on Referrals, should guide all referral interactions during MMAPP data collection:

- **Respect confidentiality.** All participant information must be kept private, shared only with consent and on a strictly need-to-know basis. Only the minimum information required for the service provider to respond appropriately should be collected and shared. Information must be collected, stored, and transferred securely in line with RD4C principles.
- **Obtain informed consent.** Before recording a participant's information or proceeding with a referral, verbal consent, and written consent where possible, must be obtained directly from the participant. The referral process should be explained clearly and in terms appropriate to the participant's age and comprehension level, and understanding should be confirmed before proceeding.
- **Do not raise expectations.** The referral process and expected timeline should be explained honestly. No promises should be made about outcomes. Interviewers should be transparent about what services can and cannot offer.
- **Respect choices and decision-making capacity.** Participants have the right to decline a referral. Their decisions should be listened to non-judgmentally and accepted without pressure. Where a participant declines, the interviewer should still provide information about available services and encourage the participant to speak with a trusted adult.
- **Prioritize the safety and security of the individual.** Before completing a referral, consider any risks the participant may face in accessing the service, for example, risks related to privacy, disclosure, or transport. Where appropriate, encourage the participant to involve a trusted adult or caregiver in the decision-making process.

Referral protocol for the MMAPP Questionnaire during data collection

There are two types of referral protocols for the MMAPP tool, defined according to the risk level of the respondents. These should be initiated in the following circumstances:

1. Low to Moderate Risk Referral Protocol:

If... (referral criteria are met)

- Respondent reports suicidal ideation in the past two weeks (MMAPP Suicidality Item # 2); **OR** MMAPP Depression Total Score **OR** MMAPP Anxiety Total Score is above locally validated cut-off³⁰;

Then (action):

- Offer **referral** to services to receive support within one week.

- **Process:**

- Read the referral script offering support. As a reminder, all referral scripts should be co-developed with experts by experience to ensure safe, dignified, and effective referral processes.

e.g.,

“It sounds like you are struggling at the moment, and I would like to help you find someone who can support you.

We can call a professional counsellor from [name of government or private provider] with whom you can talk about anything that worries you. Counsellors help young people with their feelings and emotions and the conversation with them is always confidential. This counselling service is free of charge.

Would you like us to contact a counsellor?”

- Obtain the respondent’s consent for the referral.
- Record the respondent’s contact information securely.
- **Regardless of whether the referral is accepted or declined**, provide information about available services, and suggest discussing their situation with a trusted adult.

2. High-Risk Emergency Referral Protocol:

If... (referral criteria are met)

- Respondent reports a suicide attempt in the past 12 months (MMAPP Suicidality Item # 1=1); **AND**
- Respondent reports suicidal ideation in the past two weeks (MMAPP Suicidality Item # 2=1)

Then (action):

- Offer **referral** to services to receive support immediately. Contact must be made within 24 hours.

- **Process:**

- Read the referral script offering immediate contact with a counsellor. As a reminder, all referral scripts should be co-developed with experts by experience to ensure safe, dignified, and effective referral processes.

e.g.,

“It sounds like you are struggling at the moment, and I would like to help you find someone who can support you.

My supervisor can call a professional counsellor from name of government or private provider with whom you can talk about anything that worries you, and who will be able to contact or visit you as soon as possible. Counsellors help young people with their feelings and emotions and the conversation with them is always confidential. This counselling service is free of charge.

Would you like us to contact a counsellor?”

³⁰ Thresholds for referral should be selected based on local cut-offs and/or consultations with local clinicians. Contact the UNICEF Child and Adolescent Mental Health Measurement team at ITY-CAMH-Data@unicef.org for information on local cut-offs.

- Obtain the respondent's consent for the referral.
- Ensure the respondent's contact information is shared with a professional who will follow up within 24 hours.
- **Regardless of whether the referral is accepted or declined**, provide information on available mental health services and suggest they speak with someone they trust.

Important Considerations:

- It is critical to ensure that all staff are aware of these specific thresholds and are trained to identify respondents who meet them. These thresholds should be predefined during the planning phase of MMAPP implementation.
- When excluding the suicidality domain, it is crucial to consider the potential impact on identifying individuals in need. Alternative support mechanisms should be explored to ensure participant safety.

Process for identifying and/or establishing a referral protocol

The process to identify and/or establish referral protocols involves mapping existing MHPSS services and developing localized referral protocols that include MHPSS and other relevant services for child health and wellbeing.

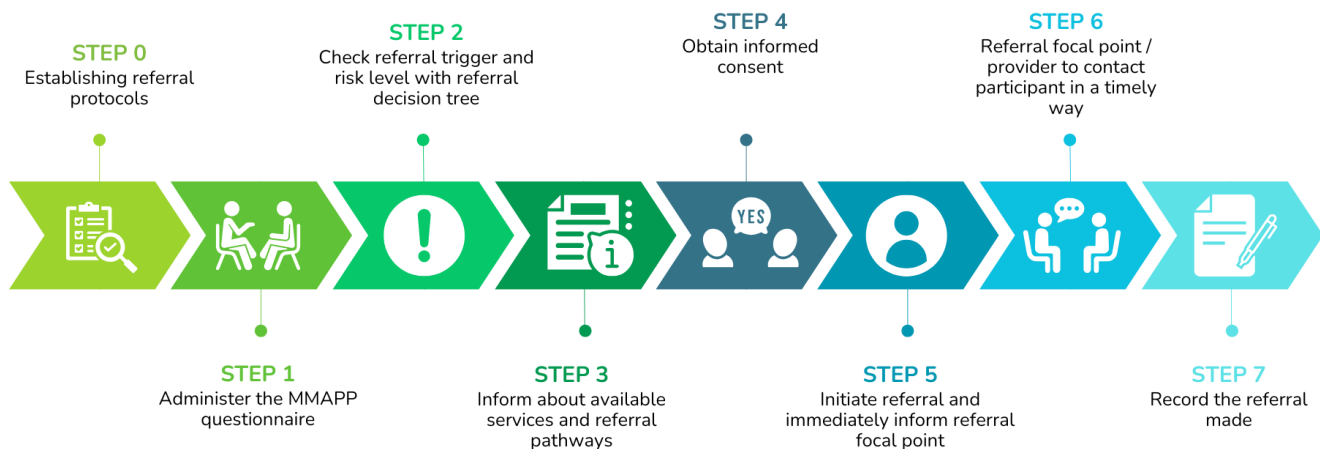


Figure 6: MMAPP Questionnaire referral protocol Establishment process

Step 0: Map services and identify referral focal points

Start by mapping available MHPSS services helplines, and providers, especially those that are free of charge:

- Action: Begin by mapping all available MHPSS services, helplines, and providers in the areas where data collection will take place, prioritizing those that are free of charge and accessible to adolescents and young people. The mapping should include specialists trained to provide mental health support to this age group (such as counsellors, social workers, and psychologists) as well as services across other relevant sectors including child protection, gender-based violence, health, and social services. The output should be a comprehensive, up-to-date list of services with contact details. In settings with functioning mental health systems, this mapping will typically identify an existing landscape of services that can be engaged as referral partners. However, in humanitarian, emergency, or fragile settings, or in contexts where MMAPP is being used as part of a needs assessment, services may be limited, overstretched, or not yet established. In these settings, the mapping process will likely reveal significant gaps, and the findings should be used to inform decisions about what referral support needs to be established or scaled up before data collection begins. Where critical gaps are identified, data collection should not proceed until a minimum level of referral capacity is in place. Proceeding without adequate referral pathways would be inconsistent with the ethical requirements set out above, regardless of the urgency of the needs assessment.
- Outcome: This should result in a comprehensive list of services with contact details.
- Assign referral focal points: Designate individuals responsible for managing referrals.

Estimate potential referrals:

- Action: To guide costing and planning, it is recommended to estimate the potential number of referrals expected, and explore pathways, where possible, to meet the estimated need. Referral estimates may vary widely by setting based on the levels of mental health needs and the number of adolescents who are currently receiving care. About 10-15% of participants are expected to need low/moderate risk referral³¹ and 3-4% are expected to need a high-risk referral.³² If local estimates of emergency mental health needs are available, these estimates can be adjusted based on local or regional data. Where capacity is insufficient, the implementing organization should explore complementary pathways, including: engaging a pool of on-call counsellors recruited specifically for the data collection period; activating regional or national helplines where available; or coordinating with other organizations operating in the same area to share referral capacity. A combined approach may include dedicated on-call counsellors for high-risk referrals requiring 24-hour response, and existing services for low/moderate risk, and is a practical model in many contexts. In settings where existing MHPSS services are limited or where MMAPP is being used precisely because there is limited knowledge of the mental health burden in the population, standard referral planning may not be sufficient. A surge response plan should be developed as part of Step 0 to ensure that an unexpected volume of high-need referrals can be managed safely.

³¹ Polanczyk, G. V., Salum, G. A., Sugaya, L. S., Caye, A., & Rohde, L. A. (2015). Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 56(3), 345–365. <https://doi.org/10.1111/jcpp.12381>

Uddin, R., Burton, N. W., Maple, M., Khan, S. R., & Khan, A. (2019). Suicidal ideation, suicide planning, and suicide attempts among adolescents in 59 low-income and middle-income countries: A population-based study. *The Lancet Child & Adolescent Health*, 3(4), 223–233. [https://doi.org/10.1016/S2352-4642\(18\)30403-6](https://doi.org/10.1016/S2352-4642(18)30403-6)

³² Balázs, J., Miklósi, M., Keresztény, A., Hoven, C. W., Carli, V., Wasserman, C., Apter, A., Bobes, J., Brunner, R., Cosman, D., Cotter, P., Haring, C., Iosue, M., Kaess, M., Kahn, J.-P., Keeley, H., Marusic, D., Postuvan, V., Resch, F., ... Wasserman, D. (2013). Adolescent subthreshold-depression and anxiety: Psychopathology, functional impairment and increased suicide risk. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 54(6), 670–677. <https://doi.org/10.1111/jcpp.12016>

Nock, M. K., Green, J. G., Hwang, I., McLaughlin, K. A., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2013). Prevalence, Correlates, and Treatment of Lifetime Suicidal Behavior Among Adolescents: Results From the National Comorbidity Survey Replication Adolescent Supplement. *JAMA Psychiatry*, 70(3), 300–310. <https://doi.org/10.1001/2013.jamapsychiatry.55>

- Action: It is recommended to apply these percentages to the expected sample size of youth 15-24 years of age to estimate the number of assisted referrals that may be needed during the data collection period. For instance, if the survey includes 1,000 participants, then the low/moderate risk referrals can be estimated to be around 10-15% of 1,000, or 100-150 participants, and the high-risk referrals may be 3-4% of 1,000, or 30-40 participants.
- Outcome: This will produce an estimate to inform resource planning. Not all respondents flagged for referral will agree to be referred, and without consent, an active referral cannot be made. The estimated number should therefore be understood as the maximum expected number of assisted referrals.

Box 5. Notes on referral rate estimate

The estimates provided here are derived from published prevalence data on depression, anxiety, and suicidality among adolescents in low- and middle-income country settings.

The 10–15% estimate for low/moderate risk referrals is based on a 59-country study published in *The Lancet Child & Adolescent Health* (Polanczyk et al., 2015; Uddin et al., 2019), which reported a 12-month prevalence of mental health disorders among adolescents in LMICs of approximately 17%, with wide variation across settings. A more conservative estimate of 10–15% was adopted for planning purposes to account for this variation and to reflect the fact that not all adolescents meeting prevalence thresholds will score at a level that initiates the MMAPP referral decision tree, and not all who are flagged will consent to referral.

The 3–4% estimate for high-risk referrals is based on two sources reporting point-prevalence of acute suicidal ideation among adolescents: a study by Nock et al. (2013) reporting 3.6% of adolescents with acute suicidal ideation in the past 30 days; and a study by Balázs et al. (2013) reporting 4–7% with acute suicidal ideation in the past two weeks. The lower end of this range (3–4%) was adopted as the planning estimate, reflecting that the MMAPP high-risk threshold requires both a recent suicide attempt (past 12 months) and current suicidal ideation (past two weeks), which is a more specific criterion than suicidal ideation alone.

These estimates should be treated as planning benchmarks, not precise predictions. Actual referral rates will vary depending on the characteristics of the survey population, the setting, and local prevalence of mental health conditions. In humanitarian, post-crisis, or other high-burden settings, actual rates may be substantially higher, and implementing organizations should adjust their planning estimates accordingly using any available local or regional data.

Engage service providers:

- Action: Where possible, and especially for population-level large-scale surveys, it is recommended to identify and engage mental health specialists in relevant government agencies and organizations, as well as experts and stakeholders in other relevant sectors such as child protection, education, and gender-based violence prevention, to ensure that referral pathways are appropriate and adequate. Potential routes for providing referrals may include through existing government and non-governmental organizations, organizations led by people with lived experience, and/or private service providers; a team of on-call counsellors recruited for this purpose; a combination of both (e.g., on-call counsellors for high-risk referrals within 24 hours, and

existing services for low/moderate risk referrals). Designate referral focal points who will play central roles in the coordination and implementation of the referral protocol.

- Engagement strategies include:
 - a. **Stakeholder Meetings:** Organize meetings with service providers to discuss collaboration.
 - b. **Surveys and Interviews:** Conduct assessments to understand service capacities.
 - c. **Community Involvement:** Involve community leaders to facilitate acceptance and cooperation.
- Outcome: Formal relationships established with service providers. Develop formal partnerships with clear roles and expectations.

Develop information materials:

- Action: Compile providers' contact details, and ensure that these providers are contacted in advance and have an agreement with them to ensure a smooth referral process, especially as the risk protocols require a response within a certain number of days, and this is likely not going to be possible if the service is following their standard procedures for new referrals.
- Outcome: Accessible materials such as brochures/leaflets for distribution to all participants.

Train data collection team:

- Action: All data collectors must receive training on the referral protocol before data collection begins. Training should cover: basic knowledge of depression, anxiety, and suicidality among adolescents and young people and other relevant topics for the target population such as child protection and gender-based violence concerns; administration of the MMAPP questionnaire and use of the referral decision tree; step-by-step referral procedures for both risk levels; ethical practices including informed consent, confidentiality, and participant autonomy; cultural sensitivity in navigating sensitive conversations; and specific guidance on how to respond if a participant shows signs of acute distress during the interview. In humanitarian or high-need settings, training should additionally cover: recognizing signs of acute psychiatric crisis beyond what is covered by referral decision tree; managing their own emotional responses to distressing disclosures; and activating the surge escalation pathway if needed. Ongoing supervision and support for data collectors throughout the data collection period is strongly recommended in all settings, and essential in humanitarian contexts.
- Outcome: A prepared team capable of implementing the protocol effectively.

Steps 1 & 2: Check for referral criteria and risk level based on the referral decision tree provided

Once the items on the suicidality domain are completed, the next step is to score the responses using the decision tree provided within the MMAPP toolkit; and-determine if the referral protocol has been initiated based on the decision tree provided. The [referral decision tree](#) presented in the earlier section identifies individuals who may require further assessment or immediate mental health support based on their responses.

The referral decision tree is a decision-support tool, not a clinical assessment. It is designed to identify those most likely to benefit from further support, but it will not capture every individual in need, and being flagged does not guarantee that a participant will benefit from referral. Interviewers should use their judgment throughout the interview and should not wait until the assessment is completed to flag a case before responding to visible signs of acute distress. Clear guidance on how to respond to acute distress during the interview, including escalation pathways, should be covered in interviewer training and readily accessible during data collection. In humanitarian or

high-burden settings, interviewers should be particularly attentive to participants who may not be captured by the decision tree but who show behavioral signs of significant distress, and should know how to activate appropriate referral pathways as established in the planning phase.

Step 3: Inform about available services and referral pathways

All participants, regardless of whether they met the referral criteria or not, should receive information about available local services as part of the data collection process. This is both an ethical requirement and a practical safeguard, ensuring that every participant leaves the interview with access to information about where to seek support, should they need it.

For participants identified through the referral decision tree as potentially needing further support, this step involves providing the prepared information brochure or leaflet (developed in Step 0), which should include contact details for local mental health services, descriptions of what each service offers, and a clear indication of which services are available free of charge. The interviewer should also explain that a referral focal point or counsellor can reach out to them directly at a time and through a channel of their choosing, if they consent to this. All options should be presented impartially and without pressure. The interviewer's role at this step is to inform, not to persuade.

Step 4: Obtain Informed Consent

Before making any referrals, it is crucial to obtain informed consent from the individual and, if required, their guardian, if they are under the legal age of consent. This step involves explaining the referral process clearly, ensuring they understand what it entails, and securing their agreement. Using standardized consent forms provided by MMAPP helps ensure this process is conducted properly and ethically.

For participants below the legal age of consent in the relevant setting, consent from a parent or guardian is also required unless doing so would put the participant at risk, in which case local child protection protocols and the best interest principle should guide the decision. The referral process should be explained clearly, in plain language appropriate to the participant's age and comprehension level. The interviewer should confirm the participant's understanding before proceeding, and should not assume that nodding or silence constitutes meaningful consent.

If consent is not obtained, the interviewer will leave an information card and contact details, including information for the nearest mental health services available in the area and suggest that the participants talk about their worries with an adult they trust (like a parent, relative or teacher). Note that declining a referral does not mean a participant's needs are not real or serious. Documentation of a declined referral (without identifying information) supports monitoring of the overall referral system and helps identify where barriers to consent may need to be addressed.

Step 5: Initiate referral by immediately informing the referral focal point

With consent obtained, the referral process can be initiated by immediately informing the referral focal point about the need for a referral. This step is vital to ensure that the individual is connected with appropriate mental health services without delay. Communication channels such as email, phone, or referral management systems should be used to notify the referral focal point promptly. -Response time requirements are:

- **Low or moderate risk:** The service provider should make contact with the participant within **one week**.
- **High risk:** The service provider must make contact within **24 hours**, or immediately if the participant is in acute distress at the time of the interview.

These timeframes are not targets to aim for, rather, they are minimum standards. Implementing organizations should work to establish service agreements in Step 0 that make these response times reliably achievable, not aspirational. Where existing services cannot meet these requirements, dedicated on-call counsellor capacity must be established before data collection begins.

Step 6: Referral focal point/provider to contact participant in a timely way

The referral focal point or service provider contacts the participant within the required timeframe, using the contact channel and approach to which the participant consented. The nature and intensity of follow-up should be proportionate to the assessed risk level.

All contact must respect the participant's previously given consent, protect their privacy, and be conducted in a manner sensitive to their circumstances, including age, gender, cultural context, and any specific vulnerabilities. In settings where stigma around mental health is significant, care should be taken to ensure that the manner of contact does not inadvertently disclose to others in the participant's household or community that they have been referred for mental health support.

Where a referral focal point is unable to make contact within the required timeframe, for example, because contact details provided were incorrect, or the participant is unreachable, this should be documented and escalated to the team supervisor. A protocol for what to do when contact cannot be made should be established as part of Step 0 planning.

Step 7: Record the referral made

Finally, it is essential to document the entire referral process, in line with responsible data for children (RD4C) principles and secure data storage guidance. This includes recording the services referred to, the date of the referral, and any follow-up actions taken. Using standardized referral forms and digital tracking systems provided ensures that all relevant information is captured accurately. Proper documentation is crucial for monitoring and evaluating the referral process and outcomes, and serves two essential functions: it enables real-time monitoring of whether referrals are being completed within required timeframes, allowing problems to be identified and addressed quickly, and it provides the data needed to evaluate the effectiveness of the referral system over time and make improvements for future data collection efforts.

Ethical processes and guidelines for implementing MMAPP

General safeguarding, survey implementation, and [responsible data for children](#) guidelines should be observed to ensure data quality including continuous supervision of fieldwork activities and monitoring using data-check protocols.

Follow principles and standards that guide the conduct of research involving human subjects to ensure data collection is conducted in a manner that respects the rights, dignity and well-being of the individuals participating in the survey. Ethical principles in the administration of the tool include:

- **Informed consent and assent:** Informed consent is a cornerstone of ethical research. Participants must be fully informed about the survey's purpose, what it will involve, the types of questions they will be asked, and how their data will be used. This information should be provided in a clear, accessible manner appropriate for

the age and comprehension level of the participants. Consent and assent should be obtained from all participants, and for minors, from their parents or guardians.

- **Privacy and Confidentiality*:** Ensuring the privacy and confidentiality of participants is critical. This involves safe information management practices to protect the data collected from unauthorized access or disclosure. Confidentiality is especially important in situations where respondents may be identified as being at risk and need to be referred to mental health and psychosocial services. In such cases, confidentiality must be balanced with the need to ensure the respondent receives appropriate care and support. Mandatory reporting may also be a factor, but best interest principle must prevail.
- **Respect for autonomy:** Respecting the autonomy of participants means recognizing their right to make informed decisions about their participation in the survey. Participation must be entirely voluntary, without any form of coercion or undue influence. Participants should feel free to withdraw from the survey at any point without any negative consequences.
- **Beneficence:** The principle of beneficence involves taking proactive steps to maximize benefits and minimize potential harm to participants. This includes providing participants with information about available support services and establishing a referral/safety protocol for those identified as needing further care. Researchers should ensure that participation in the survey does not cause psychological distress or harm.

Contingency measures

Even with thorough preparation, situations may arise during data collection that require contingency responses. The following minimum contingency plans should be established before data collection begins:

- **Service unavailability.** Where a referred service becomes unavailable during the data collection period due to closure, capacity limitations, or other disruptions, alternative options must be ready to activate immediately. These should include national helplines, online resources, and contacts at other organizations providing MHPSS support in the area. In humanitarian settings, where service availability can change rapidly, the service map developed in Step 0 should be reviewed and updated regularly throughout the data collection period.
- **Participant refusal of referral.** Where a participant declines a referral, this should be documented respectfully and without pressure. The information card with local service contacts should be provided, and the participant should be encouraged to seek support in their own time. Patterns of refusal across the dataset may indicate barriers such as stigma, distrust, or practical obstacles that should be reported to the team supervisor and addressed where possible.
- **Acute distress or emergency during the interview.** A clear protocol must be in place for situations where a participant becomes acutely distressed or discloses an immediate risk to their own safety during the interview. This protocol should specify: when to pause or end the interview; how to provide immediate support; how to contact emergency services or the referral focal point; and how to document the incident. Interviewers must be trained on this protocol and should have emergency contact numbers accessible during all data collection activities. The protocol should be developed in consultation with local mental health professionals and should reflect local legal and service contexts.

5.4. MMAPP Costing Considerations

The costs associated with implementing the MMAPP questionnaire at the population level include the cultural adaptation of the instrument and related materials, translation where needed, identifying or setting up referral pathways and systems, additional training and interview time in the field, as well as costs related to data processing and analysis. However, because the MMAPP questionnaire and its accompanying implementation package are

available for use at no charge, incorporating it into existing household surveys should not significantly increase costs, especially if the survey already includes data collection on adolescents and young people.

Integrating the MMAPP questionnaire into ongoing household surveys involves adding about 33 questions to an existing questionnaire, which typically takes up to 15 minutes of additional interview time. The training required to prepare fieldworkers to administer the MMAPP questionnaire is approximately 1.5 days. This minimal additional time ensures that the MMAPP questionnaire can be effectively incorporated into routine data collection efforts without substantial financial or logistical burdens.

Costing should also account for the referral system itself, including the cost of any MOUs, information materials, dedicated counsellor time, and monitoring mechanisms. Where MMAPP is being implemented in a setting with limited existing services, the cost of establishing minimum referral capacity should be budgeted as a non-negotiable prerequisite, not treated as optional. Failing to budget for adequate referral capacity is not a legitimate cost-saving measure, it is an ethical gap that should preclude implementation.

Section 6: The MMAPP Questionnaire Scoring, Cut-offs, Indicators, and Reporting

The MMAPP Questionnaire is designed to generate data to produce population-level prevalence estimates relevant to mental health among adolescents and young people aged 15-24 years old. Currently, MMAPP includes measures of four mental health-related domains across 35 items: symptoms of depression and anxiety, functional limitation due to depression and anxiety, suicidality, and mental health care-seeking and connectedness. In the following sections, we first describe the scoring procedure of depression and anxiety symptoms items; then discuss nine global mental health indicators across the four mental health domains that can be generated from MMAPP for population-level monitoring.

6.1. Scoring of the MMAPP Questionnaire

Administration of the **MMAPP Domain 1: Symptoms of Depression and Anxiety Questionnaire (MMAPP – DA)** provides data to generate MMAPP Depression Total score, Anxiety Total Score, and Depression and/or Anxiety Total Score. [Annex A - MMAPP Questionnaire with Scoring Tool for Data Collection](#) includes instructions for generating these scores embedded within the paper-and-pencil version of the data collection tool.

Responses to MMAPP Domain 1 questionnaire can also be used generate scores that are equivalent to the commonly used clinical tools such as the Patient Health Questionnaires (PHQ-9, PHQ-A) and Generalized Anxiety Disorder (GAD-7). [Annex D – MMAPP scoring guide](#) provides the MMAPP scoring procedure and formula for MMAPP Depression and Anxiety scores, as well as these equivalency scores from Domain 1 responses:

Table 3. The MMAPP Domain 1 Scores Description

Score	Range	Key Items
MMAPP Depression Total	0 – 45	MMAPP01–04, 11–21 (15 items)
MMAPP Anxiety Total	0 – 39	MMAPP05–10, 19–25 (13 items)
PHQ-A Equivalent	0 – 27	9 items derived from MMAPP (requires all 15 MMAPP Depression items to be administered)
PHQ-9 Equivalent	0 – 27	9 items derived from MMAPP (requires all 15 MMAPP Depression items to be administered)
GAD-7 Equivalent	0 – 21	MMAPP02, 05, 08–10, 19, 23 (7 items; requires the 5 depression screening items and all 13 MMAPP Anxiety items to be administered)

For **Domain 2: Functional Limitations due to Depression and Anxiety (MMAPP – FL)** items, the simple sum of the three items provided should be used. If the functional limitation score > 0 , i.e., if participants report any level of functional limitation due to depression and anxiety in any of the three items, they are considered to have functional limitation in reporting.

Domain 3: Suicidality (MMAPP – SU) items are to be reported at the item level, and do not require an additional scoring procedure.

For **Domain 4: Mental Health Care-seeking and Connectedness (MMAPP – CC)**, the items (MMAP_CC1-5) can be reported at the item level, and do not require additional scoring procedure; and consider if a participant respond to any relevant item for the indicator (See [Annex I - Description of MMAPP Indicators and Corresponding Items](#)) sometimes (1), often (2), and always (3) (> Never (0)), the participant qualifies for having access to mental health care or social supports for mental health for the relevant indicator of interest.

Table 4. MMAPP Domain 4 Indicators Scoring fomula

Indicator #	Indicators for Domain 4: Mental Health Care-seeking and Connectedness	Indicator-specific scoring equation
7	Professional help-seeking for mental health among adolescents and young people	$(MMAP_CC4 + MMAP_CC5) > 0$
8	Informal help-seeking for mental health among adolescents and young people	$(MMAP_CC1 + MMAP_CC2 + MMAP_CC3) > 0$
9	Any help-seeking for mental health among adolescents and young people	$(MMAP_CC1 + MMAP_CC2 + MMAP_CC3 + MMAP_CC4 + MMAP_CC5) > 0$

6.2. Selecting Cut-off Scores for Domain 1: Depression and Anxiety

Once the MMAPP depression and anxiety total scores are calculated for participants, these scores can be assessed against validated *cut-off* scores to generate population-level prevalence estimate.

A *cut-off* is the score used to classify someone as “screen-positive” (likely to have clinically significant symptoms) versus “screen-negative.” In MMAPP, the main goal of cut-offs is **population-level estimation** (e.g., “What percent of adolescents in the country are likely experiencing clinically significant depression/anxiety symptoms?”), **not** making a diagnosis for an individual adolescent.

Why cut-offs matter

Cut-offs matter because they determine how many adolescents are counted in the “needs support” group. Selecting the “right” cut-off is critical to generate accurate and valid estimates of the population level prevalence. Use of inappropriate cut-off can lead to high societal and policy costs because they affect:

- **Public health estimates and planning:** A low cut-off can inflate prevalence, leading to overestimation of need and potentially misallocation of limited services.
- **False positives and stigma:** If many adolescents screen positive but would not meet clinical diagnostic criteria, families and systems may be burdened, and adolescents may be unnecessarily labeled.
- **False negatives and missed need:** If a cut-off is too high, adolescents who *do* need help may be missed, leading to underestimation of burden and underinvestment in services.

This is why validity guidance in global/humanitarian mental health emphasizes that tools can both **miss people who need care and incorrectly label people who don't**, and that these errors can have real consequences for service delivery and interpretation of population burden³³.

What “best cut-off” means: sensitivity, specificity, and trade-offs

Even with a psychometrically sound instrument, **there is no perfect cut-off**. Any cut-off creates a trade-off:

- **Sensitivity:** among adolescents who truly need mental health services for depression and anxiety (based on a gold-standard clinical interview), the proportion who are identified as MMAPP-depression-positive or MMAPP-anxiety-positive.
- **Specificity:** among adolescents who truly do *not* need mental health services for depression and anxiety (based on a gold-standard clinical interview), the proportion who are identified as MMAPP-depression-negative or MMAPP-anxiety-negative.

Lowering the cut-off usually **increases sensitivity** (fewer false negatives) but **reduces specificity** (more false positives). Raising the cut-off usually **increases specificity** but **reduces sensitivity**.

Two additional concepts are crucial for population surveys:

- **Positive predictive value (PPV)** depends heavily on **prevalence**. Even a tool with good sensitivity/specificity can have a modest PPV when the true prevalence is low—meaning many screen-positives are false positives.
- **The “best” cut-off depends on purpose.** A clinical service might prioritize sensitivity (don't miss cases), while a population survey often needs a more careful balance to avoid inflating estimates and overwhelming follow-up systems.

Validation papers of MMAPP-related depression and anxiety measures illustrate this. For example, validation of the anxiety scale (PHQ) in Nepal found that even when using clinically validated cut-offs, anxiety screening can still produce **high false-positive rates**, and unadjusted population prevalence estimates could be inflated several-fold if cut-offs are not chosen and interpreted carefully³⁴. Similarly, the Belize validation of a widely-used anxiety and depression scale (Revised Children's Anxiety and Depression RCADS) recommends that **different cut-off scores be selected for different purposes** whether that be clinical, public health, research, or another initiative. Lower cut-off scores increase sensitivity — that is, the ability to identify adolescents in need of support — but also increase the rate of false positives,

³³ Kohrt BA, Kaiser BN. Measuring mental health in humanitarian crises: a practitioner's guide to validity. *Confl Health*. 2021;15(1):72. Epub 2021/09/28. doi: 10.1186/s13031-021-00408-y. PubMed PMID: 34565416; PMCID: PMC8474916.

³⁴ Luitel NP, Rimal D, Eleftheriou G, Rose-Clarke K, Nayaju S, Gautam K, Pant SB, Devkota N, Rana S, Chaudhary JM, Gurung BS, Åhs JW, Carvajal-Velez L, Kohrt BA. Translation, cultural adaptation and validation of Patient Health Questionnaire and generalized anxiety disorder among adolescents in Nepal. *Child Adolesc Psychiatry Ment Health*. 2024;18(1):74. Epub 20240619. doi: 10.1186/s13034-024-00763-7. PubMed PMID: 38898474; PMCID: PMC11188246.

which may burden mental health programs and heighten the risk of stigmatization. Higher cut-off scores reduce false positives but risk underestimating prevalence and missing adolescents who would benefit from services³⁵.

Why local validation is ideal and what to do when it's not available

Best-case scenario: You have a **country- and language-specific clinical validation** of the MMAPP depression/anxiety items against a gold-standard diagnostic interview (or another strong clinical criterion). This allows you to choose a cut-off based on observed performance in *that* setting and language.

But even with local validation, you still must choose a trade-off:

- If your survey context makes underreporting likely (e.g., limited privacy), you might value **higher sensitivity** to reduce false negatives.
- If your early results show very high screen-positive rates (suggesting many false positives), you may need **higher specificity** to avoid inflating prevalence estimates.

If local validation is not available: MMAPP uses a structured, evidence-informed approach to select a defensible cut-off using the closest available evidence and then checks whether results “make sense”, e.g., if the MMAPP-depression or MMAPP-anxiety rates are too high or too low given the population characteristics. It is also recommended to conduct sensitivity analysis, such as examining MMAPP-depression or MMAPP-anxiety prevalence rates by different cut-off thresholds and compare with existing prevalence rates with similar populations; comparing prevalence rates by different cut-off thresholds by different subgroups (e.g., age groups, gender)

Box 5. Example MMAPP cut-off selection workflow for MICS and related MMAPP integration

The following is the practical step-by-step process used for MMAPP cut-off selection, used for population-level prevalence estimation.

Step 1: Clarify the purpose of the cut-off

The MMAPP questionnaire can be used for multiple purposes, and different considerations are required depending on the purpose. See [Guidance by Use Case and Cut-Off Selection Decision Guideline](#) section below for MMAPP cut-off selection for the following purposes:

- For Estimating Population-Level Prevalence
- For Programme Evaluation and Research Purposes
- For Programmatic Decision-Making and Monitoring

Prior to MMAPP questionnaire administration, one should also decide **which** cut-off will be linked to a **referral protocol**. Local cut-offs and/or consultation with local clinicians should be used to determine appropriate thresholds for referral; the users may consider different thresholds and safeguards.

³⁵ Carvajal-Velez L, Ahs JW, Lundin A, van den Broek M, Simmons J, Wade P, Chorpita B, Requejo JH, Kohrt BA. Validation of the Kriol and Belizean English Adaptation of the Revised Children's Anxiety and Depression Scale for Use With Adolescents in Belize. *J Adolesc Health*. 2023;72(1s):S40-s51. Epub 20221116. doi: 10.1016/j.jadohealth.2022.10.002. PubMed PMID: 36400635.

Step 2: Check for an existing local validation

- **Country-specific validation** of the same tool/items in the same setting.
- If not available, check **language-specific validation** (e.g., Spanish version, Swahili version) that is likely close in meaning and response style.

Step 3: If no direct validation exists, use the “next-best” evidence

Work down a hierarchy:

- **Validation of a very similar tool** (e.g., PHQ-A / GAD-7 variants, RCADS short forms) in a comparable adolescent population.
- **Cut-offs** from the most similar contexts and languages.
- **If no reasonable validated cut-off is available to use**, then consult with local clinicians and mental health researchers for guidance. For the most up-to-date information on validated cut-offs, please contact the UNICEF Child and Adolescent Mental Health Measurement team at ITY-CAMH-Data@unicef.org.

Step 4: Check whether different language versions may need different cut-offs

If a country uses multiple languages (or translated administration without a fully validated version), consider:

- whether **response patterns differ by language**, and
- whether separate cut-offs are warranted (or whether results should be presented with explicit caveats and sensitivity checks).

Step 5: Expert and stakeholder review

Cut-off selection is not done in isolation:

- **UNICEF + external expert review**, and
- **review with government partners** to ensure interpretability, feasibility, and alignment with policy needs.

Step 6: Document decisions and run sensitivity analyses

For transparency and credibility:

- Report the primary cut-off and the rationale (local validation vs regional/harmonized evidence).
- Conduct and document **sensitivity analyses by examining the** prevalence rate by different cut-off thresholds (e.g., slightly higher and lower) to show how prevalence estimates may change depending on the cut-offs; and given the existing evidence of prevalence rate in the context and population, which cut-off threshold “makes sense”.
- Where possible, consider reporting **adjusted prevalence estimates** if sensitivity/specificity statistics from validation studies are available,³⁶ using [Annex H. Adjusted Population Prevalence Calculator](#).

Guidance by Use Case and Cut-Off Selection Decision Guideline

The appropriate approach to cut-off selection and score use depends on the primary purpose of data collection. The three use cases below — population-level prevalence estimation, programme evaluation and research, and programmatic decision-making and monitoring — have distinct requirements and warrant different analytical approaches. Use the guidance and decision aid table below to determine the appropriate approach for your context.

³⁶ *ibid.*

For Estimating Population-Level or Sample-Specific Prevalence

The primary intended use of the MMAPP is to generate population-level prevalence estimates of depression and anxiety symptoms among adolescents and young people. In this context, a cut-off score is required to classify individuals as MMAPP-Depression or MMAPP-Anxiety symptoms positive or negative, and the choice of cut-off directly determines the estimated prevalence. The following guidance applies:

1. **Use a locally validated, clinical cut-off whenever available.** A cut-off derived from a country- and language-specific clinical validation study (validated against a gold-standard diagnostic interview in the same population) provides the most defensible basis for prevalence estimation. Follow Steps 1–7 of the cut-off selection workflow above to identify and document the most appropriate cut-off for your context.
2. **Where local clinical validation is not yet available, consult the UNICEF CAMH team.** The MMAPP team is actively developing regionally harmonized cut-off scores. In the interim, contextually appropriate guidance can be provided on a case-by-case basis, including on the use of non-clinical, benchmarked cut-off approaches (see note below).
3. **Apply adjusted prevalence estimates** when observed screen-positive rates are 25% or higher. At screen-positive rates > 25%, false positives may make a proportionally large contribution to the observed proportion, risking overestimation of true population burden. In these cases, unadjusted observed rates should not be reported as the primary prevalence estimate. Use the [Annex H. Adjusted Population Prevalence Calculator](#) to produce corrected estimates, and report both the raw observed rate and the adjusted estimate with appropriate caveats. It is important to note that the adjustment requires sensitivity and specificity statistics from the clinical validation study with the target population; and these statistics may vary depending on the population and context. If there is no local/population-specific validation study available, please consult with local mental health experts and the UNICEF CAMH team.
4. **Always run and report sensitivity analyses.** Report prevalence estimates at the primary cut-off and at least one higher and one lower alternative to show how estimates shift. This supports transparency and allows readers to assess the robustness of findings.
5. **The MMAPP is not intended for individual-level diagnostic screening.** Population-level cut-offs are calibrated for aggregate estimation and should not be applied to classify or make decisions about individual adolescents. See the Reporting Considerations section for appropriate language.

Note on non-clinical cut-off approaches: Local clinical validation against a diagnostic interview is the gold standard for cut-off selection. However, in settings where clinical validation is not available, the MMAPP team is currently exploring benchmarked, non-clinical approaches to cut-off selection — for example, using functional limitation variables as an anchor criterion. These approaches aim to provide defensible and meaningful population-level estimates in the absence of clinical reference data. They remain under development and would lead to different interpretations and implications for policy and programming. Implementers interested in applying these methods should contact the UNICEF CAMH team for current guidance.

For Programme Evaluation, Monitoring, and Research Purposes

When the MMAPP is used to evaluate and monitor a programme or intervention, or for research purposes, for example, to assess whether a mental health programme has changed symptom levels among participants, the use of cut-off scores is generally **not recommended** as the primary analytical approach. Instead, a continuous approach to analysis is recommended, for example, looking at change in mean scores from pre- to post-intervention. The following approach is preferred:

1. **Use continuous pre- and post-scores and change scores as the primary outcomes.** Analyze and report the MMAPP Depression Total Score (MMAPP_DEP_SUM) and MMAPP Anxiety Total Score (MMAPP_ANX_SUM) — or PHQ-A, PHQ-9, and GAD-7 equivalents where appropriate — as continuous variables at baseline and follow-up. Report mean change scores with confidence intervals and use appropriate statistical tests for pre-post comparisons (e.g., paired t-test, mixed-effects model for repeated measures).
2. **Report changes in symptom levels, not changes in prevalence rates.** Describing programme effects in terms of symptom score change — e.g., "average depression scores decreased by X points" — is more precise and less susceptible to threshold artefacts than reporting changes in the proportion above a cut-off.
3. **Cut-off-based comparisons may be reported as supplementary information only.** If a validated cut-off is available and stakeholders require a categorical indicator (e.g., for reporting to funders), changes in the proportion above the cut-off may be reported alongside the continuous score analysis, but should be clearly labelled as supplementary and interpreted with caution.
4. **The MMAPP is not a clinical diagnostic instrument.** In research and evaluation contexts, avoid language that implies clinical diagnosis. Frame findings in terms of self-reported symptom levels. See the Reporting Considerations section for approved language templates.

For Programmatic Decision-Making and Monitoring

Programmes may use MMAPP data to support planning, resource allocation, or monitoring of mental health needs within a target population — for example, to track whether symptom levels are improving in a programme area over time, or to compare needs across sub-groups. Cut-offs can be used as an eligibility criterion to select participants for a programme (e.g., adolescents above an MMAPP total score of 10 are selected for inclusion in the intervention), but this should not be conflated with making a diagnosis, nor ever to be used for clinical screening purposes for mental health treatment. Many interventions have shown mental health benefits for adolescents even when they do not meet strict clinical criteria for a condition. The appropriate analytical approach depends on the specific decision being made and should be determined on a case-by-case basis in consultation with the UNICEF CAMH team. The following principles apply:

1. **If applicable, select a MMAPP threshold for eligibility in the program or intervention.** The MMAPP questionnaire may be used to define eligibility thresholds for non-clinical, tiered mental health, wellbeing, and/or psychosocial support interventions that are offered to individuals experiencing elevated levels of psychological distress. For programs requiring a minimum level of symptoms and/or functional impairment, a threshold should be carefully selected in consultation with intervention developers and local mental health experts, taking into account the type and intensity of the intervention (e.g., lower thresholds for indicated prevention compared to treatment, and higher thresholds for intensive mental health services than for more generalized support support). In contrast, universal programs, i.e., offered to all adolescents in the target population do not require MMAPP-based eligibility criteria.
2. **For tracking symptom trends over time or across sub-groups:** use pre- and post-scores and change scores. Continuous MMAPP total scores provide more sensitive and reliable information about change at the programme level than categorical cut-off-based indicators. Mean scores, score distributions, and change scores should form the basis of routine monitoring dashboards and programme reports.
3. **For sample-wide prevalence rate decisions:** use locally validated cut-off scores, applied with caution. When a programme needs to estimate the proportion of the target population experiencing elevated symptoms — for example, to size service demand or justify resource requests — a locally validated cut-off may be applied to produce an estimated prevalence rate for the programme population. This should follow the same procedures as population-level prevalence estimation (see above), including the use of adjusted estimates where the observed screen-positive rate is 25% or higher.

4. **Do not use MMAPP scores alone for individual-level diagnosis.** The MMAPP is a population-level measurement tool. Scores should not be used to label individuals as having a mental health condition based on their screening result alone. Formal diagnoses can only be made by local clinicians. High scores on MMAPP can be used to initiate referral protocols following the safeguarding and referral procedures set out in Section 5, but diagnoses can only be made in clinical evaluations.
5. Consult the UNICEF CAMH team for context-specific guidance. Given the diversity of programmatic contexts in which MMAPP data are collected, cut-off selection and score use for monitoring and decision-making should be made in consultation with experts prior to finalizing the analytical approach. Contact UNICEF CAMH team for resources and assistance.

Table 5. Cut-off score uses decision considerations by use cases

Primary Use Case	Use Cut-off?	Primary Metric	Key Requirements
Estimating population-level or sample-specific prevalence	Yes, required	Prevalence rate (%) above validated cut-off; adjusted estimate if observed rate $\geq 25\%$	Locally or regionally validated cut-off; sensitivity analyses; Adjusted Population Prevalence Calculator (Annex H)
Programme monitoring, evaluation, and research	Not recommended	Pre- and post-total scores; mean change scores with confidence intervals, score distributions, and change scores over time or across sub-groups	Baseline and follow-up or repeated data collection to generate MMAPP total scores; standardized data entry and analysis procedures, with appropriate statistical test for change (e.g., paired t-test, mixed-effects model);
Evidence/Data generation for decision making	For Eligibility Assessment: recommended	For Eligibility Assessment: Use cut-offs relevant to the intervention and context for determining participant eligibility	For Eligibility Assessment: Locally or regionally validated cut-off
	sample-wide prevalence: recommended, with caution	Estimated prevalence rate (%) in the programme population; adjusted estimate if observed rate $\geq 25\%$	Locally validated cut-off; adjusted prevalence calculator if needed; do not use for individual-level screening; consult UNICEF CAMH team
Individual-level clinical diagnosis	Never	N/A	The MMAPP is not designed or validated for individual clinical screening or diagnosis. MMAPP can identify individuals at greater risk of mental health conditions, but diagnoses can only be made by specialized clinical instruments and trained professionals.

6.3. The MMAPP Indicators for Prevalence Estimate Reporting

The scores and responses generated from the MMAPP Questionnaire can be used to report on nine core indicators across four domains 1) symptoms of depression and anxiety, 2) functional limitations, 3) suicidal thoughts and behaviors, and 4) mental health care-seeking and connectedness. These indicators are designed to enable standardized, comparable reporting on adolescent and youth mental health using population- and sample-specific prevalence statistics. The primary purpose of these indicators is population-level monitoring: generating nationally and globally comparable prevalence estimates that can inform policy, track trends, and support accountability for adolescent mental health. The first four of these MMAPP indicators were adopted by the GAMA Advisory Group as recommended global adolescent health indicators, supporting their uptake into national and subnational monitoring systems. However, they can be used to report on the prevalence estimates of a specific target sample/population as well (See [Reporting on MMAPP Indicators: Population- and Sample-Specific Prevalence Statistics Reporting Considerations](#) section below).

We currently do not provide indicators or reporting examples for MMAPP results for other purposes—such as programme evaluation and research, or programmatic decision-making and monitoring—given that reporting requirements and needs can vary substantially across contexts, programmes, and studies. Please reach out to UNICEF CAMH team at ITY-CAMH-Data@unicef.org for context-, programme-, and study-specific guidance.

See [Annex I – MMAPP Indicators Description and Reporting Templates](#) for the description of indicator-specific numerator, denominator, and relevant items in the MMAPP Questionnaire. See Manoj et al. (2026, unpublished manuscript) for more details.

Table 6. MMAPP Indicators Definition

Indicator	Definition
Symptoms of depression and/or anxiety among adolescents and young people	
1 Symptoms of depression among adolescents and young people	Percentage of adolescents and young people reporting symptoms of depression during the last 2 weeks
2 Symptoms of anxiety among adolescents and young people	Percentage of adolescents and young people reporting symptoms of anxiety during the last 2 weeks
3 Symptoms of depression and/or anxiety among adolescents and young people	Percentage of adolescents and young people reporting symptoms of depression and/or anxiety during the last 2 weeks
Functional limitations due to depression and/or anxiety	
4 Functional limitations among adolescents and young people with symptoms of depression and/or anxiety	Percentage of adolescents and young people reporting symptoms of depression and/or anxiety during the last 2 weeks, who report functional limitations related to those symptoms
Suicidal thoughts and behaviors	
5 Suicidal ideation among adolescents and young people	Percentage of adolescents and young people reporting suicidal thoughts in the last 2 weeks
6 Suicide attempt in the last 12 months among adolescents and young people	Percentage of adolescents and young people reporting a suicide attempt in the last 12 months

Mental health care-seeking and connectedness³⁷

7	Professional help-seeking for mental health among adolescents and young people	Percentage of adolescents and young people who had spoken with a mental health or other health professional about their mental health during the last month
8	Informal help-seeking for mental health among adolescents and young people	Percentage of adolescents and young people who had spoken with someone in their family, peer, or community support networks about their mental health during the last month
9	Any help-seeking for mental health among adolescents and young people	Percentage of adolescents and young people who had spoken with someone in their informal or professional support network about a problem or worry related to their mental health during the last month

6.4. Reporting on MMAPP Indicators: Prevalence Statistics Reporting Considerations

The MMAPP questionnaire generates population-level estimates of mental health symptoms among adolescents and young people. It is not a clinical diagnostic instrument, and findings must never be reported in ways that imply clinical diagnosis or labelling of individuals or populations. This section sets out the key principles for responsible reporting. See [Annex I – MMAPP Indicators Description and Reporting Templates](#) for adaptable language templates for each MMAPP indicator.

Accurate, carefully framed reporting matters **for reasons of technical correctness, as well as for how the results will be interpreted and used by different stakeholders**. Language that overstates findings, for example, by describing screen-positive adolescents as "having depression" rather than "reporting symptoms of depression" can contribute to stigma, generate unwarranted alarm, and undermine public trust in data. Conversely, language that understates findings by being overly cautious can fail to convey the genuine urgency of adolescent mental health needs. The templates below are designed to strike this balance.

Key Considerations for Reporting:

- MMAPP findings describe the proportion of adolescents and young people who self-report experiencing symptoms at a level consistent with clinical significance. They do not establish whether any individual has a diagnosable mental health condition. All reporting should reflect this. The phrases "symptoms of depression," "symptoms of anxiety," and "self-reported symptoms" are appropriate. Phrases such as "have depression," "are depressed," "diagnosed with anxiety," or "suffer from a mental health disorder" are not appropriate and must be avoided.

³⁷ Note that while MMAPP-CC items used for Indicators 7, 8, and 9 are asked of all participants, reporting on these indicators should be limited to those who reported experiencing mental health symptoms on MMAPP. See Annex I for details.

- Prevalence estimates are meaningless without knowing what cut-off was applied. Every report of MMAPP prevalence data should specify: the cut-off score used; whether it was derived from a local clinical validation study, a language-specific validation, or a regionally harmonized estimate; and, where relevant, what sensitivity and specificity values were used to generate any adjusted estimate. This information is essential for readers assessing the reliability of the findings and for future comparability across studies.
- All prevalence reports should include estimates at the primary cut-off and at least one higher and one lower alternative, so readers can assess how sensitive the headline figure is to the choice of threshold. This is particularly important for settings where no local clinical validation is available.
- Results from the suicidality domain require particular care. Findings should be reported in terms of self-reported thoughts and behaviors, and not in ways that sensationalize, dramatize, or inadvertently normalize suicidal ideation. Reported figures should always be accompanied by contextual information about available support services. Media and public communications reporting on MMAPP suicidality findings should follow [WHO safe messaging guidelines for suicide reporting](#).
- Where sample sizes permit, findings should be disaggregated by age group, sex, and other relevant sociodemographic characteristics. Aggregate figures should always be accompanied by enough contextual information for readers to interpret them accurately, including the population surveyed, the recall period, the cut-off applied, and any known limitations of the data.
- If the prevalence rates are 25% or higher, the adjusted prevalence estimates should be reported instead. [Annex H](#) provides an [Adjusted Population Prevalence Calculator](#). At 25% or higher observed prevalence rates, even from a population-representative sample, there is a greater risk of overestimated population prevalence due to the oversized contribution of the false positive rate.

Section 7: The MMAPP Initiative, Next Steps

MMAPP serves a broad range of users, including researchers, practitioners, policymakers, young people, and various other stakeholders. Researchers can utilize robust data to conduct detailed studies and produce evidence-based recommendations. Practitioners can apply actionable insights to inform programs, service planning, and community-level interventions. Policymakers can leverage data to design, implement, and refine mental health policies that address youth needs. Young people themselves can engage with the data to advocate for appropriate services and support. This section provides a brief overview of strategic priorities for the MMAPP initiative as of 2026, to advance the goal of improving the quality and availability of population-level mental health data for adolescents and young people.

As of 2023, the MMAPP questionnaire was integrated into UNICEF's flagship, multi-topic data collection program which prioritizes indicators on the well-being of children, adolescents and their families: the Multiple Indicator Cluster Surveys (MICS)³⁸. By integrating the tool into MICS, it is now possible to analyze mental health data alongside key socio-demographic, education, health and child protection indicators, helping expand the understanding of the environment in which adolescents and young people live and how these could be associated with their mental health.

Looking ahead, the use of MMAPP is expected to contribute to the field of adolescent mental health in a range of ways:

- As more data become available across countries and regions, advanced analysis will yield greater insight into the prevalence and burden of adolescent mental health conditions; To ensure comparability, data will be standardized across regions, enabling robust cross-country comparisons on symptoms of depression and anxiety, functional impairment, suicidality, social connectedness and care-seeking, and other risk and protective factors.
- With the accumulation of large global datasets, empirically grounded prediction of population-specific prevalence and cut-offs using automated analytic tools can be applied to improve psychometric rigor and precision of population-level estimates while reducing the analytic burden. Potential applications include predictive modeling of mental health outcomes, identifying emerging trends across regions, and enhancing the precision of interventions tailored to individual risk profiles.
- As more data are gathered, we will be able to explore the intersecting social and structural determinants of mental health, such as socioeconomic status, education, family dynamics, and environmental factors. This analysis will help revolutionize how researchers and practitioners can address complex issues in mental health and psychosocial wellbeing, ensuring more targeted and holistic interventions.
- As the MMAPP questionnaire is rolled out across increasingly diverse cultural settings, the underlying measurement model will be refined to better account for cultural variation in the expression and experience of mental health symptoms and conditions. This effort will include systematic testing of differential item functioning across diverse cultures, contexts, and populations, as well as qualitative investigation of

³⁸ UNICEF's Multiple Indicators Cluster Survey <https://mics.unicef.org/>

adolescents' and young people's lived experiences of mental health in diverse contexts. Together, these efforts will strengthen cross-cultural validity, measurement equivalence, and comparability of MMAPP scores, and ensure that equity considerations are embedded throughout the tool's ongoing development.

- The inclusion of additional mental health domains with high policy relevance is currently under active exploration by the UNICEF CAMH team and its technical and academic partners. Priority is being given to domains where: (a) population-level prevalence data are scarce, but policy demand is high; (b) validated, brief measurement approaches suitable for integration into large-scale population-representative surveys are feasible to develop; and (c) inclusion would meaningfully extend the tool's utility for national and sub-national policy planning, resource allocation, and programme design. We will actively engage youth leaders and youth organizations in advocacy efforts, ensuring that they are key partners in disseminating findings. This will involve co-creation of campaigns, youth-led workshops, and creative platforms such as social media to amplify voices and disseminate results in innovative ways that resonate with adolescents and their communities.
- We will explore how MMAPP mental health data can inform and advocate for new policy and programmatic approaches to critical cross-sectoral issues — including climate change, education, AI and technology use, job preparedness, and social inequality — and their intersections with adolescent mental health. For example, data could inform research on how climate change affects adolescent mental health, or support the development of interventions that address both educational pressures and mental health outcomes.

These initiatives will not only deepen our understanding of adolescent and youth mental health but will also drive data-informed policies, improved program designs, and enhanced service delivery. By leveraging data to guide programmatic and policy actions, we can more effectively support the mental health and psychosocial wellbeing of adolescents and young people, ensuring a brighter, healthier future.