



COMMUNITY ENGAGEMENT RESEARCH INITIATIVE

Evaluation of the WHO Community Engagement Research Initiative



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Developed to embed community engagement approaches as a critical means of mitigating social impact during the COVID-19 pandemic and beyond

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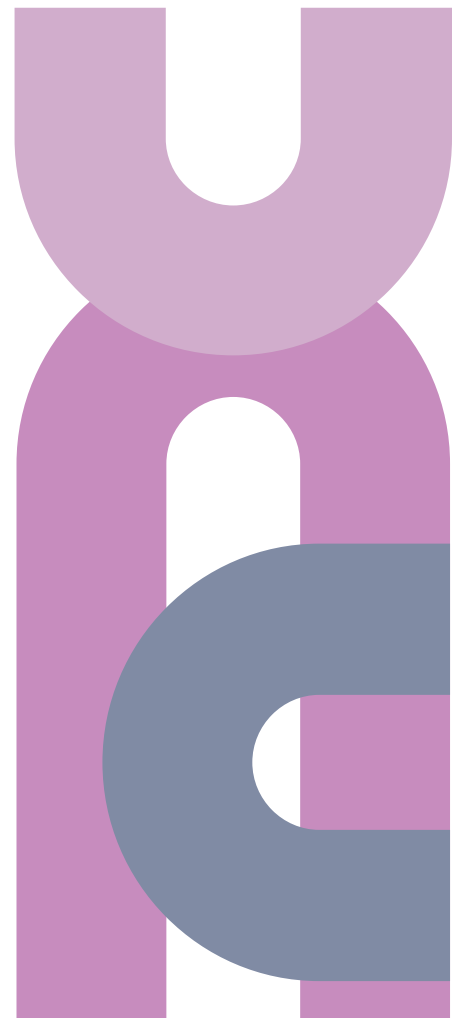


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Abbreviations

CONNECT	Community Network Engagement for Essential Healthcare and COVID-19 Responses through Trust
COP	Community of Practice
COVID-19	coronavirus disease
CRT	country research team
DHI	digital health intervention
DOHA	District Office of Home Affairs
HCW	health-care worker
HEI	Health Equity Initiative
NCHADS	National Center for HIV/AIDS, Dermatology and STD
PI	principal investigator
PLHIV	people living with HIV
SEACO	South East Asia Community Observatory
WHO	World Health Organization





Executive summary

The coronavirus disease (COVID-19) pandemic has exposed inequities and service delivery gaps in national and global health systems. These weaknesses reveal the need for a fundamental reconfiguring of ways of working within health systems to meet the needs of the people they serve. The World Health Organization (WHO) Regional Office for the Western Pacific, in collaboration with WHO headquarters and WHO country offices, led an ambitious Community Engagement Research Initiative to fill critical research gaps and accelerate action in mitigating the impacts of the COVID-19 pandemic on vulnerable populations. Four country research teams (CRTs) carried out evaluative action-based research in Cambodia, the Lao People's Democratic Republic and Malaysia.

Starting from the conceptual foundation of systems theory, the Community Engagement Research Initiative was structured as a proof-of-concept research project that intentionally adopted a relational approach to the commissioning and implementation of action-based research and to the provision of technical support. The Research Initiative aimed to show how relational community engagement processes can emphasize meaningful interactions that place people and communities at the centre of health service delivery and health decision-making, build relationships and strengthen collaborative action, and redress power imbalances and inequities. More broadly, the Research Initiative sought to challenge traditional assumptions underpinning the science of “intervention design” in order to deepen the understanding of how processes of systemic relational engagement can create conditions for transformational change within health systems to support improved health, and how the skills involved in relational community

engagement can be taught and learnt throughout the health workforce and communities, making operational the *WHO Global Competency and Outcomes Framework for Universal Health Coverage*.

The Research Initiative developed a distinctive technical support structure, with a “conceptual framing” founded on a rigorous evidence base provided by developments in the natural sciences, which broadened what counts as data to include the lived experiences of communities, service providers and researchers. The Research Initiative’s support structure provided intensive, bespoke support for the CRTs while also modelling the kinds of behaviours that are fundamental in delivering relational community engagement. The initial health indicator data from the CRTs provide evidence of the success of the research projects in developing innovative ways of engaging communities. In two cases, there is evidence of affecting the health issue, even at this very early stage. The communities engaged by the CRTs included refugees and asylum seekers with mental health issues (Malaysia CRTs), people living with HIV (Cambodia CRT) and rural populations (Lao People’s Democratic Republic CRT), as well as patient managers, community health workers, other health-care workers, district officials, high-level stakeholders, patients and local community members.

The Cambodia team explored how community engagement could better support people living with HIV. Despite the circumstances of the pandemic, which interfered with treatment adherence, in the two months following the intervention, the percentage of patients not retained in HIV treatment care fell from 2.8% to 0.6% in the intervention group compared to 0.9% to 0.7% in the control group. The research team also reported enhanced relationships between health-care workers and patients and improved communication resulting from less formal interactions.

The Lao People’s Democratic Republic team wanted to understand the enabling factors for the uptake of essential services such as family planning, antenatal care, delivery with skilled birth attendants and vaccination delivery among rural populations. The team successfully engaged local governments in participating in their community engagement workshops. Following the community engagement intervention, one village health centre reported that antenatal care clinic attendance climbed to 80%, up from 41% in the corresponding period in the preceding year. Similarly, 34% of deliveries took place at local health centres after the intervention, compared to 12% during the same period in the previous year. The success of the workshops also led to the signing of a memorandum of understanding between the Ministry of Health and the Ministry of Home Affairs.

The evaluation of the Community Engagement Research Initiative identified several key features that enabled the achievement of these and other outcomes and that offer an indication of how the relational community engagement approach can be effective in new settings. Strong, trusting relations should be in place among members of teams seeking to implement and research relational community engagement interventions. These team relations provide a strong foundation for building new relations with new communities. Moreover, commissioners of relational community engagement initiatives need to invest the time and resources required to build such relations. Commissioners also need to be responsive to implementing teams,

allowing them to identify the right time for action-based research work to be conducted. The timeliness of community engagement initiatives may be determined by a specific demand for interventions based on the lived realities of communities. Similarly, specific conditions in health systems can provide a demand for community engagement. Such demands function as mandates for the work, and when these mandates are present, the likelihood of success for the community engagement intervention increases.

The teams that successfully implemented relational community engagement research had distinctive ways of working. They had team leaders whose leadership practice was relational, enabling them to identify people's distinctive skills and allowing team members to “play to their strengths”. Successful teams shared goals and collective values, which allowed them to develop cultures of experimentation, fostered by feelings of safety and trust, and without fear of failure. These teams were able to develop new ways of capturing process data to show how and why outcomes emerged and ways of intervening in health systems to allow for local adaptation. Multidisciplinary teams undertaking relational community engagement research need to be prepared to reflect upon changes within their own teams and be open to bringing in additional skills and expertise, as necessary, as they respond to the dynamic conditions that shape the implementation of their intervention, particularly during health emergencies.

Relational community engagement requires practitioners and researchers to engage with people as persons and not as the “problems” with which they may present. The shift from provider-to-patient to person-to-person relations within this work requires significant changes to how practitioners and researchers communicate with people; however, such changes in ways of communicating can lead to individuals experiencing a sense of empowerment. This empowerment can follow from the feeling of “belonging” to the implementing team and witnessing how the lived experiences of community members have equal importance and equal value in the process. This sense of belonging within the implementing team can also lead to more effective co-design of health interventions and, consequently, a wider reach for these interventions. Finally, engaging local authorities and health ministries can result in them taking ownership of the engagement processes and their outcomes, which can create conditions for transformative change within health systems as a whole. This can lead to these systems functioning more efficiently and delivering services in a more “healthy” fashion.

It is recommended that WHO adopt a new relational approach to community engagement in service delivery throughout the Western Pacific Region to support health and address health inequalities:

Relational community engagement intentionally readies health services to build the conditions that enable all communities, and particularly those marginalized by condition, poverty, ethnicity, sexuality or gender, to express their own health needs in ways that generate partnerships between service providers and communities that are able to respond to these health needs.



This new approach to relational community engagement, the WHO definition of community engagement and the conceptual framing for the Research Initiative are all founded on the recognition that everyone is in relation to each other. They highlight current blind spots in research and practice and identify issues that should be linked but are being addressed in isolation. Relational community engagement provides new opportunities to tackle socially constructed ideas and concepts by addressing the very relationships that give rise to them in a manner that matters in the daily lives of people. For example, while explicitly addressing issues of gender, equity, diversity, inclusivity and rights was beyond the scope of the proof-of-concept research, relational community engagement can respond to the relational contexts of intersectionality, whereby all discrimination is linked, and as a consequence of which, people uniquely experience discrimination and oppression in different ways.

As supported by the observed outcomes of the CRTs, WHO should ensure the clear and widespread adoption of this relational approach to community engagement. In so doing, WHO can enable relational community engagement to become a core approach by which the social determinants of health become embedded across all technical health issue areas and within programming. In this way, relational community engagement can become an inherent way of working that supports WHO as an organization to achieve the priorities and strategic goals stated in the Thirteenth General Programme of Work and beyond. This will, in turn, enable WHO to play a powerful role in convening and supporting the implementation of the principal values and core ethos of relational community engagement among its Member States.

To achieve these aspirational ends, WHO decision-makers must begin by acknowledging and endorsing the transformative potential of relational community engagement – for the health of individuals, communities and organizations, for the implementation of health programming, and for change within whole health systems.



SECTION 1

Background

This report offers an evaluation of the World Health Organization (WHO) Community Engagement Research Initiative, hereafter the Research Initiative, hosted in the Western Pacific Region and led by four country research teams (CRTs) in three countries – Cambodia, the Lao People’s Democratic Republic and Malaysia.

Context

The coronavirus disease (COVID-19) pandemic has exposed inequities and service delivery gaps in national and global health systems. These weaknesses reveal the need for a fundamental reconfiguring of ways of working within health systems to meet the needs of the people they serve. As set out in *For the Future: Towards the Healthiest and Safest Region* and the *WHO Western Pacific Regional Action Plan for the Response to Large-scale Community Outbreaks of COVID-19*, meaningful community engagement is essential for effective pandemic response and recovery. Moreover, whole-of-society and whole-system approaches to achieving equity and engaging and empowering groups that live in vulnerable situations highlight the essential role of communities alongside community engagement processes.

Yet too many communities are unreached, particularly during times of crisis. Early on in the pandemic, the WHO Regional Office for the Western Pacific recognized this gap, which spurred the creation of the Research Initiative to identify new ways of meaningfully engaging communities to improve trust and support equitable health service delivery.

WHO definition of community engagement

“Community engagement is a process of developing and maintaining relationships that enable stakeholders to work together to address health-related issues and promote well-being to achieve positive and sustainable health impact and outcomes.” (4)

These relationships work together through a process that is founded on empowerment, health promotion, health equity, gender equality, human rights and planetary health.

- The process of working together is navigated through dimensions of:
 - compatible values, vision and purpose;
 - interactions that are based on compassion, respect and dignity;
 - widespread, active and inclusive participation;
 - equitable, conjoint decision-making; and
 - the equitable dynamic flow of power, control and resources.
- The process spans the micro (individual), meso (group) and macro (systems) levels of human systems.



Community Engagement Research Initiative: Intent and purpose

A rapid review of community engagement literature, commissioned in advance of the evaluation, identified significant evidence, practice and policy gaps in how community engagement is framed, understood, implemented and measured within the health sector. The predominant approach in health programming locates communities outside of health systems. As such, health systems are configured towards communities as sites where service uptake can be increased, and in which compliance with recommended health interventions can be promoted. Research on health systems also tends to deem the dynamic detail of the processes by which health programmes or interventions are implemented, and by which communities are engaged, as lying beyond the scope of the research that requires evaluation. Consequently, research tends to overlook the relational dynamics that influence the overall research process.¹

In order to respond to these gaps in the conceptualization, implementation and measurement of community

engagement in health systems, the WHO Regional Office for the Western Pacific, in collaboration with WHO headquarters and WHO country offices, led a Community Engagement Research Initiative with CRTs in Cambodia, the Lao People's Democratic Republic and Malaysia to design, implement and research relationship-focused community engagement interventions in the context of the current COVID-19 response and recovery efforts.

Starting from the conceptual foundation of systems theory and recognizing that health systems function as complex adaptive systems, the Research Initiative was structured as a proof-of-concept research project that intentionally adopted a complexity theory approach.² A distinctive feature of complexity theory is its focus on the dynamic relations that are constitutive of the behaviour of systems. On this basis, the Research Initiative adopted a relational lens to understand how and why community engagement works. This relational lens also allowed the Research Initiative to root its theoretical approach in the fundamental fact of people's lived reality – that everybody already finds themselves in relation to others, and that this is the basis for any conception of community. From this relational perspective, the Research Initiative aimed to show how people's biological, psychological and social

1 Annex 1 offers details on how health systems and community engagement in the time of COVID-19 provided a specific context for the Research Initiative

2 Annex 2 provides an outline of the properties of complex systems. It also maps various salient features drawn from the work of the CRTs onto these features of complex systems in order to show how the research supported by the Research Initiative exemplifies the principles of complexity.



well-being is impacted by the people and systems with which they engage. In particular, the Research Initiative sought to show how community engagement processes can emphasize meaningful interactions that place people and communities at the centre of health service delivery and decision-making, build relationships, strengthen collaborative action and redress power imbalances and inequities.

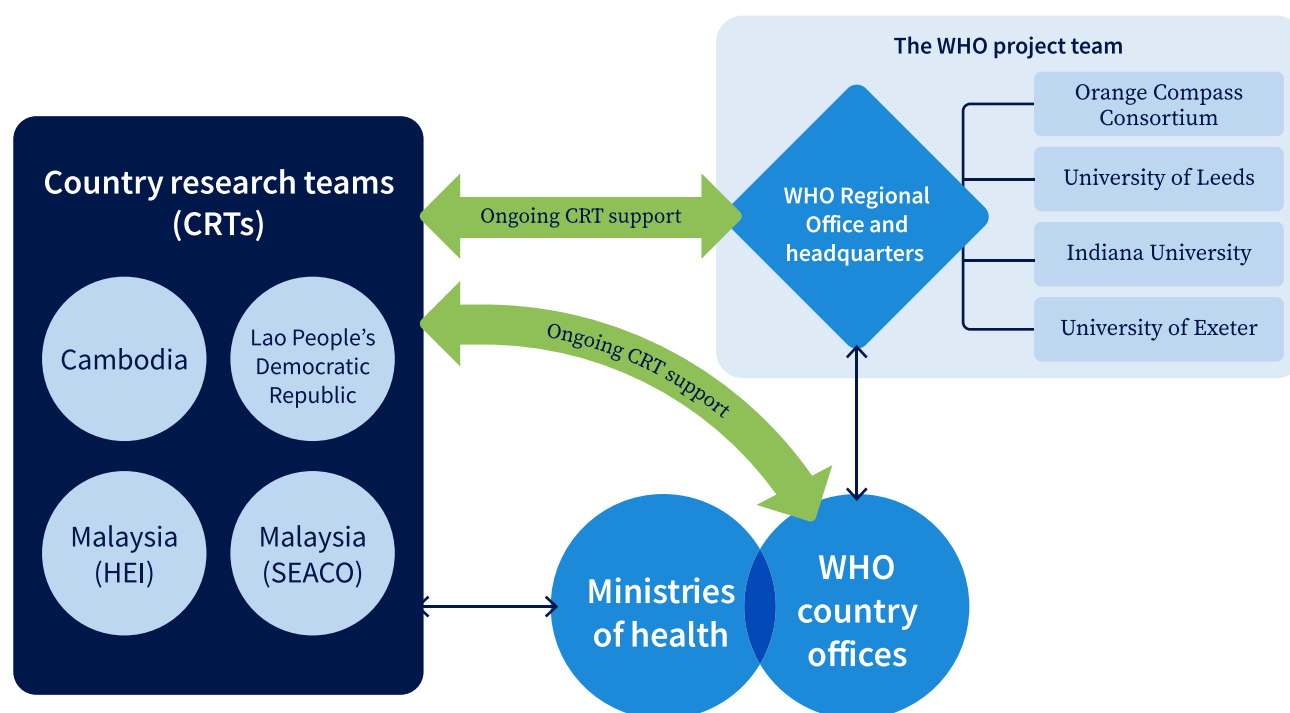
The Research Initiative also sought to challenge traditional assumptions about what constitutes an “intervention” in a health system, and hence the whole science of “intervention design”. In this way, the Research Initiative aimed to demonstrate that a relational approach to community engagement can be transformational in multiple ways since it recognizes that “every interaction, no matter how big or small, constitutes an intervention” and that interactions based on communication can influence not only behaviours but also biologies, and thus the core factors that constitute the health of individuals, as well as of communities.

Ultimately, the Research Initiative sought to deepen the understanding of how processes of systemic relational engagement can create conditions for transformational change within health systems, to support improved health, and how the skills involved in relational engagement can be taught and learnt throughout the health workforce and communities, making operational the *WHO Global Competency and Outcomes Framework for Universal Health Coverage* (2). In all of these ways, therefore, the Research Initiative aimed to determine what implications taking a complexity-informed relational approach might have for making advances in community engagement research, practice and policy.

Community Engagement Research Initiative: Structure

In order to accomplish these aims and objectives, the Research Initiative developed a distinctive technical support structure represented in **Fig. 1**.

Fig. 1. Technical support structure of the WHO Community Engagement Research Initiative



Source: WHO

Four CRTs from Cambodia, the Lao People's Democratic Republic and Malaysia, some of which had direct relations with ministries of health and other local partners, were provided technical support by a diverse team from WHO (Regional Office, headquarters and country offices) and commissioned technical institutions (Indiana University, University of Exeter, University of Leeds and, at the outset, Orange Compass and Clear Horizon), hereafter called the WHO project team. The WHO Regional Office oversaw the management and implementation of the Research Initiative and select country projects, and WHO country offices played an important role at the country level.

The WHO project team founded the Research Initiative's "conceptual framing" on the rigorous evidence base provided by developments in the natural sciences (see Annex 3). Evidence from the community engagement framework shows that this natural scientific evidence broadens what counts as evidence to include the lived experiences of communities, service providers and researchers in order to understand how relational community engagement works. In this way, the overall approach of the Research Initiative sought to become more "holistic", that is, more attuned towards achieving both person-centred and whole-system change to bring about changes in the social determinants of health.



The WHO project team offered intensive, bespoke support for the four CRTs participating in the programme.³ Alongside the technical, conceptual and practical support offered, the WHO project team also modelled the kinds of behaviours that are fundamental in delivering relational community engagement. The WHO project team, therefore, sought to support the adoption of relational, complexity theory perspectives – within their team and in collaboration with the CRTs – in order to understand how and why community engagement works.⁴

Timeline of key milestones

The Research Initiative was carried out in phases. The **First Phase** focused on developing an overall conceptual approach that recognized the emergent nature of the project and, therefore, explicitly identified where process expertise needed to be applied and documented. This phase involved identifying potential research collaborators and building clarity about roles, expectations and working principles across all teams.

It also included the co-design of goals and indicators of success (internal and external) and relational engagement. This phase began with the development of a theory of change for each of the CRT research projects. Later, it came to be understood that the theories of change should have emerged from the projects themselves.

The **Second Phase** focused on building understanding and assessing good practices across the capacity-building domains and using research and evidence to inform design and decision-making. This phase included the first Community of Practice meeting and the establishment of processes for capturing what the CRTs were learning from their participation in the process.

The **Third Phase** focused on supporting the CRTs to work with the WHO project team to create the most relevant and impactful approach to their work and learning and identifying appropriate mechanisms for technical support. This phase included the development of monitoring, evaluation and learning frameworks to enable the CRTs to make sense of their work as their projects unfolded, tailored technical

³ Details of the projects undertaken by the four CRTs are provided in Section 4.

⁴ Details of how the WHO project team functioned and how their work can be understood as exemplifying the conceptual framing for the Research Initiative are provided at the end of Section 5.

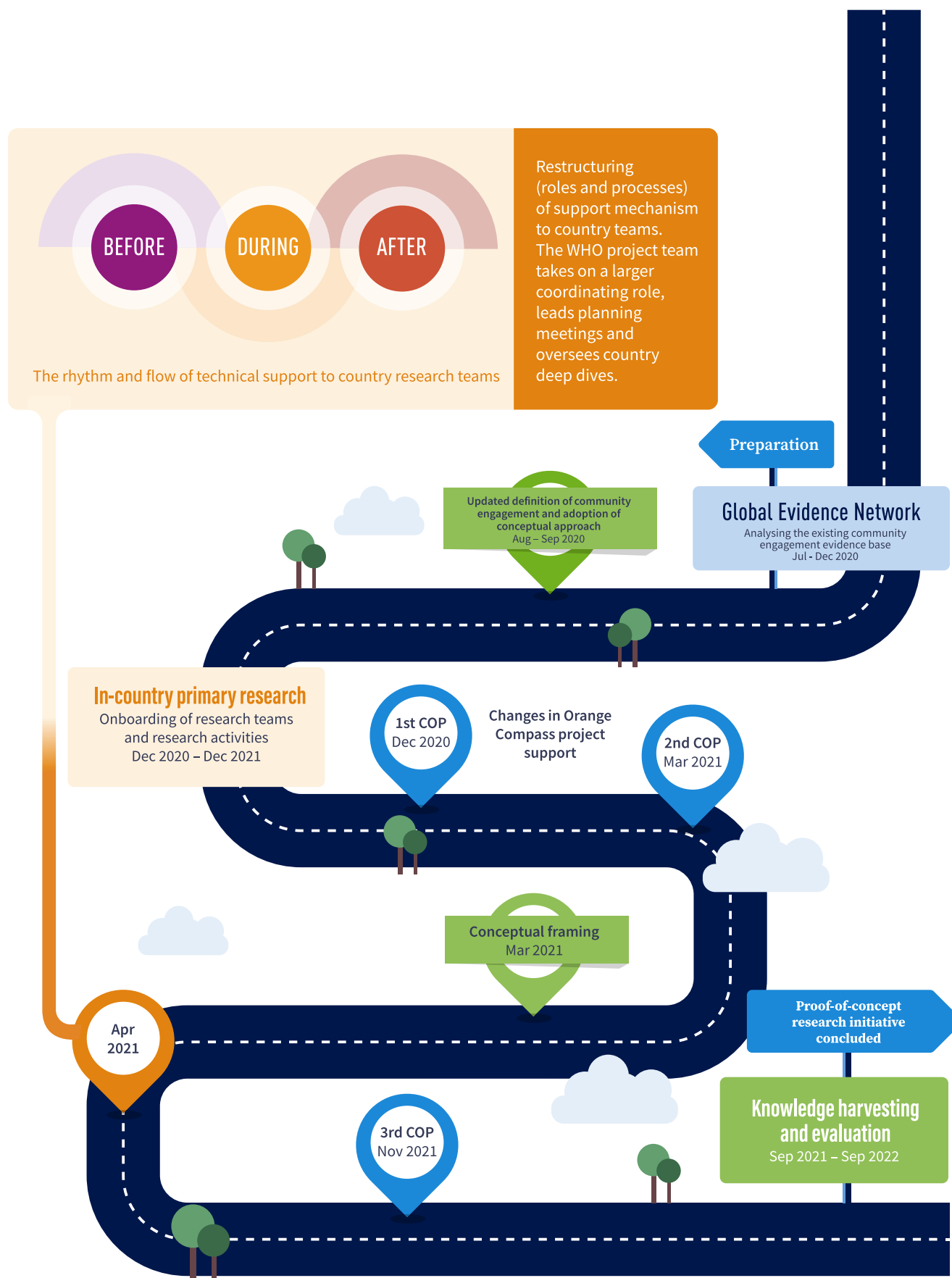
guidance on how to co-design community engagement data collection efforts, and development of relational tools such as relationship maps to better understand the ways in which relational dynamics were either supporting or hindering engagement in health service delivery programmes. During this phase, a move away from the structured approach to capacity-building, monitoring, learning and evaluation, towards an organic, adaptive mode of working deemed to be more responsive to the complex dynamics of the CRTs' projects and the Research Initiative as a whole, was enacted. As a result, the WHO core team, from the WHO Regional Office and headquarters, took a larger, more proactive role in coordinating inputs and activities across the entire Research Initiative, with the WHO Regional Office playing a direct liaison and support role to the four CRTs.

The **Fourth Phase** of the Research Initiative involved the implementation of the CRTs' projects, supported by the submission of monthly reports and periodic "deep dives" with the WHO project team. The second Community of Practice meeting was held to discuss data collection; specifically, what sorts of data could be collected to measure processes within the implementation of the CRT projects. This topic had to be addressed because the overall approach of the Research Initiative required the CRTs to adopt ways of working that were different from traditional research methods. For example, a traditional research project might be designed in advance, and data collection throughout its implementation would focus solely on measuring the outcomes of the project intervention. However, for this programme, data on how the intervention was being implemented became crucial because the processes by which interventions were delivered impacted the project itself. Consequently, each CRT project-based intervention and its implementation needed to be researched as it was being implemented, and this entailed the collection of appropriate process data.

The **Fifth Phase** involved the completion of the CRT projects, submission of initial drafts of their final project reports, and a final Community of Practice meeting, including senior members of WHO. The key milestones for the Research Initiative are represented in **Fig. 2**.



Fig. 2. Milestones of the WHO Community Engagement Research Initiative





SECTION 2

Aims and objectives

The report's primary aim is to evaluate the proof-of-concept initiative and the extent to which the processes of systemic relational community engagement can create transformational change to support improved health. The secondary aim is to respond to the research question: how can the processes of systemic relational community engagement create transformational change to support improved health programming and outcomes, including how services are designed, experienced and provided? A subsidiary aim is to provide recommendations for the WHO Regional Office, policy-makers, commissioners and funders, grounded in the evidence base generated by this evaluation and informed by the scientific evidence base of complexity theory. In so doing, this report seeks to evaluate the rationale for the WHO Regional Office and Member States to commit to the principles and practices of transformative community engagement as a fundamental process and approach across the Organization, including headquarters, regional offices and country offices.

A series of guiding objectives shaped the approach to data generation and analysis for this evaluation:

1. To understand whether and how relational community engagement is significant for health-care teams in reaching and delivering high-quality health care.
2. To understand the nature of the relational community engagement processes and how attending to the quality and nature of interactions can help to understand ways of engaging that can strengthen relations.
3. To understand if relational community engagement is a new or different way of working for the CRTs or if it is historically or culturally embedded in practices or ways of living within their countries.
4. To understand the enablers and barriers to relational community engagement and how these might be recognized.
5. To understand what is effective about taking a complexity informed approach to relational community engagement.
6. To understand how and why the conditions for relational community engagement can be created as a set of adaptive processes that can be used in other contexts and geographies.

Questions were posed to interviewees and focus group participants to stimulate conversations that could provide further evidence to respond to these objectives (see Annex 4).

Report plan

Three substantive sections in this report set out the evidence generated by the research evaluation. Section 4 presents an overview of the baseline findings for the research. These comprise the health issue each research team sought to address, the outcomes their research sought to achieve, the community engagement undertaken, who was engaged and by what means, and the outcomes of the research. Section 5 presents a set of cross-cutting themes and patterns that emerged from the second-level, cross-case complexity analysis. This section also seeks to show how relational conditions can bring about change – that is, *make a difference* – in the micro, meso and macro levels of health systems, and thereby impact health at the level of the individual, community and ultimately the whole system. Throughout this section, case studies from the CRTs are presented to illustrate and illuminate notable cross-cutting themes and patterns. Section 6 seeks to distil the findings from Sections 4 and 5 into a framework that describes the necessary processes for relational community engagement to effect systemic change in health systems. Finally, Section 7 offers recommendations grounded in the research findings of the previous sections.





SECTION 3

Methods

The methods and analytic processes used for the evaluation of the Research Initiative (shown in **Fig. 3**) included in-depth scrutiny of written reports and reflective accounts, attendance at and observations of WHO project team meetings and group meetings with CRTs, focus group discussions and interviews with members of the CRTs.

The datasets for each of the stakeholder groups are detailed below.

COUNTRY RESEARCH TEAMS

Reports and documents of the initial application, monthly progress reports and final reports, attendance at or retrospective observation of “deep dive” presentations and Community of Practice meetings and focus group discussions and interviews (detailed below).

WHO PROJECT TEAM

Weekly WHO project team meetings, monthly insights meetings, pivotal moment reports and discussions with the WHO project team about the programme, conceptual framing and emergent findings.

EXTERNAL ORGANIZATIONS

A meeting with Clear Horizon, scrutiny of documents from meetings with Clear Horizon and Orange Compass, and a feedback meeting for the CRTs with the WHO Regional Office for the Western Pacific.

Qualitative data

In addition to the in-depth scrutiny of written documents and attendance at weekly WHO project team meetings, focus group discussions were held with teams from Cambodia, the Lao People’s Democratic Republic and the Malaysia Health Equity Initiative (HEI), and one-on-one interviews were held with members of the Malaysia South East Asia Community Observatory (SEACO) team.

An outline of the focus group and interview schedule can be found in Annex 4.



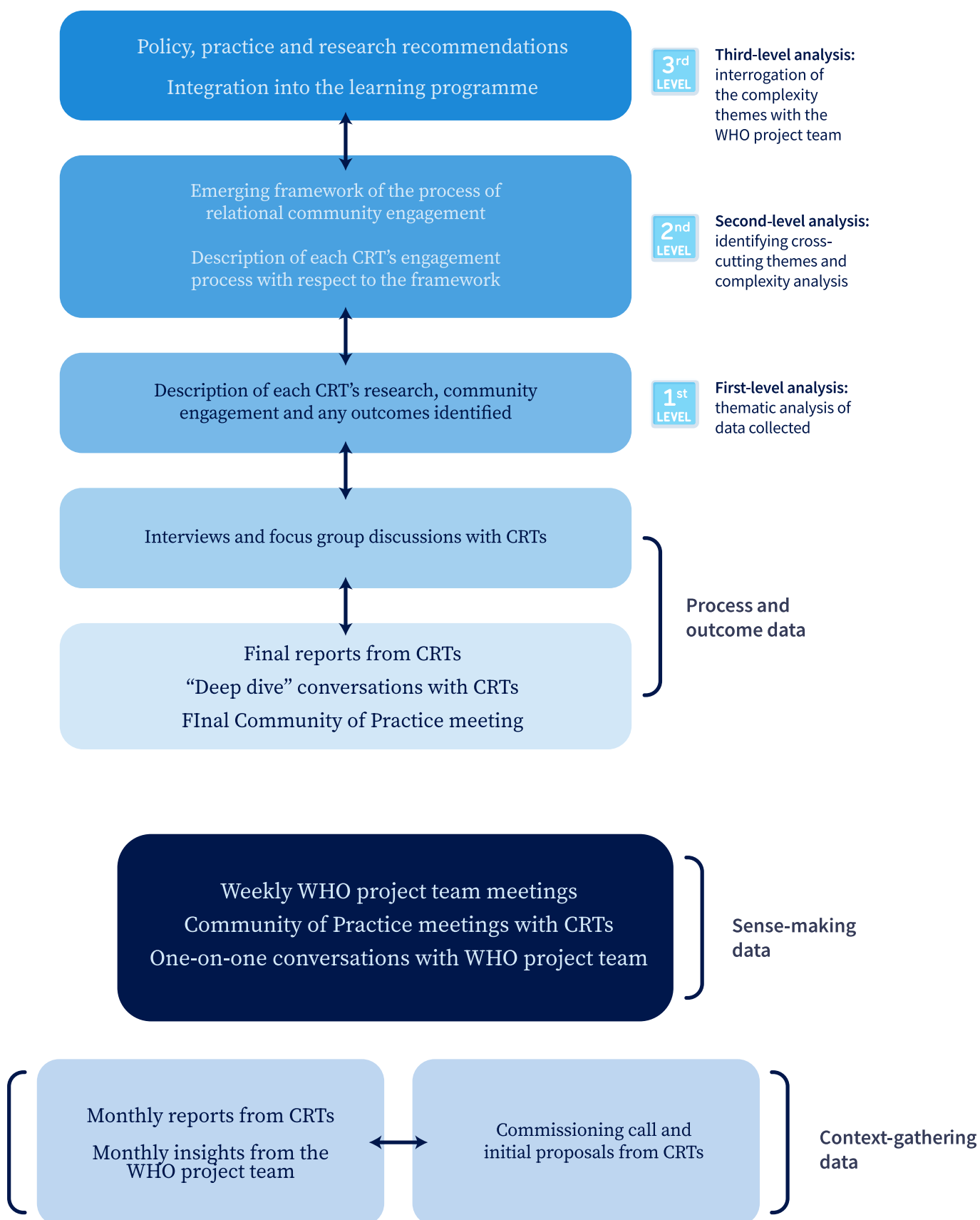
Analysis

Case study analysis

As part of the first-level analysis, data collected from interviews, focus groups, meetings, non-participant observation and document scrutiny were subjected to rigorous thematic analysis to understand the following: how the programme was set up and CRTs commissioned, the initial conditions of the CRTs, the nature of the teams, how the research was delivered (challenges and enablers) and the impact of the work on the CRTs and the communities. The validity of the data interpretation has been supported by separate identification of the overarching themes by the report authors, by triangulation (comparing interpretations from the data streams within the project – interview, observation and documents) and through the focus groups to confirm the sequence of events of the research, how they used (or did not use) the conceptual framing, and what the legacy of the work is for that team. Further triangulation has taken place in conversations with WHO and the commissioned technical partners and in the drafting of this report.

Cross-case comparison and complexity analysis

If the first-level analysis tells us what happened, the second-level analysis seeks to determine why it happened. This phase of the analysis is about aspiring to a position where one can say, “If you want to undertake transformative community engagement, then these are the conditions that need to be created and for these (theory-based) reasons.” At stake is the ability to identify transferable lessons, to support new ways of working with communities to achieve positive health outcomes and reduce inequalities, and to help embed those processes of learning and acting differently in the wider health and social care community.

Fig. 3. Methods and analytic processes used in the generation of the findings



SECTION 4

Overview of research and findings

In this section, a brief overview of the research and findings from the first-level analysis of the CRT projects is presented. The information in Table 1 has been synthesized primarily from the teams' original proposals, final reports and observations from the final Community of Practice meeting. It includes context-gathering data, sense-making data, and process and outcome data (**Fig. 3**). The table provides a schematic overview of the work undertaken by each of the CRTs. It describes the health issue each CRT sought to affect, the outcomes their research sought to achieve, the community engagement undertaken, which stakeholders were engaged and by what means, and the outcomes of the research.

Health issues

All of the CRTs chose to work with populations experiencing inequalities exacerbated by the ongoing pandemic. Two CRTs were concerned with the mental health of vulnerable communities, another sought to support people living with HIV (PLHIV) to enhance treatment and adherence to treatment, and the fourth CRT sought to develop community health action plans to support maternal and child health.



Outcomes of engagement

The initial health outcome data from the CRTs provide evidence of the success of the teams' research projects in developing innovative ways of engaging communities during the pandemic, and in two cases, in affecting the health issue at an early stage (see Lao CRT and Cambodia CRT below). These outcome data, combined with the qualitative data generated from the evaluative research, provide a rich basis to demonstrate the proof of concept for the overall Research Initiative.

The primary aim of the Lao CRT project was to understand the enabling factors for the uptake of family

planning, antenatal care, delivery with skilled birth attendants, and vaccination delivery. Among the initial outcomes from their project, the team reported that from August to September 2021, the period immediately following their community engagement workshop, one village reported that antenatal care clinic attendance was 80%, compared to 41% in the corresponding period in the preceding year. Similarly, deliveries at local health centres were 34% during this period, compared to 12% during the same period in the previous year.

The primary aim of the Cambodia CRT project was to develop community engagement practices to provide support for PLHIV, alongside treatment adherence and diagnosis during the pandemic. Despite all of the circumstances of the pandemic, which mitigated against treatment adherence, the project outcomes indicated that in the two months following the intervention, the percentage of patients not retained in HIV treatment care fell from 2.8% to 0.6% in the intervention group compared to 0.9% to 0.7% in the control group. The CRT also reported enhanced relationships between health-care workers (HCWs) and patients, and less formal interactions that supported enhanced communication.

Who was engaged and how?

The CRTs engaged diverse communities within regional and national health systems. They included refugees and asylum seekers with mental health issues, patient managers and community health workers (Malaysia HEI); local residents, HCWs, district officials and the central government (Lao People's Democratic Republic); and care providers, patients and high-level stakeholders (Cambodia). There is also proof of concept in the ways that the processes of engagement brought about changes in patterns of behaviour and changes in the configuration of health-care systems. Among examples of these process outcomes is the way in which the Cambodia CRT adapted to place significantly more emphasis within their work on qualitative rather than only quantitative data. As a consequence of reflective feedback, their digital health intervention (DHI) devoted new resources to understanding and enhancing the nature and quality of interactions in the digital realm. Finally, in their reflections at the conclusion of their project, the Cambodia CRT committed to adapting the ethos, methods and scientific basis of relational community engagement to future research projects.

For the Lao CRT, the most striking process outcome was engaging local governments in their community engagement workshops. After the workshops, governors endorsed the engagement processes and the local community plans that emerged from them. Consequently, the governors' endorsements created the space of possibility for the roles played in local health-care systems to change significantly. A significant outcome of this process was the signing of a memorandum of understanding for collaboration between the Ministry of Health and the Ministry of Home Affairs.





There may be a connection between how communities were engaged and the outcomes of engagement. The second-level, cross-cutting analysis presented in Section 5 provides in-depth thematic accounts of how these community engagement approaches were developed and implemented, and how the work of the CRTs and the WHO project team resulted in the formation of a Community of Practice. Section 5 provides a detailed response to the question of how processes of systemic relational community engagement were able to create the conditions leading to the preliminary health outcomes briefly reported in this section.

Finally, the data suggest that two of the CRT projects (Lao and Malaysia HEI) explicitly addressed issues of sharing power and control in their project interventions (see Annex 1). The CRT projects of Cambodia and Malaysia SEACO engaged communities in developing and piloting the DHIs, with the aim of supporting people's health and treatment adherence, to ensure the feasibility and acceptability of the intervention. However, they did not engage communities in co-creating research. But even in this latter case, the Cambodia CRT explicitly recognized over the course of their project that communities might be able to offer questions leading to new research problems that the research team would not identify if they were working in isolation.

Table 1. First-level analysis of CRT projects**Cambodia team****NATURE OF THE HEALTH ISSUE^a**

- To provide support for PLHIV, treatment adherence and diagnosis during the pandemic; to revise the existing community action approach for engaging PLHIV.

ANTICIPATED OUTCOMES^a

- To generate insights and possible solutions for shortcomings of the current community action approach in terms of implementation strategies and degree of involvement required from a vulnerable population, hospital-based workers and community-based workers and volunteers.
- To understand how the livelihoods and health needs of PLHIV are additionally affected by the current pandemic.
- To guide decisions of various stakeholders in terms of assistance that should be offered during emergency times.

DESCRIPTION OF THE INTERVENTION^b

- DHI to support communication and treatment adherence for PLHIV during the pandemic. The intervention comprised a series of principles and trainings to support good communication, which community HCWs could adapt to each patient.

WHO WAS ENGAGED AND HOW?^b

- Care providers, patients and high-level stakeholders were interviewed to understand the challenges to health and health-care delivery to inform the DHI. Virtual platforms were used in four intervention sites to strengthen relationships between HCWs and patients and to build trust and show support for patients. Findings were compared to those of four control sites.

OUTCOMES OF ENGAGEMENT^c

- Enhanced relationships between HCWs and patients, less formal interactions supported enhanced communication. HCWs found the DHI acceptable and enjoyable to use.
- Early outcome indicators (in the two months post intervention) show the percentage of patients not retained in HIV treatment care fell from 2.8% to 0.6% in the intervention group and from 0.9% to 0.7% in the control group.

Lao People's Democratic Republic team

NATURE OF THE HEALTH ISSUE^a

- To understand the reasons behind the varying uptake of family planning, antenatal care, delivery with skilled birth attendants, and vaccination delivery in local health centres.

ANTICIPATED OUTCOMES^a

- The research was designed as a process, which later became the basis of the CONNECT Initiative, to create new social networks and connections between participants that can potentially alter patterns of health-care utilization and other health-related behaviours. In addition, the research process has produced a community-based intervention designed to impact COVID-19 disease prevention, control, and essential health-care uptake through building trust.

DESCRIPTION OF THE INTERVENTION^b

- CONNECT participatory workshops. Participatory action research to pilot the CONNECT relational community engagement approach, including community mapping, role playing and games incorporated into stakeholder workshops, to empower the local community, HCWs and district officials to find their own positive capacities and create a joint plan to improve essential health-care access to support maternal and child health.
- A separate workshop with local authorities to strengthen ownership to scale up and sustain the community-level interventions.

WHO WAS ENGAGED AND HOW?^b

- Initial community engagement research was done in Bokeo province. Three CONNECT workshops were held in Sangthong district, Vientiane capital; Borikhan district, Borikhamxay; and Khoune district, Xiengkhouang as part of an iterative design process.
- Workshops involved local residents, district officials and HCWs in identifying their needs, capacities, and developing action plans.

OUTCOMES OF ENGAGEMENT^c

- Improved trust and relationships between residents, HCWs and local and provincial district officers.
- Further connections facilitated with the Ministry of Health and the Ministry of Home Affairs led to a joint memorandum of understanding.
- Improved essential health care uptake – for example, in one health centre, in the months following the workshop:
 - Antenatal care clinic attendance was 80% (compared to 41% during the same period in 2020)
 - Deliveries in the health centre were 34% (increased from 12% in 2020).

Malaysia SEACO team

NATURE OF THE HEALTH ISSUE^a

- Mental health of Segamat community before and during the pandemic; relational ways of engaging people with poor mental health through a DHI.

ANTICIPATED OUTCOMES^a

- Improvement in mental health literacy and self-coping among mental health service users, families and communities; reduction in mental health inequalities and experiences of stigmatization and shame; increased accessibility of mental health services and improved COVID-19-related mental health outcomes through community engagement in semi-rural communities.

DESCRIPTION OF THE INTERVENTION^b

- Development of a digital health programme – RELATE-ME – a four-day digitally applied programme to support the mental health of the Segamat community. RELATE-ME is a series of relational activities hosted by community health workers with people experiencing mental health issues to create an online support community as well as individual activities to support mental well-being.

WHO WAS ENGAGED AND HOW?^b

- Baseline survey of residents in Segamat community; qualitative interviews with 15 survey respondents; stakeholder workshop to assess the acceptability of the proposed mental health intervention, i.e. RELATE-ME.
- Stakeholder workshop with members of the Segamat community to assess acceptability of the intervention.
- The RELATE-ME pilot involved people with whom HCWs had existing relationships, rather than the intended target population.

OUTCOMES OF ENGAGEMENT^c

- Prototype of a digital mental health programme to address determinants of mental ill health evidenced from the baseline survey and qualitative interviews. Although a prototype was developed to consider health inequalities, it was not piloted on people with mental health needs due to time constraints.
- Piloting showed the feasibility and acceptability of the programme. The four-day pilot was too time intensive, so plans to deliver it over two days are proposed.

Malaysia HEI team

NATURE OF THE HEALTH ISSUE^a

- To focus on the mental health of refugees known to the HEI. To integrate the principles and strategies of relational community engagement in the follow-up calls related to the treatment adherence programme with HEI's patients on psychiatric treatment.

ANTICIPATED OUTCOMES^a

- To build the capacity of team members to improve the quality of communication and relationships with patients. By the end of the training, patient managers and community health workers should be able to:
 - identify the different components of the RESPECT Framework, which seeks to enhance trust and improve the quality of communication and relationships between service providers and patients;
 - describe the use of the framework in communication with patients; and
 - apply components of the framework to follow-up call interventions conducted with patients.

DESCRIPTION OF THE INTERVENTION^b

- A training programme explicitly based on the WHO conceptual framing for this initiative was developed for community health workers and patient managers involved in follow-up calls with refugees and asylum seekers with mental health issues. It was delivered in four adaptive modules to incorporate the RESPECT framework into the follow-up calls as part of the treatment adherence system.

WHO WAS ENGAGED AND HOW?^b

- Refugees and asylum seekers with mental health issues, patient managers and community health workers. Throughout the training, the community health workers and patient managers reflected on their experiences and “tried out” new techniques with family and reported back. The impact on follow-up calls and on deliverers is being assessed.

OUTCOMES OF ENGAGEMENT^c

- Reflexive learning programme to support capacity-building for providers supporting refugees and asylum seekers with mental health issues. Training will be part of the annual training update, and plans to take it forward more widely (for example, to student advocates) are being considered.

a Information taken from the funded proposals.

b Information taken from the final reports and “deep dives”.

c Information taken from the final reports and final Community of Practice meeting.



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SECTION 5

Cross-cutting themes and findings

In this section, detailed findings from the second-level, cross-cutting analysis are presented. The aims of this section are 1) to establish the scientific and theoretical base grounding the relational approach to community engagement, and 2) to provide evidence for how relational community engagement is implemented and the outcomes that follow. At its core, the section seeks “to deepen our understanding of how the process of systemic relational ‘engagement’ can create transformational change to support improved health” (3).

In order to achieve these aims, the section describes the types of systemic “expertise” (or “qualities”) that are necessary for enabling community engagement interventions, and the most effective systemic ways that this “expertise” can be enabled to function. Or, in essence, how systems can function to create, build and release capabilities that reside in all individuals and groups that comprise systems at their multiple levels.

The data analysis revealed a series of patterns of dynamic processes that cut across the different projects and different service delivery–stakeholder–community relations. These thematic patterns are grouped into three broad categories, with each one containing a set of more specific processes:

- i **ENABLING CONDITIONS:** readiness, timeliness, mandate and demand
- ii **DYNAMIC CONDITIONS FOR PROJECT DELIVERY – “WAYS OF WORKING”:** team working, values and ethos, research methods and intervention design
- iii **DIMENSIONS OF RELATIONALITY:** micro, meso and macro.

5.i. Enabling conditions: readiness, timeliness, mandate and demand

The first set of themes speaks to the nature of the enabling conditions for the work of the CRTs. In traditional health-related research practice, the conditions of a population receiving an intervention are bracketed in the research design. Indeed, the methodology of randomized control trials, whereby participants are randomly assigned to either an experiment group or a control group, functions precisely to counter any possible influence of local conditions. By contrast, in studying dynamic systems, it is evident that the initial conditions of a system, that is, the way that the system is “configured” at any point in time, have an irreducible influence on the subsequent behaviour of the system. Retrospective analysis can therefore identify conditions – ways in which the system was configured – that enable successful interventions, or indeed stifle the effects of the intervention. The influence of initial conditions – what is called “path dependency” within systems theory – is one of the most significant reasons why it is impossible to separate outcomes from processes within system behaviours. Indeed, outcomes themselves inevitably become parts of new system processes, often in the form of “feedback loops”.

For the purposes of this section, the focus will be on a set of key features that were more or less common to the CRTs at the point where they initiated their respective projects. Taken together, these features begin to articulate some of the dynamic system properties that can be seen to constitute enabling conditions for successful relational community engagement projects. While the concrete details of these enabling conditions will inevitably differ from team to team, because the work of each team has to respond to the specificity of the local conditions in which their work is situated, it is possible to see that there is a commonality in these enabling conditions when understood as dynamic configurations of systems within which health care is delivered. One of the most significant implications of the research, therefore, will be that one of the primary concerns for health decision-makers of relational community engagement work should be how to support the development of enabling conditions within teams funded to conduct health research, service and programme implementation, to achieve improvements in quality of care and strengthen health systems.

5.i.a. Readiness

- For multidisciplinary teams to be ready to deliver community engagement projects, they must have strong, trusting relations among their members.
- Strong team relations provide a strong basis for forming new relations with new communities.

All of the CRTs reflected that “being ready” was a key enabling condition for delivering their community engagement projects. Each of the CRTs had histories of engaging communities from within the core stakeholders, working in their respective health areas to varying degrees – in no case was a CRT embarking on a new way of working for this project. For some CRTs, the opportunity afforded by the Research Initiative enabled them to adapt existing community engagement strategies and practices to the new health-care landscape of COVID-19 restrictions – restrictions that dramatically reduced opportunities for in-person interactions, which had previously been the norm for their engagement activities. For other CRTs, the Research Initiative offered an opportunity to develop new ways of working to respond to system-level issues in national health-care provision that their previous work had uncovered. In each of these cases, the configuration of the CRTs when they responded to the WHO commission allowed them to use their project work to respond to the specificity of health-care issues in their local context. By contrast, another of the CRTs took longer to reach a point where it was able to implement its project intervention. This was partly a result of the difficulties it faced in building relations within the research team in the context of COVID-19 restrictions, and the consequent impossibilities of in-person team meetings. But it was also in part a consequence of the longer time it took to identify a specific, concrete health-care issue that could anchor their work. This suggests, therefore, that readiness may be a necessary condition for enabling the successful delivery of relational community engagement research projects that are implemented in response to a direct commissioning brief, especially when that brief is focused on co-learning and experimentation, exploration and engagement with new scientific theory and evidence. It also indicates that some programmes, services or teams are more ready than others to engage in more relational ways.

If this is indeed the case, it raises the question: what does readiness look like? In other words, what makes a multidisciplinary team ready? At the very least, there should be strong, trusting relations among the members of the team. These existing relations allow new relations to be formed when other members join the team, and when relations need to be formed with community partners. This initial relationality among team members allows the team to adapt to the conditions created in the course of forming new relations. Over and above this, however, the differences between the relative progress made by the teams suggest that another aspect of readiness consists in the existence of what might be called a “need” for the work to be done – a need to which the work can respond.

CASE STUDY OF READINESS

The Cambodia CRT makes it known in their reports and presentations to Community of Practice events that they had a “great, well put-together research team for this project”. They go on to say, “Even amidst the chaos, fear and uncertainty [of the pandemic], we were still able to finish what we set out to achieve. The past relationships and bonds between the care providers and their patients, between the NCHADS and support organizations ... played important roles [in] making the entire project possible and successful.” Despite having these relationships in place, the team realized that delivering community- and home-based care for PLHIV – one of the previously successful ways of working – had led to the unintended consequence of hospital providers being “cut off” from their patients. At the same time, as a result of lockdown restrictions, interactions with PLHIV had become more “transactional” – clinicians could provide treatment or medicine, but the space for counselling had been closed down. Therefore, the specific health need to which their project could respond, and the preparedness of the team to develop the relational community engagement work for their project in response to this need, were both consequences of the team’s readiness, a responsive readiness that was rooted in the history of the team’s engaged practice.

5.i.b. Timeliness

- There is typically a “right time” to commission work.
- Time needs to be invested in relationship-building.
- The timeliness of “quick wins” can generate significant momentum for engaging communities.

The theme of timeliness is closely related to that of readiness and is supported by the research literature. This literature highlights the importance of aligning the institutional rhythms of action-based research work with the rhythms that characterize the lived reality of community partners. In respect of this relational community engagement programme, the issue of timeliness arose specifically in the context of the commissioning process. For example, the Lao CRT reflected that the WHO programme had come along “at just the right time” for them, and that the context in which the team was situated was “ripe” for their project. Similarly, the Malaysia HEI team described how the ways of working that had developed within their research team had reached a point where there was a “curiosity” to explore further the new ways of working proposed within the WHO programme.

CASE STUDY OF TIMELINESS

In the Lao People’s Democratic Republic, the Health Sector Reform Phase 3 (2021-25), which had been drafted before the COVID-19 pandemic, prioritized primary health care. Until then, the country had been struggling with weak ownership of primary health care by local authorities. Lao CRT member Dr Shogo Kubota described how the WHO commission came at a time when the Lao CRT had been focusing their work on strengthening local governance in response to the COVID-19 pandemic, to use the opportunity of the unprecedented attention of the governance sector during the pandemic on community health. The WHO commission provided an opportunity for the Lao CRT to facilitate collaboration between the governance sector (Ministry of Home Affairs) and the health sector (Ministry of Health) to strengthen local authorities in the responses to COVID-19 and “beyond”. By tagging “beyond” to COVID-19, the Lao CRT achieved a breakthrough in the longstanding challenges to primary health care. Initially, they planned to develop work that could “scale across” in response to the problem for governance that had been identified. But the specific detail of the WHO commission motivated the Lao CRT to attempt a new approach for their work: to “go deeper” into communities to explore how the reform of primary health care delivery could occur “concretely” in response to local conditions. The WHO commission was timely for the Lao CRT not only in terms of their ongoing work but also in the way that it allowed them to branch out and develop a new way of working, one that was perfectly attuned to the point. To borrow from the language of complexity theory, we can say that this timeliness represented a “bifurcation point” for the Lao CRT.

The Malaysia SEACO principal investigator (PI), Professor Tin Tin Su, highlighted another significant aspect of time and temporality. She noted that time and readiness are needed to build relations among team members. Similarly, training community health workers and public health workers in the techniques of community engagement, and in the ethos and values of relational engagement, also takes time. Furthermore, building relations with communities takes time and is time-consuming in practice. In a striking illustration of the way in which relational community engagement can be time-consuming, the Cambodia CRT described how the social habits of PLHIV, who used the WhatsApp and Telegraph platforms for the DHI, led to questions about whether HCWs should respond to messages or calls “out of hours” and whether they should be available “at all hours”. This has important consequences for how to think about the dynamics of the commissioning process for relational community engagement work. Typically, the focus in evaluating applications for research and implementation projects is on the feasibility of the delivery of the project. But the findings of the work of this programme indicate that commissioners should strongly consider investing in the work of relation-building, which is crucial to the development of enabling conditions for the successful delivery of community-engaged health interventions, and most importantly, consider how to provide researchers with the time necessary for building relations.



Finally, Professor Tin Tin Su spoke of the constraints necessitated by the timescale of the WHO programme, but she pointed out that these could be seen as having a virtue, to the extent that the intensity of the working patterns led to the implementation of rapid prototyping for the SEACO team’s RELATE-ME intervention. Rapidity often manifests in the form of the delivery of “quick wins” for community partners – solutions to problems that have been co-identified in workshops with community partners, which can be delivered rapidly due to the remit afforded by the statutory authority residing with specific service providers. These rapidly delivered quick wins have the capacity to build momentum for more significant processes of change because of the feelings of mutual trust they instil in relations between service providers and community partners – both are able to see the benefits of working

in partnership. However, for the SEACO team, the RELATE-ME intervention did not result in quick wins for potential community partners, as the CRT did not have time to apply for ethics approval to work with people with mental health needs.

It may seem that the rapidity of quick wins contradicts the necessity of taking time to build relations. However, the evidence suggests that taking the time to build relations creates the conditions for the delivery of quick wins. Consequently, much of the momentum of successful relational community engagement flows from this initial investment of time in relations building.

5.i.c. Mandate and demand

- Successful relational community engagement initiatives should respond to a specific demand based on the lived realities of communities.
- Specific conditions in, or configurations of, health systems can provide a mandate for relational community engagement interventions; such mandates increase the likelihood of success for the intervention.

Data highlighted that real progress could only be made in the CRTs' research projects when there was a need for the proposed research and a mandate for the teams to deliver their work. Such a mandate could be anchored in an understanding that a different approach to community engagement could make a difference to programme outcomes. The WHO commissioning process encouraged teams to reflect on the mandate for their proposed research by asking the question: what is the most pressing health issue of concern that could benefit from community engagement implementation research in your country? Applicants were also asked to consider what successful community engagement would be like in the context of their proposed projects, and which communities and stakeholders would benefit from their proposed research.

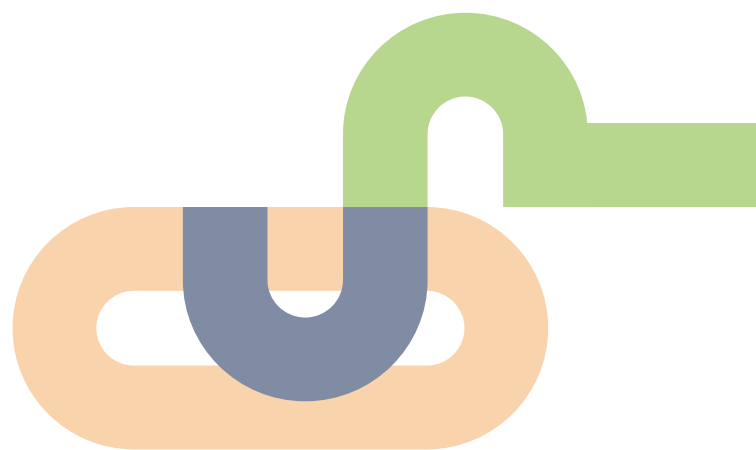
The demand for work to address a pressing health issue can come from the “outside” (an “exogenous demand”). For all the CRTs, an exogenous demand was provided by the COVID-19 pandemic. For instance, in Malaysia, the HEI team had already been working with refugee groups to improve their access to health-care provision. Because of their noncitizen status, refugees are marginalized in health-care systems – the very forces that marginalize them make it difficult to reach the services they need. This underlying situation was greatly intensified by pandemic restrictions. In Cambodia, some PLHIV were too afraid to travel to receive antiretroviral treatment. To do so would mean passing through COVID-19 checkpoints, where they would have to admit to their HIV or AIDS status. They were fearful of the consequences.

As health-care provision became more inaccessible due to the pandemic, a common response was to move to digital health service provision. This approach highlighted the acute “digital divide” that risks further marginalizing groups already experiencing inequities, such as refugee communities. However, the demand to overcome this digital divide, to which the HEI team responded in their project, created a new opportunity for relational community engagement research: in interactions that do not take place in person, it becomes harder to gauge how people are responding, how they are reacting and how they are feeling. This difficulty represents a different sort of digital divide, but one that is equally pressing when seeking to engage marginalized communities. It is important to note that demand can also come from the “inside” (an “endogenous demand”). For the Lao CRT, this endogenous demand centred on the anomalous situation of local governors within the system of service provision.

Each of these cases revealed a need for system-based changes. They raised the question: where in the local health systems could interventions be made to bring about these system changes? In addition, they raised deeper questions about the teams' mandate to make these interventions: what conditions within the overall health systems, within the research teams and within the teams' local health systems might enable the research teams to implement their interventions? In other words, how were the teams mandated to respond to these demands? Even more fundamentally, how might teams move from deriving their mandate for research from within their institutional settings to drawing their mandate from the imperative to provide quality health services that are responsive to the needs of the people and neighbourhoods they serve.

CASE STUDY OF MANDATE AND DEMAND

During the pandemic, hospital-based care providers in Cambodia were being “cut off” from their care recipients. However, a network of community workers (mostly peer volunteers paid for by nongovernmental organizations) continued to support PLHIV in their communities, as much as circumstances allowed. According to the Cambodia CRT, these community workers had to split their workloads, spending a lot of time in hospitals and taking up more responsibilities during the pandemic. They worked alongside clinicians and counsellors in hospitals, acting as a bridge between service providers and recipients. They also raised awareness among hospital-based clinicians and counsellors of the realities affecting PLHIV in their own communities. While this connection provided part of the evidence underpinning the demands to which the team's project would respond, the mandate for their work was provided by a revelatory piece of evidence. They discovered that patients who had built relations of trust with clinicians, and who were forced to leave their homes, often preferred to spend money to travel to the trusted clinician's hospital instead of seeking care from a local hospital (even though the services provided were identical). Based on this evidence, the team realized that the quality of the relationship with the clinician was decisive for how PLHIV chose to access health-care provision and, therefore, that they would have to modify the design of their project's pre-existing community action approach to focus on the quality of interactions between service providers and recipients. As Cambodia CRT member Dr Bora Ngauv explained, for PLHIV who travelled long distances, the relationship between them and their clinicians felt more like that of “friend and friend”.



The themes of **readiness**, **timeliness** and **mandate and demand** have been framed under the general category of enabling conditions. Based on the evidence of one research programme, it cannot be asserted that any one of these themes represents a necessary condition for the successful implementation of a relational community engagement project. Nevertheless, it can be surmised with a relatively high degree of confidence that if the configuration of the health-care system does not present enabling conditions for the work of the research team, then any project they seek to undertake will unlikely bring about change to positively impact health and health inequalities. In the absence of enabling conditions, the research team will struggle to work. Ultimately, this is why the theme of mandate and demand is so significant: in effect, mandate and demand give the project team some work to do while also opening a space within which the work can be done.



5.ii. Dynamic conditions for project delivery – “ways of working”

The focus of discussion now turns from the enabling conditions prior to the initiation of projects to the dynamic conditions involved in the delivery phase of the projects. This overarching category is called, “ways of working”. As this category heading suggests, these conditions are concerned with how the work of the project teams was delivered.

5.ii.a. Ways of working in teams

- Successful multidisciplinary teams often have team leaders who can identify people’s distinctive skills and who allow team members to “play to their strengths”.
- Teams implementing relational community engagement approaches to health care should have shared goals and collective values.
- Teams implementing relational community engagement approaches to health care should have a culture of experimentation – fostered by feelings of safety and trust without any fear of failure.

There were very strong similarities in the ways that the Malaysian HEI and Lao teams talked about their team strategies and how these strategies related to the leadership of their teams, namely Dr Sengchanh Kounnavong and Dr Sharuna Verghis, respectively. The practice of leadership in these teams was itself relational – the PIs exercised leadership in a relational fashion, and as a consequence, leadership became distributed throughout the team members, and more specifically, as an effect of the relations among the team members. The Lao team talked about the key aspect of leadership within their team being the “skill of identifying people’s skills”, playing to these people’s skills and strengths, and then supporting them in the development of new skills – all the while working towards enabling team members to do the work and achieve the outcomes that matter most to them. Similarly, the HEI team talked about their underlying strategy of getting people involved in their team, that is, to take ownership of the team’s way of working and their own ways of working as part of the team. The HEI team highlighted one of the ways in which they did this: they would get leaders from different units in their wider team to take up these ways of working, and then to become champions for these ways of working, acting as mentors for their own team members in their units, so that they too can come on board with the work – a form of peer mentoring and learning, by which leaders seek to tap into people’s own sense of right ways of working, and especially their motivations for working in these ways. It is clear, as well, that the modules developed by the HEI team for their staff training programme are geared towards honing these ways of working, both by helping to build specific skills and by building relations among participants as members of teams. It is also clear that the nature and qualities of the interactions by which they seek to build up these team relations mirror the nature and qualities of the relations they will have with the communities that they engage.

CASE STUDY OF WAYS OF WORKING AS A TEAM

The Lao CRT has a very distinctive culture of experimental working, of being comfortable with trying new approaches without any sense of suffering a fear of failure when undertaking them. The team revealed that all members are comfortable saying, “I don’t know,” and that they are eager to explain things to one another. The team has a “we can do this” and “everyone can be the PI” ethos. The team’s ethos fosters respect among the team members, creates a shared sense of responsibility for one another and ensures that everyone is working towards shared common goals. The team members say that it is this “fabric” within their team that enables them to work experimentally without fear of failure – because this fabric forms a “safety net” for everyone, in the sense that it provides the team with the capability to adapt to any new situation that they might encounter. In turn, this safety net for experimentation provides a vivid exemplar of what trust means in practice, that is, when people talk about the importance of relations of trust in teams seeking to undertake relational community engagement work.

It became clear to us that the ways in which teams worked together were rooted in the team's collective values, and the ways in which they went about fostering these values. One team summed up the values of community engagement as working with “passion and a commitment to serve”. In turn, this was the underpinning principle by which new people who wanted to be part of the programme were brought into the team. This commitment to serve became “the common unifying bond or factor within the team”.

Another shared value that was rooted in the teams' ways of working was the importance of asking questions as a way of sense-making in an emergent process among the team, from the communities they serve to the CRTs, and as the intervention itself. One of the Lao team members joked that when they had been interviewed on a previous occasion by another team member, they were very impressed with the “good questions they asked me”. The member went on to reflect, “I like good questions, so I think all the interventions that we do are really about asking good questions.” To develop this ethos of questioning, teams had to create an environment conducive to asking questions, as well as listening attentively to responses to questions. This environment was encapsulated in the comfort that team members feel in saying, “I don't understand.”

A striking example of how this ethos of asking questions can be transformative within relational community engagement projects was offered by one team's PI, who reflected on the delivery of their research project, noting that it felt more like “operational research” than “scientific research” in its adaptive and responsive nature. With this realization, the PI began to lead differently: “We are all working together, and the way of leading is that we listen to each other; and then we say, ‘Let's try this’, and if this doesn't work, then we can adjust. There is flexibility in the work. I think this is a new way of working [for us].” The PI went on to explain that they had come to recognize the same ethos in how they were working with their community partners – the team began to recognize, and hear, “the good questions which communities can ask”, questions that can help identify gaps in the research, and in turn prompt the design of new research interventions.



5.ii.b. Ways of working – intervention design and research methods

- Research teams implementing relational community engagement practices need to develop research methodologies and data collection methods that are adaptive to complex dynamic processes.
- Interventions need to be adaptable rather than fixed in advance.
- A major aspect of research methodology should be a reflection on changes within the research teams themselves.

In developing its commissioning brief, WHO sought to build on and strengthen existing research infrastructure and programming needs.



At the time of the negotiations with WHO, two of the teams were already working with a specific population and/or a particular health issue, namely PLHIV and the mental health of a refugee community. The third team selected maternal and child health as the issue to frame their engagement work, while the fourth chose the mental health of a community with which they were already engaged. To some extent, how the teams saw the issue determined what they considered to be the intervention they were piloting. One of the interventions targeted the behaviour of individuals experiencing mental health issues, focusing on the relational aspects of poor mental health and trying to create networks of new relations through an online programme. Another CRT used an online platform to reach out to PLHIV but saw the “intervention” as

relationship-building with the HCWs, and rather than having a set of activities/specific questions, they had a series of principles that they hoped would underpin the interactions. For two of the CRTs, a central aspect of the intervention was the development of a relational training programme; one used the WHO RESPECT framework and explicitly wove in principles gleaned from meetings with the WHO project team (e.g. “we live in ongoing systemic process with one another where every interaction is an intervention and communication is bioactive”) to support HCWs and patient managers to have wide-ranging supportive follow-up calls with their patients about their mental health. The other CRT developed a bespoke set of activities to bring together people living in the community, district officials and HCWs to understand the barriers to women accessing health-care services during pregnancy, childbirth and the early years. The activities were developed to support relationship-building within the local teams and focus on developing an action plan to address the issues.

The most striking observation about the ways of working in delivering the research projects was made by Dr Vonthanak Saphonn, PI of the Cambodia CRT, who said during a “deep dive” meeting: “This doesn’t look like a research project!” At the other end of the continuum of responses, another researcher said: “At the beginning, I thought, it’s ‘just’ community engagement. I didn’t see where it was any different. But, for me, [community engagement had always been about] participation, right, and I feel really bad saying this now, but I know better now.”

Perhaps the biggest change in ways of working, and the biggest change in understanding their ways of working, was undergone by the Cambodia research team, as Dr Vonthanak’s comment suggests. The Cambodia team had been the CRT most committed to a traditional, quantitative data-driven, biomedical approach to research design – even though they had previously developed a very ambitious community action approach. They were adamant about the “basic science approach” for research. As one of the Cambodia team members stated: “Numbers speak!” The Cambodia team exemplified the fact that it can take time for research teams to adapt their ways of working to the research methodology required for relational community engagement; however, the work of the team also bears out the profound impact that adapting to these new ways of working can have on the understanding of the nature and practice of research.



The Cambodia team’s understanding of research methods was a corollary to their community action approach, which was largely focused on “reaching” PLHIV. This approach was very amenable to quantitative evaluation. One of the most striking things about the design of their DHI was that it was very open-ended. Rather than being designed for a specific health outcome, it facilitated interactions. As a consequence, the team began to focus in their research work on the nature and quality of these interactions. This focus followed from their initial commitment to finding out what sorts of “expertises” were necessary for ensuring that interactions on digital platforms were of a high quality. Speaking about this, one of the Cambodia team members said that, in the past, they had typically gone straight from the detail of the intervention design

and implementation strategy to the end results, which could be measured quantitatively, and then worked back to hypothesize “what happened in-between”. But based on their work in this project, they were now recognizing that perhaps this “in-between” represented the place from which they should start their research. As noted in Section 1, this recognition amounted to a realization of the importance of researching the intervention as it was being implemented because of the flexible and adaptive nature of intervention implementation in relational community engagement. The Cambodia team also realized as a result of

adopting this new approach to engaging with communities is that community members can become key members of research teams understood in their widest sense, and, in that capacity, they have the expertise to identify new research questions that can, in turn, generate new intervention design. As Dr Vonthanak observed: “Maybe communities don’t have the right answers, but they might have the right questions.”

The strongest message regarding research methods that came from the Lao team centred on the notion of “adaptability”. One aspect of adaptability pertains to the adaptability of research teams to new members – and of new members to established research teams. But the other aspect relates to the adaptability of researchers and research teams to the inevitable uncertainty that occurs when working directly with communities. As discussed above, the team’s ethos of experimentation in their ways of working is supported by this capacity for adaptivity. For the Malaysia HEI team, their perspective on adaptability had been significantly impacted following their conversations with the WHO project team and, in particular, from discussions about complexity and relationality. The focus on the uncertainty that lies at the heart of the epistemology of complexity theory brought home to the HEI team the need to be concerned with qualities of “deliberateness”, “purposefulness” and “mindfulness” in interactions with community members – qualities that lie at the heart of the principle that “every interaction is an intervention”.

CASE STUDY OF WAYS OF WORKING – RESEARCH METHODS AND COMPLEXITY THEORY

Members of the Lao CRT made it clear that taking a relational approach to researching and research design was “second nature” to them. At the same time, most of our respondents, during interviews and focus group discussions, made it clear that the language and concepts of complexity theory had made little impact on their ways of working. We tried to gain a better understanding of why this might be the case, and the following reflections were very powerful. One of the main values of complexity theory is the resource it provides for developing a new model for research that is better adapted than standard biomedical research methods to the realities of social systems. One respondent told us that in their country – and more widely in the region – the imposition of the Western biomedical research approach that privileges linearity felt like a form of colonialism. This approach was simply alien to the natural ways of working in their country. As a result, the salience of complexity theory as an approach that draws significance from being a research methodology in explicit opposition to the standard linear biomedical research approach had no resonance for them. For this respondent, the principles underlying a relational community engagement approach to research had more salience when understood within the conceptual framework of their own culture. It was for this reason that this respondent concluded: “I have always felt most invested in my work when I have known that the people I’m working with have really needed the intervention.”

5.iii. Dimensions of relationality: micro, meso and macro

It is fitting, in a programme of work devoted to relational community engagement, that the theme of relationality itself should turn out to be so fundamental throughout all the material comprising the dataset for this research. However, what became apparent, particularly within the context of the second level, cross-cutting analysis, which is undertaken from the perspective of complexity theory, is that the theme of relationality is itself “complex”. A guiding clue in developing this category came from a series of reflections by Dr Sharuna Verghis during a focus group discussion with the HEI team from Malaysia. These reflections resonated with a key principle that animated the collaborative work of the WHO project team, namely that there are multiple scales on which relational community engagement work plays out when viewed from a systems perspective: micro, meso and macro. Micro-level analysis focuses on the experiences and behaviours of individuals and on person-to-person interactions; meso-level analysis focuses on interactions within groups such as communities (or organizations) and between groups (or organizations); while macro-level analysis focuses on whole-system interactions, such as those of national health-care systems. These three dimensions of relationality suggested three system dimensions within which change can take place and, therefore, three dimensions in which relational community engagement can have an impact. Table 2 depicts the “complexity” of relationality and incorporates health outcomes for each dimension of relationality drawn from the conceptual framing for the programme. The analyses of this subsection indicate that the empirical evidence grounding the complex principle of “dimensions of relationality” offers proof of concept for the micro, meso and macro aspects of the overall conceptual framing.

Table 2. Complexity of relationality

DIMENSION OF RELATIONALITY	LEVEL OF ANALYSIS	SITE OF IMPACT OF CHANGE	POTENTIAL HEALTH OUTCOMES
Complexity of individual interactions/relations	Micro	Persons	<ul style="list-style-type: none"> • Improved sense of well-being • Increased (individual) sense of control • Increased (individual) sense of empowerment • Increased (individual) sense of ownership of interventions
Complexity of group interactions/relations	Meso	Communities Teams Groups	<ul style="list-style-type: none"> • Improved health status of communities • Better reach of health interventions (e.g. to vulnerable or marginalized communities) • Increased trust between stakeholders, groups, teams • Co-design of interventions
Complexity of whole-system interactions/relations	Macro	Programmes Systems Organizations	<ul style="list-style-type: none"> • Healthier policies (e.g. health-affirming, well-being promoting) • Decreased health inequities • Equitable dynamic flow of power, control and resources within and across all levels of programming, systems and organizations

5.iii.a. Complexity of individual interactions/relations

- Relational community engagement requires researchers and practitioners to engage with people as persons and not as the “problems” with which they may present.
- Shifting from provider-to-patient to person-to-person relations requires significant changes to how researchers and practitioners communicate with people.
- Through such changes in ways of communicating, individuals can experience a sense of empowerment through participating in relational community engagement.

The relational approach to community engagement is rooted in being committed to “patients” as *persons*, responding to them and their care needs by looking across services, by taking an integrated-holistic approach, rather than one that is fractured along service provision organizational lines, or one that treats symptoms such as poor mental health in isolation. This latter approach, which is akin to the norm for biomedically determined provision of care, inevitably focuses on the condition, or problem, with which the patient presents, rather than responding to the “patient” as a person. Responding to the person as a person reveals the complex dimension of person-to-person relations: to respond to the person in this way requires the researcher or service provider to respond to the complexity of the person and to respond to the complexity of the situation in which they find themselves. For the HEI team, such a situation might involve a politically constructed stigma attached to refugee communities. For instance, a member of the refugee community might be viewed and treated by service providers first and foremost as a refugee, rather than a person who is experiencing health issues (which may or may not be affected by their refugee status). In turn, this approach might impact the refugee’s willingness or capacity to access centrally provided healthcare services.



For the Lao CRT, this complexity of relating with individuals manifests most clearly in the inevitable uncertainty that pervades such interactions. One of the team’s strengths is the comfort that team members feel in coping with this uncertainty, in feeling comfortable responding to people’s real problems as they are revealed in the real context within which they live. Lao team member Dr Elizabeth Elliot shared a Lao phrase that describes this personal quality; it translates as “keeping a cool heart”.

Working in this way can have transformative impacts on the researcher or service provider and the patient. One of the most striking examples of a transformative impact was reported by Dr Sovathana Ky of the



Cambodia CRT. She explained that HCWs tasked with delivering the Cambodia team's DHI were initially sceptical about the additional work. However, many of the digital platforms used by the team – such as WhatsApp and Telegraph – were already being used by the PLHIV engaged in the project. More specifically, PLHIV used these platforms to interact with their families and friends. As a consequence, when they interacted with the HCWs via these platforms, the patients communicated as if they were interacting with their friends and families. This meant that they often felt more comfortable talking about their situations and conditions in more personal or intimate ways. This, in turn, affected how the HCWs interacted with the patients, responding to them in ways that were much more akin to what Dr Bora Ngauv had previously called the “friend and friend” relation. While the HCWs

had initially been reluctant to embrace the work entailed by the DHI, Dr Sovathana revealed that these new ways of relating led to them spending their own money to travel to patients' homes in order to deliver in-person services. This commitment by the HCW went even further in building trust for the PLHIV with whom they were interacting. As a further consequence, the patients felt comfortable adopting the new interventions trialled by the project team, and even went on to support new patients to engage with the project – a clear example of the identified health outcome of “increased individual sense of ownership of interventions”.

A final element of this dimension of relationality pertains to the impact of engaged interactions on the health and well-being of the individual person. Each of the CRTs has been collecting various sets of data that enable them to assess the impact of their work on the health of individuals. One striking perspective that has evolved over the course of the overall programme has been the way in which each team has made sense of the principle that “every interaction is an intervention”, which the WHO project team have stressed in countless meetings. This principle has allowed the teams to begin to understand the significance of data that pertains specifically to the nature and quality of interactions with individuals.

5.iii.b. Complexity of group interactions/relations

- In successfully implemented relational community engagement research, the research team expands to include community partners who feel they belong.
- A consequence of team expansion, the expertises of community members come to have equal importance within the teams – this process parallels the way in which trust among multidisciplinary teams is built up.
- Team expansion can also lead to more effective co-design of health interventions and, as a consequence, a wider reach for these interventions.

There are two foci for the dimension of relationality of groups – relations among members within research teams and within communities, and relations between teams and communities.



Dr Shogo Kubota captured the system-level impact of change in this dimension when he talked about “breaking down the wall that separates care providers from care recipients”, noting that care providers and recipients are mutually interrelated parts of the same system. One of the clearest examples of “breaking down of the wall” was offered by Cambodia CRT member Dr Kenneray Seang during the focus group discussion with the team. When she talked about the “team” that was working on the Cambodian project, she explicitly mentioned not only her research colleagues but also the HCWs delivering the DHI and the PLHIV engaged in the project. It was clear from her words that she and her colleagues believed that all of them belonged to the team. As a result, all of the various groups that belong

to the team have been able to continually “identify gaps” to which the research project can respond, and thus to imagine together new possibilities for interventions. Dr Sovathana summed up by saying, “We hear lots as a team, and we learn together as a team.”

If treating the condition of a patient entails that the patient comes to hospital, then a public health response to community health needs requires that the service provider or researcher go to the community to hear members tell them what their health needs are, while seeing for themselves the reality of the conditions in which people are living. Perhaps the single most significant impact of the dimension of the complexity of group relations, which bears out this principle, was on the team of medical doctors who carried out the field research for the Lao CRT as part of their master's degree research practice. Their reflections on how they changed from being urban medical experts to researchers in isolated rural communities – by listening



and responding to the “expertise” of local communities – are a profound testimony to the transformative power of relational community engagement. For the Lao team, the realization that these reflections themselves constituted a crucial dataset that could yield one set of process indicators by which to evaluate their work represented a further transformative impact.

A further intriguing impact at this scale of the complexity of group relations was discussed by the Malaysia HEI team. One focus of their work has been on improving the hygiene conditions in refugee detention centres. By engaging both the refugees and the officers in the detention centres, they were able to make the officers understand that any diseases contracted by the refugees because of unsanitary conditions actually presented a health risk to the officers, an understanding that was all the more salient in the context of the COVID-19 pandemic.

5.iii.c. Complexity of whole-system interactions/relations

- Engaging key stakeholders from local authorities and health ministries can help them take “ownership” of engagement processes and their outcomes, which in turn can create conditions for transformative change within health systems as a whole.
- This can lead to these systems functioning more efficiently and delivering services in a more “healthy” fashion.

The macro-level of analysis represents perhaps the hardest perspective for researchers to grasp, as well as representing the most challenging dimension for national health ministries to bring about changes that have demonstrable health outcomes. One example of how the work of the project teams can be effective in the dimension of the complexity of whole-system relations was suggested by the Malaysia HEI team, which talked about the way in which a focus on health offered a “soft entry” for working systematically with refugee communities, which in turn offered the potential to have an impact on the political and legal circumstances affecting such communities. For the Cambodia CRT, it is possible, as WHO Regional Officer Dr Polin Chan suggested in the final “deep dive” with the team, that the remarkable successes achieved by the team and NCHADS in providing care for PLHIV, and in moving towards achieving their 95/95/95 strategy – to eliminate new HIV infections and thereby to achieve an AIDS Free Generation – can be traced back to their commitment to and innovations in relational community engagement.

CASE STUDY OF RELATIONALITY – COMPLEXITY OF WHOLE-SYSTEM RELATIONS

A traditional approach to solving a system-level problem, such as local governors having power but holding no responsibility, would be for the “centre” of the system – for instance, a central governing authority – to try to institute a centralized policy of reorganization. In terms of system dynamics, such an approach would consist of “pushing” the change onto local contexts. An alternative approach would consist of enabling these local contexts to “pull” a change towards them, a change that would emerge locally as a response to a community situation. This could be achieved by the kind of generation of local community plans that were developed in the course of the Lao team’s Community Network Engagement for Essential Healthcare and COVID-19 Responses through Trust (CONNECT) workshops. But how might these plans be given efficacy? How might they be given the power to bring about system-level change? The Lao team ensured that these CONNECT workshops were attended by district and provincial staff from the District Office of Home Affairs (DOHA) and the Ministry of Home Affairs. One key piece of data stands out from the team’s evaluation of these workshops: “One staff member of DOHA, who was involved in the whole process, reconfirmed that DOHA’s role and responsibilities were really relevant to the CONNECT work, [after thinking during] the introductory meeting on day 1 that DOHA’s work was not really concerned with the work of CONNECT.” Elsewhere, the team reported that “all district and provincial staff who joined the process in the community [emphasis added] expressed consistently that they were convinced by the CONNECT approach”. What is significant here is not so much the impact of the plans that represented the “outcome” of the CONNECT workshops; rather, what is striking is the profound shift in the attitude of the DOHA staff member. Home Affairs staff were convinced by the process of the CONNECT workshops, and they were convinced because they were “together” with the community, throughout the process. They subsequently reported that they had never worked in this way before, but by being involved along with community members throughout the whole process, they were able to “see for themselves” the efficacy and impact of this approach. Subsequently, during the period of preparing this report, the Lao CRT has been successful in building on these initial whole-system outcomes, facilitating further connections with the Ministry of Health and the Ministry of Home Affairs, which led to the signing of a joint memorandum of understanding between the ministries.

Relationality has also been presented in three system-level dimensions to highlight how relational complexity can have impacts within systems at the levels of the individual, the community and the health system. This is a somewhat artificial formulation – to the extent that, within any dynamic system and especially within a complex adaptive system, there will also be inter-relational processes taking place between the “levels” of the system. In this way, the complexity of relationality functions both “horizontally” and “vertically” within systems. What does this mean in practical terms? As suggested by the schema presented in Section 6: the embedding of new ways of working in communities, and in local health and governance systems, which have successful health impacts within these localities, can then impact on commissioners, who are provided with a mandate to commission new projects that exemplify these new ways of working in new settings. Similarly, as the evidence from the work of the Cambodia team shows, engaging with PLHIV by way of their DHI helped improve rates of retention in HIV treatment care, but it also opened up new spaces for research questions and project design. These “vertical” relations between levels of the system serve as “positive feedback loops”.

5.iii.d. Case study of relational engagement

This section concludes with an extended case study that aims to show how relational engagement plays out in practice; how, from a systems perspective, common dynamic conditions enable relational engagement processes to occur; how, within the system, consciously modelling these conditions can create positive feedback loops that reinforce, and thereby mandate, the development of the relational engagement processes; and finally, how complexity science provides both a conceptual means for making sense of these systemic processes, and a resource for framing their “implementation” in practice.

CASE STUDY OF RELATIONAL ENGAGEMENT

One of the most important concepts in complexity theory is that of “adjacent possibles” – how systems can explore and evolve into new possibility spaces for behaviour, for “ways of being”. These adjacent possible are significant, as they begin from a minimal change in behaviour, thus minimizing the risk of failure being catastrophic for the system, while the non-linearity of the system dynamics allows for potentially exponential impact for the new behaviours. We saw significant examples of activities from across the Research Initiative that could be understood in terms of the exploration of adjacent possibles. What was striking about these examples was that they were supported by a series of common conditions.

When the Lao team talked about their ethos of experimentation, they emphasized how they felt safe experimenting and did not fear failure. This feeling came from what they called the “safety net” that was afforded by the relationality within their team, which manifested in such characteristics as their comfort with saying “I don’t understand” or “I don’t know” in team meetings. The team members said that whatever transpired from undertaking such experiments, they knew that the team would be able to adapt to the outcomes that emerged. A key example of this in practice occurred when the medical doctors who were carrying out field research for the Lao team in rural communities reported back to the PI, Dr Sengchanh, that they did not feel that the draft survey questions for the research were fit for the work they were trying to do on site. Dr Sengchanh encouraged them to modify the survey in whatever way they felt appropriate, in this way distributing leadership to the researchers on the ground, and exemplifying the claim made by members of the core team that, in practice, “anyone can be PI at any time”. The researchers in the field were mandated to respond to the uncertainty of the situation in ways that seemed most appropriate to them, in the community where they themselves had built up new relations, and therefore based on their local knowledge of local conditions. Although this mandate was explicitly articulated by Dr Sengchanh, it, in fact, expressed the ethos of experimentation and the relational fabric constituting the safety net, which were most characteristic of the Lao team’s way of working.

Turning now to the WHO project team (WHO and commissioned technical partners), it is apparent that they also aspired to an ethos of relational working that had distributed leadership. They sought to provide “process expertise” to the CRTs, to partner and support the CRTs in the development of their projects and to model and seek to embed the relationship-building, engagement and collaborative working that the Research Initiative was seeking to foster. The fora within which they carried out this work were the Community of Practice meetings (three times) and the regular “deep dives” with each of the project teams. The further aim of the Community of Practice meetings was to enable the CRTs to witness the work being done by each team, and to have the context within which to translate what they were seeing into their own contexts. One of the most important functions of the work of the WHO project team, and of the Community of Practice, was to support the CRTs in responding and adapting to the uncertainty that would emerge in their projects, as a necessary corollary of undertaking ways of working that went beyond the norms of the traditional research practices with which they might have been familiar. In this way, the WHO project team, in the context of the Community of Practice, performed a function that directly paralleled the function of the Lao team – providing, in effect, a “safety net” for each team to experiment with new ways of working. But more than just paralleling this function, the WHO project team worked to give permission to the CRTs to experiment and to mandate the teams to take risks in their projects, without having to worry about failing.

From a systems perspective, therefore, there was modelling – or scaling – of the relational conditions that enabled new, engaged ways of working at different levels of the overall Research Initiative viewed as a system. However, it is possible to go further and say that these modellings created feedback loops that influenced the behaviour of the overall system in its various levels. (For example, based on reflective learning between the first and second Community of Practice meetings, the WHO project team, led by the Regional Office and headquarters, developed a “before-during-after” rhythm for their working, which went on to inform their practice in supporting the CRTs, but which also sought to model and embody the process of community engagement, enabling the formation of a community of co-learning and co-creation.)

In review of these processes that were being scaled at multiple levels within the system, and which were mutually shaping and informing one another by means of positive feedback loops, from the perspective of the science of complexity, it is evident that these ways of working enabled not only various parts of the system to explore adjacent possibilities, but also the whole system to explore adjacent possibilities. Over and above this, it is also possible to see how the teams within the system and the system as a whole were able to adapt to the changes and to the uncertainties that accompanied these changes. Some of these changes affected the system from within, while others came from “outside” – as parts of the system interacted with communities and stakeholders in the “niche” or “environment” within which the research teams implemented their projects, and hence made their interventions.



SECTION 6

Schematic representation of processes that create conditions for relational engagement

The analysis of the cross-cutting themes through a systemic lens has provided evidence for how the conditions can be created for responsive and adaptive ways of working between stakeholders who are addressing a particular health issue. The process indicators from all four CRTs provide evidence of the feasibility and acceptability of the approach they sought to take to address poor health, and access to or uptake of health services, from the perspective of the front-line health workers supporting service users and for the CRTs. This evidence pertains particularly to interventions in the interactions and connections between different stakeholders responsible for health service governance, delivery and use during the pandemic. There is evidence from some of the CRTs that the relational engagement approaches they designed to engage relevant stakeholders in the health-care systems and the study sites were also embodied in the nature of the relations within the CRT. These include fostering relationships of trust, shared vision and a deep commitment to collaborative working to overcome barriers to accessing health services.



Two of the CRTs have generated initial outcome data; early outcome data from the Lao People's Democratic Republic and Cambodia strongly suggest that these new ways of connecting stakeholders have generated a shared experience and understanding of the nature of the issues (barriers to health services, treatment and care) from which emerged decisions, agreements and adaptive responses to address the barriers. This has led to tangible health outcomes for the populations they sought to reach. Furthermore, in the case of the Lao People's Democratic Republic, there is a commitment for a relational engagement approach to be adopted nationally.



This section details a set of processes that the empirical data and cross-case analysis suggest can create the conditions for relational stakeholder engagement. Drawing from the work of Hawe and Shiell (4), a schema is presented that understands complex interventions less as multicomponent sets of activities and more as critical events in the system (for example, health care, school, workplace) or as “perturbations in the system”. This perspective supports, and further elaborates, the principle from the conceptual framing for the programme, that is, “every interaction is an intervention”. These events disrupt patterns of interactions, as well as the nature and quality of relationships experienced by “communities of interest”, and thereby create new ways of interacting that can displace existing activities and redistribute resources. Thinking about complex interventions as events that perturb systems also acknowledges that relations, patterns of relations and the nature and qualities of relations within systems cannot simply be altered towards a preferred outcome by “linear” interventions designed and implemented from research positions “outside” the system.

Reflecting on what this conceptualization means for issues of scaling interventions across different contexts, Hawe and Shiell (4) propose that, rather than characterizing an intervention in terms of a standardized form, such as a workshop, information leaflet or script for a telephone call, which looks essentially the same in every site, when an intervention is conceptualized as an event (or series of events) in a system, then the process of change could be the same in all sites, but the form might be different. Therefore, it is the purpose or function of holding the workshop or handing out an information leaflet that is used to characterize the intervention and fidelity to the intervention is fidelity to the functions of the activities.

The following schema has been developed as a way of responding to the challenge posed by working with complex systems to traditional approaches to “scaling”. Complex systems are sensitive to their initial, local conditions, whereas traditional approaches to scaling up services use approaches that focus on replicating the components of an intervention, regardless of local conditions, and without consideration of the purpose or function of the components. For this reason, the approaches adopted by the various CRTs – each of which was informed

by, and responded to, the concrete realities of both their national health-care systems and the health-care issues addressed by their research projects – cannot simply be reduced to activities that can be replicated and then expected to have the same impact in “any” health-care system. At the same time, however, the dynamic relational conditions that are presented in Section 5 have the potential to be “translated into” or “scaled across” other health-care systems. What is required is “a change in the mind-set, attitudes and practices of health professionals, policy-makers, commissioners and funders” in their approach to supporting work that seeks to translate the findings about relational community engagement arising from the projects supported by this programme into new contexts (4).



The schema shown in **Fig. 4** depicts the form and function of the processes for relational engagement, including capturing evidence of its impact. Central to understanding the conditions necessary for relational engagement is recognizing the “self-organizing process”, which is brought about by a change in the nature of relations in the system, which then leads to changes in system behaviour. Stable patterns of behaviour that arise from these new relations can then hold the system in its new self-organizing state, and these new ways of working can become a sustainable means of delivering health-care services in response to specific population needs. The schema is intended to show how the initial

conditions to experiment with relational ways of engaging can be created and supported by commissioners. It also shows the importance of generating ways for the CRTs to stay connected through a shared vision and sense of purpose for the research, which in turn supports creative thinking about who else needs to be engaged, or brought into the team, sharing the same values. Generating a collective sense of purpose for the work and a distributive style of leadership that recognized diversity of experiences and expertise creates a safe space for all members of the team to try new ways of doing things and collective sense-making. These enabling relationships are then patterned in the way front-line services are delivered and people with experience of the issues are brought in to co-create new ways of delivering health care.

The schema takes a complementary but different perspective to that of the WHO Community Engagement Framework (1). The purpose of the schema is to give a representation of the dynamic nature of the processes that can be seen to underlie the categories of the Framework, and how these processes follow on from one another.

Table 3 attempts to capture the process of each CRT and highlights the extent to which their practices were new ways of working and generating a shared understanding of the nature of the issues, the nature of the engagement and how process and outcomes were captured.

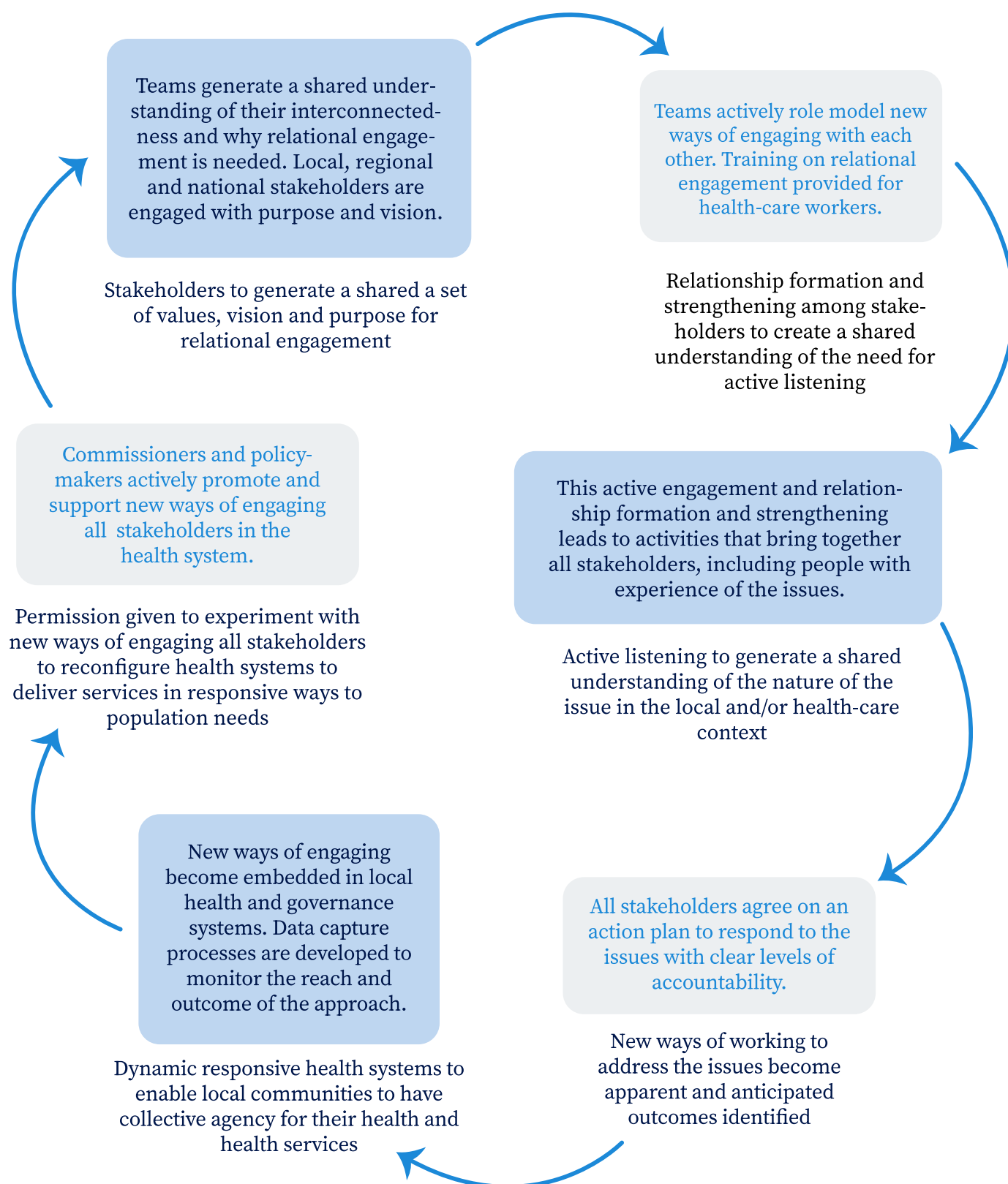
Fig. 4. Schema of form and function for relational community engagement

Table 3. Enabling conditions for relational engagement and the processes undertaken by each team

Cambodia team

FORM OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	FUNCTION OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	PROCESSES UNDERTAKEN BY THE CAMBODIA TEAM	CRT QUOTES*
<p>CRTs have diverse skills and experience and meet regularly.</p> <p>Local, regional and national stakeholders who are part of the delivery and governance of the health system and service provision are identified.</p>	<p>Stakeholders generate a shared understanding of their interconnectedness and appreciate the diversity in expertise and experience as a resource.</p> <p>Local, regional and national stakeholders are engaged with purpose and vision based on shared values.</p>	<p>Realized that the COVID-19 pandemic was affecting the treatment and care of PLHIV and that new ways of reaching the population were needed. New ways of sustaining relationships between HCWs, patients and families were needed to achieve the 95/95/95 goals.</p>	<p><i>"Community-based care is interrupted so we had to design again ways to strengthen the relationship [between the patient and HCW]."</i></p> <p><i>"The current COVID-19 pandemic changes the dynamics of the relationships between the care providers, as well as the patients, so all of these lead to changes in several of the HIV/AIDS indicators including access and retention rates among this population."</i></p>
<p>Skills and expertise for relational engagement are identified. Training is delivered for front-line workers, where appropriate, to support new ways of working.</p>	<p>CRTs role model active listening, creating spaces for experimentation. Relationship formation and strengthening occurs between all stakeholders and creates a shared understanding of the need for co-learning.</p>	<p>Recognized the need to develop a DHI based on relational principles for HCWs to reach out to PLHIV using appropriate platforms and ensuring that PLHIV have necessary digital access and phones/tablets, etc., where needed. Training given to HCWs to support trust and relationship-building through digital platforms.</p>	<p><i>"We learned that the HCW did a lot to support their patients. They use all means to get their patients to interact. Sometimes they spend their own pocket money on the patients, and they contact the patient by all means, so sometimes they contact the neighbour of the patient. We learnt that the HCW really [takes] care of the patients and [treats] them like a relative."</i></p>

Workshops are held with all stakeholders including people with experience of the issue. Participatory activities are developed for co-learning.	Proactive engagement and sense-making across all stakeholders to generate a shared understanding of the nature of the issue in the local and/or health-care context.	<p>Identified barriers to treatment adherence. Personalized responses were developed for each patient in relation to barriers to accessing treatment and care.</p> <p>Shift from seeing PLHIV as recipients of services to active contributors in their design and delivery.</p>	<p><i>“Most of the questions the PLHIV ask are about their treatment and delays to appointments and how to deal with that. [The] response from the team has been to give very clear instructions to each patient.”</i></p> <p><i>“So we see that when the health-care provider creates the online group and responds in a timely fashion it makes the group very interactive.”</i></p> <p><i>“The health-care providers had the idea of bringing people together to share experiences and practice.”</i></p>
All stakeholders co-produce an action plan to respond to the issues identified with clear levels of accountability and monitoring systems.	The processes, skill sets, practices and tools to support relational ways of working to collaboratively address issues become apparent, and anticipated outcomes are identified.	<p>New ways of engaging strengthened relations within the CRT and between the HCWs and PLHIV. HCWs spoke of going the extra mile, PLHIV appreciated being able to have less formal catch-ups about their care, feelings of stigma reduced. Outcomes related to access to treatment and adherence were identified.</p>	<p><i>“We see that some connection [between health-care workers and PLHIV] is better than before.”</i></p> <p><i>“We learn from our team. We learn that research is important, and it can provide an exact intervention for the programme.”</i></p>
CRTs report on process and outcome of the approach. Meetings are held with all stakeholders to share the learning. Data capture processes continue to monitor the reach and outcome of the approach.	Embed relational engagement in local health and governance systems that have dynamic responsive feedback mechanisms and which enable diverse communities and health and governance stakeholders to have collective agency for their health and health services.	<p>Reflected on the value of the relational community engagement approach and how it could be rolled out more widely and/or used for other health issues.</p> <p>The national database is used to monitor health outcomes and disparities – articulated learning from project can support identifying process indicators for future research.</p> <p>Exploring ways to take the learning and apply it to other aspects of health care.</p>	<p><i>“We learn as a team, we talk and we discuss as a team, and we support each other. So the way we work together now really impacts this research.”</i></p>

Lao People's Democratic Republic team

FORM OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	FUNCTION OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	PROCESSES UNDERTAKEN	CRT QUOTES*
CRTs have diverse skills and experience and meet regularly. Local, regional and national stakeholders who are part of the delivery and governance of the health system and service provision are identified.	<p>Stakeholders generate a shared understanding of their interconnectedness, appreciate the diversity in expertise and experience as a resource.</p> <p>Local, regional and national stakeholders are engaged with purpose and vision based on shared values.</p>	<p>Wanted to affect local governance systems to embed public health as a local response to generate shared responsibility between health-care providers, local governors and local population for health.</p> <p>Shared mandate of the need to break down barriers between the providers of care and the recipients of care.</p>	<p><i>"We have a very specific agenda on how to shift the ownership of public health to the health of the people."</i></p> <p><i>"It's really about matching input and output, inputs being the experience and the knowledge and the skills, but the most important, I would say is the passion, what do we want to do with these kinds of inputs. We will find a way so that we can all realize our passion in our work from a different angle, but navigating to a certain collaborative output. I think that's the team dynamics that we are creating."</i></p> <p><i>"So whilst the initiative may be new, the desire to work in this way is not."</i></p>
Skills and expertise for relational engagement are identified. Training is delivered for front-line workers, where appropriate, to support new ways of working.	CRTs role model active listening, creating spaces for experimentation. Relationship formation and strengthening occurs between all stakeholders and creates a shared understanding of the need for co-learning.	<p>Met frequently to discuss the work, share lessons and generate a shared understanding of how they would work with all the stakeholders to generate a shared understanding and responsibility for health.</p> <p>Developed the CONNECT activities to foster new relations; provided training for the facilitators of the workshops.</p>	<i>"So whenever we talk about community engagement, the issue we have that the authority is with local government, but the accountability does not come so much with the authority ... how can we change it from going to the village chiefs and saying please help us to help your community, how can we make it so that they will say hey our community needs better health and you [the service providers] come and support us."</i>

<p>Workshops are held with all stakeholders including people with experience of the issue.</p> <p>Participatory activities are developed for co-learning.</p>	<p>Proactive engagement and sense-making across all stakeholders to generate a shared understanding of the nature of the issue in the local and/or health-care context.</p>	<p>Held participatory workshops to gain a shared understanding of the nature of the barriers to accessing health-care services.</p> <p>Discussed reasons behind not wanting to use local health-care facilities, for example, lack of trust, feelings of not being respected by HCWs.</p>	<p><i>“You know it's about the community] owning their health, and it's about breaking the walls between the users and the providers. Yeah, right, it's working together, and I think COVID-19 really gave this sense of oh, we have to really work on the same goal together. And that was another thing that made it easier to change this relationship, which is one of the very big core parts of our intervention is to break the barriers between the user and the provider.”</i></p>
<p>All stakeholders co-produce an action plan to respond to the issues identified with clear levels of accountability and monitoring systems.</p>	<p>The processes, skill sets, practices and tools to support relational ways of working to collaboratively address issues become apparent, and anticipated outcomes are identified.</p>	<p>Each pilot area identified local issues and then co-created new ways of delivering services that addressed the issues.</p> <p>CRT started to see change in the uptake of services for antenatal care.</p>	<p><i>“They saw things actually happening during that time of the workshop, and they saw that people do start to change, and they start to talk to each other, and they start to come up with plans and actions, and then they have the will to carry them through.”</i></p> <p><i>“When we are coming and working together to discuss together and plan together, they can see the reality, that okay, when we do this we achieve our community health.”</i></p> <p><i>“It's never happened before. This way of working, it's never happened before. The district [usually] decides and then says, ‘please do this and please do this’. They never listen if they [the community] can do or not do, but the way we are, we have to go, right, not ordering but just listening.”</i></p>
<p>CRTs report on process and outcome of the approach. Meetings are held with all stakeholders to share the learning. Data capture processes continue to monitor the reach and outcome of the approach.</p>	<p>Embed relational engagement in local health and governance systems that have dynamic responsive feedback mechanisms, and which enable diverse communities and health and governance stakeholders to have collective agency for their health and health services.</p>	<p>Partnerships between residents, local HCWs and district officials become the new way of identifying and responding to problems.</p> <p>District officers become embedded in local and regional systems; process and outcome indicators are identified.</p>	<p><i>“So we shift ownership of the health of the community from the health sector back to the local authorities.”</i></p> <p><i>“And we have been hearing from the primary health providers that in order to gain trust they also need skills for respectful, people-centred care, so we invite the villagers to improve the health-care quality.”</i></p>

Malaysia HEI team

FORM OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	FUNCTION OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	PROCESSES UNDERTAKEN BY THE MALAYSIA HEI TEAM	CRT QUOTES*
CRTs have diverse skills and experience and meet regularly. Local, regional and national stakeholders who are part of the delivery and governance of the health system and service provision are identified.	Stakeholders generate a shared understanding of their interconnectedness, appreciate the diversity in expertise and experience as a resource. Local, regional and national stakeholders are engaged with purpose and vision based on shared values.	<p>Purpose of the team is to support refugees and asylum seekers with mental health services – initial health needs were identified by the population. COVID-19 necessitated reaching their clients digitally to discuss their mental health needs. Wanted to embed relational community engagement into follow-up calls.</p> <p>Used a health issue as a soft entry to making health care accessible to marginalized populations.</p>	<p><i>“Why you do it drives how you do it. That's where that linking comes about in the process, whether it's within our team or from our team to the community, it's all driven from that that's why I said, you know it starts with a commitment to the people we are serving. So that is the common unifying bond or factor even within the team.”</i></p>
Skills and expertise for relational engagement are identified. Training is delivered for front-line workers, where appropriate, to support new ways of working.	CRTs role model active listening, creating spaces for experimentation. Relationship formation and strengthening occurs between all stakeholders and creates shared understanding of the need for co-learning.	<p>Developed a training programme for all team members making follow-up calls to patients using the RESPECT framework.</p> <p>Took the core concepts from the relational community engagement work and used the training as a means to enhance team relationships as well.</p> <p>During the training, team members were encouraged to try out new ways of engaging with family members and friends and share the learning.</p>	<p><i>“The value of incorporating the RESPECT framework is what we see as the purpose for integration of community engagement strategies that not only enhance trust, but also improve the quality of communication and relationships between service providers and patients.”</i></p> <p><i>“It was also about strengthening the relationships between the team members. There are a lot of new team members who joined during the period of the pandemic and who haven't been able to interact as much face to face with other peers and other colleagues, and so we kind of build those into it.”</i></p>

Workshops are held with all stakeholders including people with experience of the issue. Participatory activities are developed for co-learning.	Proactive engagement and sense-making across all stakeholders generate a shared understanding of the nature of the issue in the local and/or health-care context.	<p>From the outset, the work has been needs led and focused on raising awareness of a highly marginalized population.</p> <p>Barriers to receiving mental health treatment identified, signposting to other agencies supporting different health issues is a key part of their role, maintaining active relationships with under-served population.</p>	<p><i>"I think being committed to the person that you are serving as the starting point, because when that's the starting point, you will look across you know, to find an integrated holistic solution to whatever the problem is, it doesn't mean you have to provide every service."</i></p> <p><i>"So it's again going back to the basics, and you know, starting with the total person."</i></p>
All stakeholders co-produce an action plan to respond to the issues identified with clear levels of accountability and monitoring systems.	The processes, skill sets, practices and tools to support relational ways of working to collaboratively address issues become apparent, and anticipated outcomes are identified.	The HEI team have a very clear remit around supporting mental health and a mandate to serve refugees and asylum seekers. They capture data around health outcomes but are very clear that this does not drive what they do. They have put in place external monitoring of follow-up calls to capture the nature and quality of the interactions for continuous improvement.	<p><i>"Also, it's about looking at the strengths that the individual patient is bringing in and that links actually to the community because that's where the resilience, the opportunities for harnessing those factors of resilience lie in the networks and the social support that exists."</i></p> <p><i>"But I think it's also building up the qualitative data around this. Even if you got the health outcomes or health status, that's not enough. In a quantitative way you would start trying to fragment the causative factors of it all, but it's the qualitative data around it, people speaking to their own experiences, that is required to build a case."</i></p>
CRTs report on process and outcome of the approach. Meetings are held with all stakeholders to share the learning. Data capture processes continue to monitor the reach and outcome of the approach	Embed relational engagement in local health and governance systems that have dynamic responsive feedback mechanisms and which enable diverse communities and health and governance stakeholders to have collective agency for their health and health services.	<p>The HEI approach and work have been recognized as exemplar for engaging marginalised populations – internships and courses at Monash University spread this way of working.</p> <p><i>HEI teams embedded in refugee and asylum seeker populations, trusted workers for mental health support, ways of assessing process and outcome embedded into approach.</i></p>	<i>"... not possible to provide curative care for everyone, prevention is an important part of health and well-being necessitates a community context, the curative is more at the individual patient... for us we call it community-based care even though it is mental health care."</i>

Malaysia SEACO team

FORM OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	FUNCTION OF ENABLING CONDITIONS FOR RELATIONAL ENGAGEMENT	PROCESSES UNDERTAKEN BY THE MALAYSIA SEACO TEAM	CRT QUOTES*
Country research teams (CRTs) have diverse skills and experience and meet regularly. Local, regional and national stakeholders who are part of the delivery and governance of the health system and service provision are identified.	Stakeholders generate a shared understanding of their interconnectedness and appreciate the diversity in expertise and experience as a resource. Local, regional and national stakeholders are engaged with purpose and vision based on shared values.	To identify and support the mental health needs of a geographical population, the Segamat community, focussing on the relationship between HCWs and people with poor mental health. A diverse team of researchers (quantitative and qualitative) and public health physicians. The initial shared vision was to develop a DHI to support mental health, but the focus shifted to being a community engagement intervention.	<p><i>"We cannot run the observatory without community engagement. Community engagement is the cornerstone of SEACO."</i></p> <p><i>"We invited people [researchers] with a shared interest in the area."</i></p> <p><i>"90% of Segamat residents are part of SEACO as research participants, they already have a relationship and when we think of interventions it's at the individual, it's the target population, the people in need."</i></p>
Skills and expertise for relational engagement are identified. Training is delivered for front-line workers, where appropriate, to support new ways of working.	CRTs role model active listening, creating spaces for experimentation. Relationship formation and strengthening occurs between all stakeholders and creates shared understanding of the need for co-learning.	Intervention development followed best practice research methods including a survey to understand the nature of the problem, a systematic review and then development of RELATE-ME, a DHI to support people's mental health. RELATE-ME was based on identifying support and developing relationships within the community to support mental health – programme hosted by HCWs.	<p><i>"We assembled the team based on experience, ... but we don't have community engagement expertise, and it is not very easy to find community engagement expertise in a very short time horizon."</i></p> <p><i>"I was told it was very quick prototyping, 2 weeks, and only after that did I realize that the team was much bigger than I thought and there were other disciplines."</i></p>

Workshops are held with all stakeholders including people with experience of the issue. Participatory activities are developed for co-learning.	Proactive engagement and sense-making across all stakeholders generate a shared understanding of the nature of the issue in the local and/or health-care context.	<p>Stakeholder workshops were held to ascertain acceptability of the components of the RELATE-ME prototype. Workshops included people with lived experience of mental health issues, medics from family medicine, public health and psychiatry, a coordinator from an NGO and the CRT.</p> <p>Due to time constraints, RELATE-ME was piloted with people known to the HCWs in the Segamat community, not people with mental health needs.</p>	<p><i>“SEACO staff, when they run it, thought it was a research project. So they have the mentality that we are recruiting people for the research – a data collection mentality not a community engagement mentality.”</i></p> <p><i>“So at first, I think there was also some confusion about being a research participant. They thought they were there to provide data rather than build relationships with each other, so after a few days they found that actually we're trying to put a support group together, among them, so they started to open up more to each other.”</i></p>
All stakeholders co-produce an action plan to respond to the issues identified with clear levels of accountability and monitoring systems.	The processes, skill sets, practices and tools to support relational ways of working to collaboratively address issues become apparent, and anticipated outcomes are identified.	Follow-up interviews were conducted with participants who had received the prototype and with the HCWs who commented on what they liked and what they found challenging about RELATE-ME.	<i>“Because this is feasibility testing and not with the real people that need it, more like a trial run, it feels like they aren't the people that really need it.”</i>
CRTs report on process and outcome of the approach. Meetings are held with all stakeholders to share the learning. Data capture processes continue to monitor the reach and outcome of the approach.	Embed relational engagement in local health and governance systems that have dynamic responsive feedback mechanisms and which enable diverse communities and health and governance stakeholders to have collective agency for their health and health services.	Due to time constraints, the digital support could not be given to people with mental health needs. As such, learning about how it can provide relational support was not possible. At the time of writing, it is not clear whether the work will go forward in its current form although spin-off work has been discussed. The importance of having community health workers who address multiple issues to reduce stigma of certain issues was identified as a new avenue to explore.	<i>“The most important aspect of community engagement is shared interest between the community and the research team; they need to have a mutual respect [of each other] and trust.”</i>

* CRT quotes are from the second and third Community of Practice recordings, focus group discussions and interviews.



SECTION 7

Recommendations for research, policy and practice

Recommendations to WHO

1. WHO should consider adopting a new relationship-focused approach for community engagement:

Relational community engagement intentionally readies health services to build the conditions that enable all communities, and particularly those marginalized by condition, poverty, ethnicity, sexuality or gender, to express their own health needs in ways that generate partnerships between service providers and communities that are able to respond to these health needs.

As supported by the observed outcomes of the CRTs, WHO should ensure the clear and widespread adoption of this relational approach to community engagement. In so doing, WHO can enable relational community engagement to become a core principle by which the social determinants of health become embedded across all technical health issue areas and within programming. In this way, relational community engagement can become an inherent way of working that supports WHO as an organization to achieve the priorities and strategic goals stated in the Thirteenth General Programme of Work and beyond. This will, in turn, enable WHO to play a powerful role in convening and supporting the implementation of the principal values and core ethos of relational community engagement amongst its Member States.

To achieve these aspirational ends, WHO decision-makers must begin by acknowledging and endorsing the transformative potential of relational community engagement – for the health of individuals, communities and organizations, for how health service delivery is designed, implemented and evaluated, and for change within whole health systems.

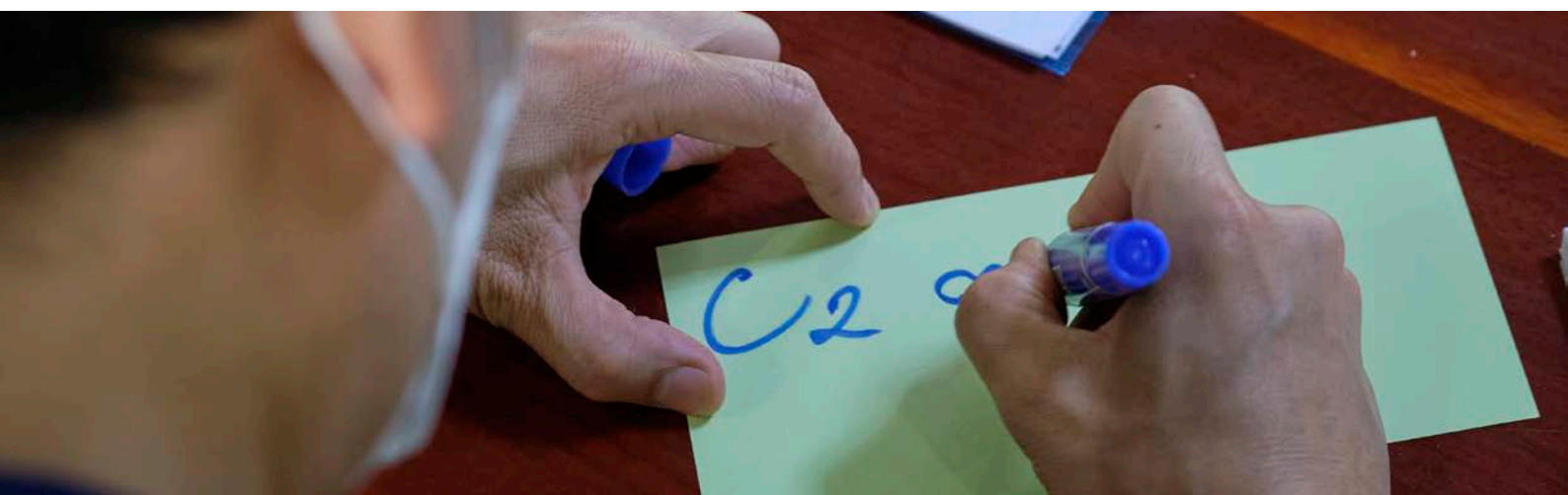
2. WHO decision-makers should also think in terms of “scaling across” and “scaling deep” rather than scaling up relational community engagement processes. When scaling across, seek to make horizontal connections across a system by recognizing that the form can adapt to local contexts. When scaling deep, seek to address intersectionality, power, gender and equity as layers unveiled over time in relationships.



3. Because of the influence of initial conditions in health systems, it is impossible to separate outcomes from processes within system behaviours. Use commissioning initiatives that enable diverse teams to work in ways that support the processes of relational community engagement. Develop monitoring and evaluation requirements that are responsive to the inseparability of processes and outcomes. Work with commissioners, health workers, researchers and communities themselves to develop system-level indicators of pathways to impact, recognizing that impact on individual-level outcomes might be hard to evidence during shorter funding time frames. Relational community engagement processes require indicators that are derived from and responsive to local contexts. These can function as intermediary indicators contributing to the overall programme and system performance indicators.

Recommendations to commissioners and funders

1. Commissioners should clearly define what they mean by community engagement, and this definition should be used to frame funding proposals for supporting population health and addressing health inequalities. Work should be funded where multi-disciplinary teams can demonstrate a clear need for their work, based on evidence from people experiencing the health issue, and a clear mandate within the health system to carry out their work. Always ask: What impact does this seek to make in communities and health programming? What impact will it have on patients, neighbourhoods and service providers?
2. Commissioners should evaluate the readiness of teams embarking on community engagement initiatives (both in the diversity of skills and experience and how they understand the nature of the issue they want to respond to) that they are considering funding. In order to support teams to become ready to deliver their projects, they should consider investing in the work of relation-building – between the implementing teams, health-care providers and communities – which is crucial to the development of enabling conditions for the successful delivery of community-engaged health interventions. They should especially consider how to provide teams with the resources necessary for building relations with people experiencing the issues. They should consider providing resources to support the training of community health workers and public health workers in the techniques and practices of relational community engagement to build skill and competence.
3. Commissioners and policy-makers should consider the potential of relational community engagement as a default approach to promote self-organization and innovation in addressing problems within health systems. Communities and service users have lived experiences of how problems manifest within systems. They have the local “expert knowledge” to work with service providers to develop solutions to local health system problems that have the potential to be effective in their local context. Professional communities are also experts in their health-care environments. They understand the challenges and bottlenecks affecting service design and delivery and what resources and support they need from managers and policy-makers. As a rule of thumb, rather than seeking to “push” solutions to problems onto local communities, enable the “pull” of solutions from local communities towards service providers.



Recommendations to implementation and research teams

1. Multidisciplinary teams embarking on community engagement initiatives should understand that the networks of teams, health-care providers and diverse communities are networks of trust and shared responsibility for creating health and addressing health inequalities. Implementing teams can help build such networks by ensuring that interactions within and between community members and health-care providers have the qualities of “deliberateness”, “purposefulness” and “mindfulness” – qualities that lie at the core of the principle that “every interaction is an intervention”.
2. Multidisciplinary teams should foster an ethos of questioning among themselves by creating an environment in which people feel safe in asking questions and comfortable in saying, “I don’t understand.” Team members should listen attentively when questions are asked in this way. An ethos of attentive listening within a team is a foundation for attentive listening when working with communities. “We hear lots as a team. We learn together as a team.”
3. Team leaders should recognize colleagues’ motivations for doing the work: “How we do it is driven by why we do it.” And they should recognize how relational community engagement gives value to the work they are doing: “I have always felt most invested in my work when I have known that the people I’m working with have really needed the intervention.”
4. Diverse teams should consider the team make-up for relational community engagement. They need to bring their respective disciplinary theories, knowledge, methods and practices, but they should be ready and willing to unlearn and relearn to arrive at consilience between the sciences and disciplines. This will shape what teams should consider as data, as potential evidence for impact, and as indicators of processes as well as what is determined as an “intervention”. They should particularly consider capturing stories of working differently, and of how working differently made a difference – for the professional and local communities with which they are working and in their own practices. Teams should meet regularly to share this learning and to create a culture of experimentation without fear of failure.

Evidence base on which recommendations are founded:

CROSS-CUTTING THEMES	FUNCTIONS FROM SCHEMA	RECOMMENDATIONS
Enabling conditions	Creating the conditions for relational community engagement as an approach	<ul style="list-style-type: none"> • Recommendation 1 • Recommendation 3 [Section 5.i; Section 5.i.b]
Mandate and demand	Purpose for engagement <i>shared set of values and vision</i>	<ul style="list-style-type: none"> • Recommendation 4 [Section 5.i.c]
Readiness	Initial relations formed conditions for active listening created	<ul style="list-style-type: none"> • Recommendation 5 [Section 5.i.a; Section 5.i.b]
Ways of working: adaptive teams	Communities listened to as experts in local health needs Responses grounded in what communities want	<ul style="list-style-type: none"> • Recommendation 7 [Section 5.ii.b] • Recommendation 8 [Section 5.ii.a] • Recommendation 9 [Section 5.ii.a]
Ways of working: research methods	New ways of relating with communities embedded <i>Mechanisms to capture outcomes</i> <i>Narrative accounts of impact</i>	<ul style="list-style-type: none"> • Recommendation 10 [Section 5.ii.b]
Relationality	Commissioners “convinced” of the value of investing in new ways of delivering services	<ul style="list-style-type: none"> • Recommendation 6 [Section 5.iii.c]

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ANNEX 1

Further context for the WHO Community Engagement Research Initiative in the Western Pacific Region

The implementation of wide-scale public health measures to prevent loss of life and slow down infections during the current COVID-19 pandemic has sparked mental health and social challenges, exacerbated by existing health inequities, that have become defining features of this crisis. In turn, these have highlighted the interconnectedness of physical, mental and social well-being that make up the core elements in the WHO definition of health.

Among these social challenges is the evidence that marginalized and disadvantaged communities around the world have been disproportionately affected by the COVID-19 pandemic. This disproportionate impact mirrors the worldwide impact of the dramatic rise in noncommunicable or chronic diseases, which now account for over two thirds of deaths globally. Where once noncommunicable diseases were thought to affect affluent lifestyles, it is now the case that poverty is closely linked with noncommunicable diseases. As WHO notes, “vulnerable and socially disadvantaged people get sicker and die sooner than people of higher social positions” as a consequence of non-communicable diseases (1). The public health challenges presented by the COVID-19 pandemic and the rise in noncommunicable diseases are thus both inextricably linked with the challenges presented by health inequities. Indeed, the impacts of both the COVID-19 pandemic and of the rise in noncommunicable diseases are widening health inequities. At the same time, these public health challenges point to the importance of addressing the social determinants of ill health, and to initiating changes in health-care systems that have not been configured to respond to such challenges. This need for change becomes all the more urgent when such consequences as the acute shortage of staff and unsustainable chronic excessive workloads caused by the COVID-19 are recognized. What is the most appropriate and effective way to respond to these public health challenges, and their effects on health-care systems, while at the same time addressing their disproportionate impact on disadvantaged, underserved and marginalized communities?

There is a growing consensus that in order to bring about changes to the social determinants of health, and to substantially reduce health inequalities, we need to address the conditions in which people are born, grow, work, live, age and die, as conceptualized in the WHO social determinants of health framework (2). Despite repeated acknowledgements of the complexity of these conditions, too many approaches still focus on risk communications and health promotion messaging aimed at changing individual health behaviour. The underlying model that informs many of these strategies remains one whereby patterns of behaviour are the consequences of choices or decisions made by individuals, and that individuals can be influenced towards making “better” choices if they are provided with appropriate information (3). This model has been

criticized by Ioannou (4), Thomson and Kumar (5) and others. There is an increasing recognition that the limited success of many such public health policies and interventions stems from the fact that the design of the interventions and methods they employ do not engage with the acknowledged complexity affecting the behaviours and settings that they are intended to tackle.



Discrimination and inequities whose origins are in beliefs and norms about gender, race and sexuality hinder progress to fulfil everyone's right to health and have far-reaching negative health outcomes. They can result in differences in life expectancy, differences in health status, exposure to risk and vulnerability, and differences in access to health services. Relational community engagement can embed the social determinants of health across all technical health issue areas, and within programming, by opening up social pathways to address

socially constructed ideas and concepts, within the very relationships that give rise to them - and in a manner that matters in the daily lives of people. The country research teams have laid important grounds to enable them to start addressing such sensitive and deeply held belief systems in their planned follow-up work. Such work will require trust, safe spaces and interventions that are trauma-informed, and which intentionally focus on building relational skills, healing and repairing ruptured social connections.

Although it is too early to make parallel claims about public health responses to the COVID-19 pandemic, we can make inferences can be made about alternative approaches by which to address the complexity of the social determinants of health, and of health inequalities, on the basis of the WHO's reviews of its responses to the Ebola virus disease (EVD) outbreak of 2014. These found that "transmission of EVD slowed and stopped when the health sector, response agencies and development partners learnt to work with (and not only for) local families and communities affected by Ebola"(6). This reveals a shift in public health thinking from "individual-level theorizing and intervention", to thinking about communities rather than individuals, and thinking about how to engage communities in addressing the problem, rather than designing interventions that are imposed on communities. But it further implies that, in order to be truly impactful, community engagement needs to be approached and implemented in such a way that it involves true co-creation alongside communities, and that it is approached in a way that responds to the complexity of the conditions affecting communities, and the health systems of which they are a part.

It is within this context that WHO embarked on a relational community engagement research initiative that sought to incorporate a holistic view of communities within whole health care systems, while incorporating an understanding of systems as complex and adaptive into the methodology for its approach; and it is this context which, in turn, frames the proof of concept work conducted by the four research teams in the three countries from the WHO Western Pacific Region.

Community engagement

While WHO recognized the fundamental importance of working with communities in the wake of the Ebola outbreak, it nevertheless also acknowledged the following:

There is an urgent need to institutionalize a better and more sustainable way of engaging with service users, their families and local communities so that significant and marginalized voices are solicited, heard and acted upon throughout the entire service and programme planning cycle. This will require fundamental shifts in the way WHO and Member States understand and engage collaboratively with service users, their families and local communities. It will take a change in the mindset, attitudes and practices of health professionals at all levels of the health system. (6)



This WHO perspective on the importance of a more fundamental commitment to community engagement, and the consequent need for shifts in both the mindsets and practices of health professionals at all levels of health systems, accords with a more widespread global recognition of the importance of community engagement as a process to improve population health and health systems, as well as of how to enable and support processes of community engagement. A systematic review of the literature about community engagement identified 335 reports of community engagement in public health interventions and provides an insight into the kinds of shifts in mindset that may be required (7). Communities were defined as communities of geography, by their social or economic characteristics, interests, values, or traditions (shared

identities or experiences) or externally defined as ‘the population’. The authors identified four ways by which health issues that reported interventions were seeking to change came to be identified:

- a felt need, which is one directly identified by community members themselves;
- an expressed need, which is inferred by observing a community’s use of services;
- a comparative need, derived by comparing service use in a similar community; or
- a normative need; derived by comparing measures of living conditions with a societal norm or standard, often set by experts

A narrative synthesis from the included studies identified two overarching ‘meta-narratives’ of community engagement, one which operationalized the role of communities in identifying and developing interventions in terms of the theory and practice of empowerment/ engagement; and a more utilitarian



perspective, whereby communities were engaged as recipients of the intervention with the objective of optimally configuring health services to achieve defined outcomes. Interventions to improve health that are based on a utilitarian perspective seek to involve communities in order to improve the effectiveness of the intervention.

In utilitarian perspectives, health (and other) services engage particular communities that they have identified as requiring assistance, with the resulting intervention being devised within existing policy, practice, and resource frameworks. By contrast, seeing community engagement as a means of social justice and civil rights emphasizes the empowerment of the community itself to take action, and for the reconfiguring of services to respond to needs identified by that community.

In 2017, WHO held a workshop to create a definition for community engagement and produce a framework for engaging communities, with the aim of achieving high-quality health services, in accordance with the six domains set out in the Institute of Medicine framework (6,8). The framework emphasizes the difference between community engagement as a process and community mobilization or community health programmes. The definition of community engagement that emerged from the workshop is:

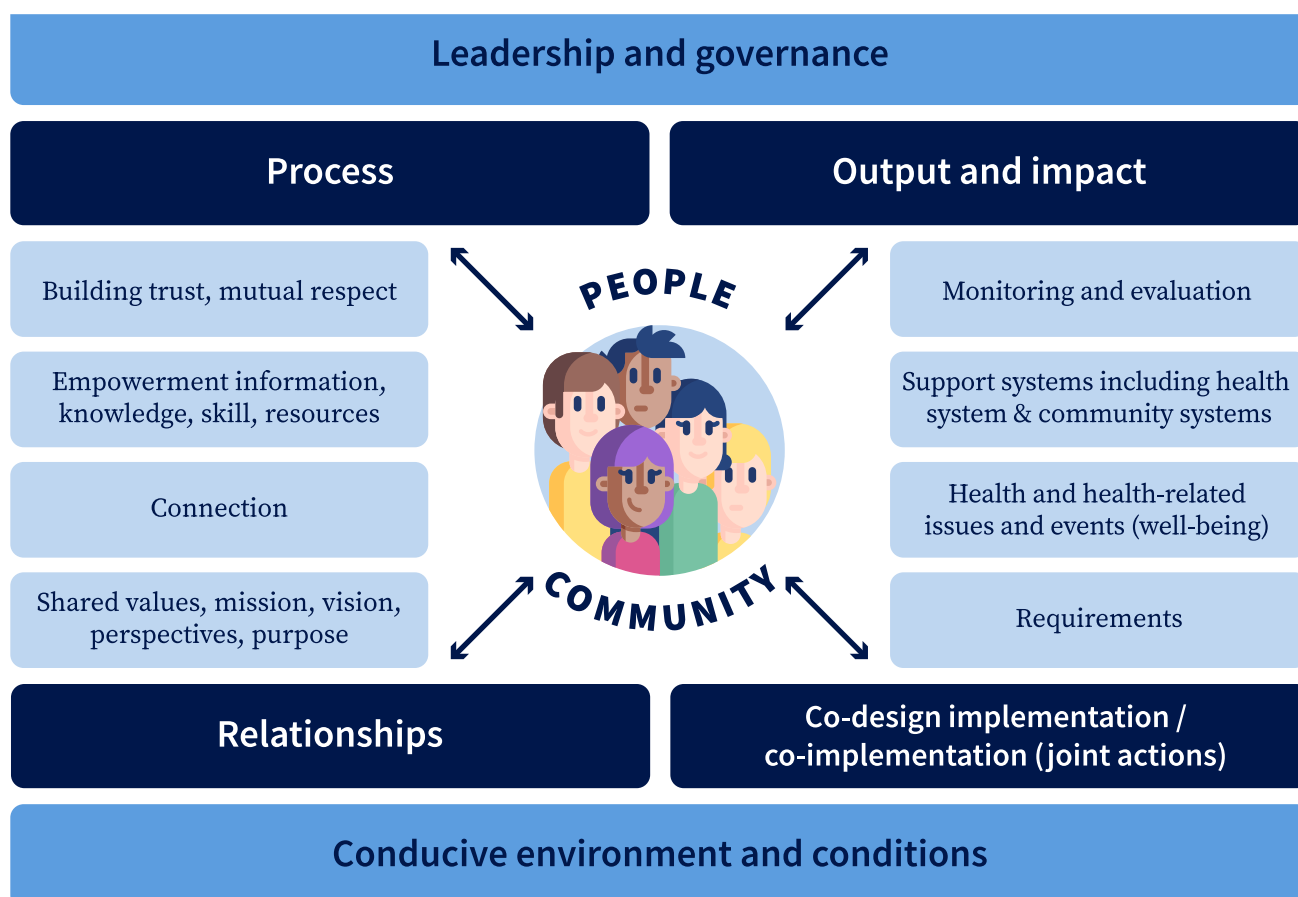
A process of developing and maintaining relationships that enable stakeholders to work together to address health-related issues and promote well-being to achieve positive health impact and outcomes.

The WHO Regional Office for the Western Pacific's proof-of-concept research initiative presents an opportunity to further validate the definition and framework co-developed with WHO Regional Office for Africa.

The WHO Community Engagement Framework, as depicted in Fig. A1.1, seeks to link existing tools, practices and approaches and align them in a way that leads to changed conditions and systems. Emphasizing the importance of relationships, it identifies key areas where engagement processes, practices and procedures can be embedded to support better connection, communication and

relationship-building between individuals, teams, departments, institutions and stakeholders (including communities). A model for the WHO Community Engagement Framework is depicted in Fig. A1.1.

Fig. A1.1. Community engagement model for the WHO Community Engagement Framework



Source: WHO (6)

There is an increasing body of evidence demonstrating the association between positive relationships and health and well-being (9). Moreover, positive relationships can also mitigate some of the negative impacts of adverse conditions and experiences (10,11). There is also an increased understanding of schools, communities, workplaces, etc., as complex adaptive systems, and that health is an emergent property arising from the system's complex nature (12,13).

The complexity of social systems is an effect of the properties of the dynamic relations that are constitutive of these systems (14,15). Therefore, the health of communities, as an emergent property of a complex system, is a consequence of the nature of the relations that comprise the health systems of which these communities are a part. These relations can be the relations that subsist within the system, as well as relations that exist between the system and its environment (16). (We provide an outline of the properties of complex systems in Annex 2.)

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ANNEX 2

Properties of complex systems

Below is a list of some features of complex systems and brief explanations of each concept. The notion of “system” is used in its widest sense to denote any group of things, objects, entities or phenomena, among which there are certain relations or associations, or which display some form of arrangement or organization. Such a system will be complex (as opposed to simple, or complicated), if:

- It is composed of many elements that interact dynamically, and non-linearly. The interactions between elements in a system are specified as non-linear when these interactions are non-proportional.
- The behaviour of the system as a whole cannot be predicted from, or reduced to, the parts of the system in isolation due to the constitutive role played by the relations between the parts in the system and the non-linear nature of these relations.
- To the extent that they are unpredictable, properties of the system, such as its structure or organization, which occur following processes of change within the system, are said to be emergent.
- The feedback loops affecting the system are both negative and positive. Negative feedback works to return a system to specified initial conditions, by reconfiguring the system in order to cancel out divergences from the initial conditions; positive feedback amplifies divergences from these initial conditions.
- It is open and thus interacts dynamically with its environment; as a result, system and environment tend to co-evolve with one another. An evolutionary change in one organism within a biosphere will tend to impact other organisms, meaning that they may have to evolve if they are to survive. Kauffman characterizes evolution as movement over a ‘fitness landscape’ and captures the notion of co-evolution by arguing that fitness landscapes are neither static nor independent.
- It has a history that influences the present behaviour of the system (in other words, the system demonstrates path dependence). The development of the QWERTY typewriter keyboard is an oft-cited example of path dependence.
- Self-organization within the system tends to occur when the system is far from equilibrium or at the edge of chaos. ‘Edge of chaos’ is the term used to describe the region where the phase transition occurs between the ordered state of a system and its chaotic state. The notion of self-organization captures the tendency of the components in the system to behave in a way that neither dissolves into turbulence nor locks into ordered behaviour, and which can therefore begin to display emergent properties.
- It is able to explore adjacent possibles. Kauffman introduces the notion of adjacent possibles at the level of molecules. The set of all molecular species constitutes the ‘actual’, and the relations between the molecules constituting these molecular species represent the reactions among the species. “The adjacent possible consists of all those molecular species that are not members of the actual but are one reaction step away from the actual.” Once an adjacent possible has been actualized, it will in turn have its own set of adjacent possibles.)

Understanding the Community Engagement Research Initiative as a complex adaptive system



The Initiative was designed to operate as a complex adaptive system with multiple feedback loops between and within all three levels of WHO, WHO commissioned technical partners, the country research teams, and other local stakeholders. There was a recognition that the process of commissioning and supporting the CRTs needed to be adaptive and responsive to the CRT needs and that linear notions of causality in conducting the research as well as evaluating its impact were not appropriate.

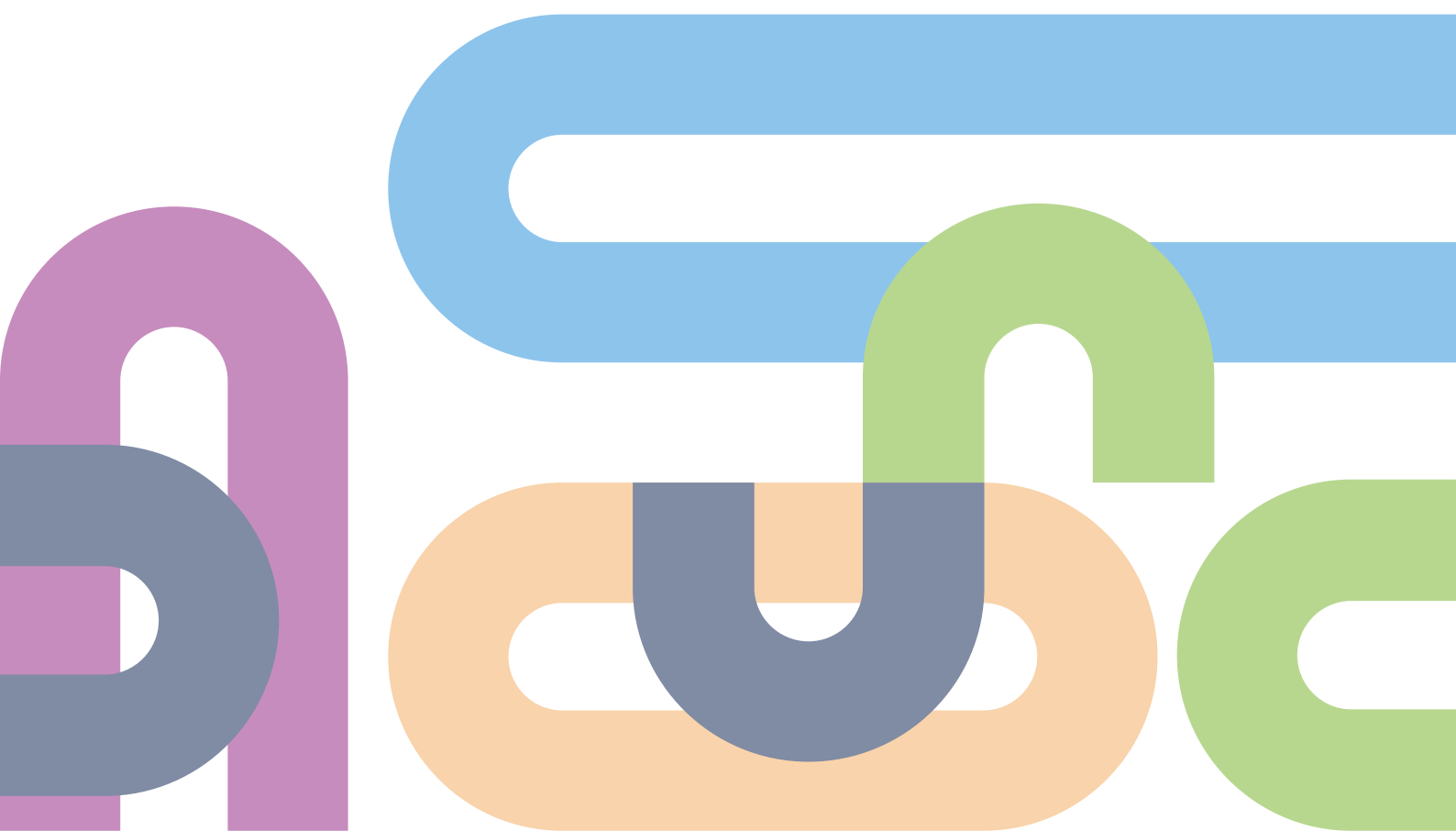
From the outset, Orange Compass encouraged the WHO project team to aspire to ‘triple loop learning’, and the initial Monitoring and Evaluation and Learning (MEL) framework was developed to capture positive and negative feedback loops. An example of a negative feedback loop within the CRTs was the time constraints for the research, resulting in an intervention developed to support people experiencing mental health issues being piloted on people not experiencing mental health problems. While the feasibility of delivery can be determined, the lack of relevance to the mental health system means that the system is highly unlikely to change. On the other hand, the positive feedback loops enhanced in the training for people supporting the mental health of refugees meant HCWs experimented with new ways of behaving with their families and friends, which fed back into the training and their satisfaction with it.

As the programme of work progressed, the WHO project team altered their ways of working with each other and the CRTs to have a before, during and after rhythm to enhance communication across the WHO project team and with the CRTs. The individual reflections and pivot moments recorded by the WHO project team allowed them to identify tensions (for example, in the conceptual framing) and re-organize themselves to address the challenges. There is clear evidence of co-evolution between some of the CRTs and the WHO project team with the research the Lao team is undertaking, feeding back into the learning programme to support the community engagement initiative.

The traditional WHO approach to community engagement shows a path-dependent process of engaging populations to enhance health literacy, increase preparedness for public health crises and to some extent as targets of public health approaches. The relational community engagement approach commissioned by WHO, on the other hand, sought to ‘shift’ system behaviour regarding engaging stakeholders to one that recognized the importance of engaging all stakeholders in the system and co-developing responses to identified issues.

The loose coupling between the WHO project team and the CRTs based on support and trust rather than scrutiny and adherence to original plans created the conditions for self-organizing research teams to be created. Where this happened, the CRTs mimicked the behaviours of the WHO project team, showing trust and respect for diverse team members and giving space and time for people to find their role within the team.

The approach the WHO project team took to commissioning and supporting the CRTs was designed to allow the CRTs to experiment in how they sought to address the identified health issue. This experimentation allows the system to explore adjacent possibilities and, through positive feedback loops, can lead to system change. For one team, the intervention was the experimentation – there was co-discovery of the nature of the problem between residents, HCWs and district officials and co-creation of new ways of working to address these issues.



ANNEX 3

Conceptual framing for community engagement

WHO defines community engagement as a process of continuous relationship building between stakeholders who need to engage in collaborative action to achieve health impact and outcomes (1–4). This definition foregrounds social, emotional and relational processes that remain largely invisible. These processes are systemic, emergent and are concerned with the quality of relationships and the dynamics and patterns of interaction within and between individuals and groups. Paradoxically, this focus for research and enquiry has remained a significant gap in the health and community engagement literature. In the absence of strong evidence and theoretical foundations to explain why and how community engagement works, the WHO Community Engagement Research Initiative adopted the following conceptual framing to guide proof-of-concept research and intervention decisions and activities:

“We live in ongoing systemic processes with one another where every interaction is an intervention and communication is bioactive.”

The conceptual framing for community engagement is based on the scientific literature and is a springboard from which to generate much needed empirical evidence. It emphasizes the role and importance of the social determinants of health in creating and maintaining health and well-being (5,6). It draws on quantum physics and the current understanding of how matter and energy operate in non-linear, non-reductionistic ways, and provides the imperative to advance mainstream social science research (7–9). More importantly, the conceptual framing for community engagement brings together the work of researchers across multiple disciplines in studies that explain the critical linkages between: the development of the human brain; social connection and interaction; the environment and lived experience; and how the interplay between these shape and influence a range of factors. These include: human perception and subjective experience; identity and sense-of-self; connection to others; and a range of adaptive strategies and responses to stressors – which in turn impact health outcomes (10–13).



The conceptual framing recognizes that biological and social systems are inherently complex (14). The human body consists of multiple, highly specialized, self-adjusting, interconnected and interdependent systems that are in continuous communication with each other (15). These systems are not bound by physical structure; the exchange of information and energy extends outwards, is bidirectional and embraces the notion that people live in constant relationship with each other (16). The connection between people has the power to influence the inner subjective experience of human life, modulating and regulating emotional states as well as affecting physiology, immune response and gene expression (17). In many cultures, relationships extend beyond the living to include the deceased (and ancestors), all beings and the natural world (18). In fact, findings from a large and growing number of studies have established linkages reflecting systemic connections such as:

- mental health and immune system function;
- quality of interaction between health care professionals and recovery prognosis;
- social environment and the incidence of depression and anxiety;
- the quality of caregiver–child interaction and both physical and mental health; and
- past and present traumatic stress and all aspects of physical, mental, and social health (19,20).

The conceptual framing acknowledges human communication as having connective and bioactive properties (22). Communication, both verbal and nonverbal, is often considered to be conscious action but includes non-conscious action as well. The words used, the tone of voice, how people talk, facial expressions and body language produce physiological effects that trigger states of nervous systems reactivity or receptivity. Communication can activate unconscious memories and generate the release of a cascade of chemicals and hormones that have emotional, physical and behavioural consequences. This bioactive nature of communication reinforces the concept of systemic interconnectedness within a person and between people and their environment. Experiences are encoded as memories and stories. Conversations give life to ongoing storying, encapsulating beliefs, values and thoughts, which are transmitted and lived within families, neighbourhoods, schools, work places and across generations.

The conceptual framing advances community engagement research, practice and policy

The field of community engagement is complex, requiring multidisciplinary interventions to capture the continuum of connection between attachment in early childhood and ongoing processes of social interaction during adolescence and throughout adulthood (22–24). Consequently, experiential, awareness-based approaches that have learning and development at their core, and which make the connection between “outer” observed behaviour and “inner” subjective experiences, are essential. For example, the arts (music, writing, singing, dance, theatre, film, painting, journaling, roleplay, etc.) and forms of embodied, contemplative, reflective and spiritual practice become pertinent and highly relevant as community engagement “interventions”. The significance for practitioners, scholars, health researchers, programme managers, and policy-makers, is the recognition that community engagement can be a transformative process – one that is capable of opening new pathways to address gender, inequity, vulnerability, power and agency through integrative, holistic, intersectional and relational approaches (25–33).

There are **key principles** emerging from the conceptual framing relevant for community engagement research and intervention design:

1. Health systems, services and programmes are composed of people and are inherently relational. Everyone relates to everyone else in various ways, ranging from stranger to intimate. People live in multiple interdependent communities and can be influenced by each other directly or indirectly. They may or may not be aware of their influence on each other.
2. The relationships between people are influenced by the bioactive systemic interactions within and between them. The qualities of these interactions can negatively or positively impact health and well-being at an individual and population level.
3. Systemic thinking about health recognizes that everything is interconnected and in motion, therefore change, both intentional and unintentional, is a constantly emerging process. Coherence is the unified functioning of a system and the result of healthy integration of differentiated parts and/or experience. Resilience arises from the strength of connection.
4. Due to the emergent properties of human systems, replicability and scalability for community engagement are found in process and patterns, not in moment-in-time outcomes.
5. Health services and the broader health system have prevailing cultures and patterns of interaction that may or may not be coherent. The perturbation of these human systems creates uncertainty, discomfort and tensions. Awareness and insight are critical for processes of integration (of mind-body and of lived experience) to support intentional connection and coherent patterns of interaction that contribute to physical, emotional, mental and social well-being.
6. Creating the enabling conditions and spaces for people to feel safe is a prerequisite for connecting, listening, belonging, sharing, participating, engaging and learning to occur. Targeted attention needs to be given to the needs of vulnerable groups and populations.

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ANNEX 4

Interview and focus group schedule for the country research teams

The purpose of this interview is for us to reflect with you on your learning journey in undertaking this work, what felt different, what enabled and what hindered the work you wanted to do in order to inform other countries and WHO as to how and why they should take a relational community engagement approach.

In this schedule, we offer an indication of the themes that we would like to explore in conversation with you:

- What interested you in the original WHO commissioning brief?
- We would like to explore the theme of “relations” – in the context of how you brought your research team together, challenges to team working posed by COVID-19 restrictions and how you identified additional capacities that were needed for the research.
- We’re also interested in finding out more about how COVID-19 restrictions impacted on how you built relations with communities.
- We would like to explore with you the “processes” involved in the delivery of your work – whether there were any ways of working that were different during this project, and what it feels like to work in a specifically “relational” way.
- We’d like to hear more about the [name of intervention] and issues that you think you might face in developing it further beyond the duration of this particular project.
- We’d like to find out more about how, or whether, the conceptual framing developed by the enabling partners for this overall project impacted on your work, and discuss what the complexity framing meant for you and the research.
- What happens next following the completion of this funded part of the project? What do you think the legacy of the project might be?
- Finally, reflecting back: is there anything that you would have done differently? Are there any messages that you would think about sharing with any other research teams that might be thinking about taking on similar (complexity theory informed) community engagement projects in the future?



