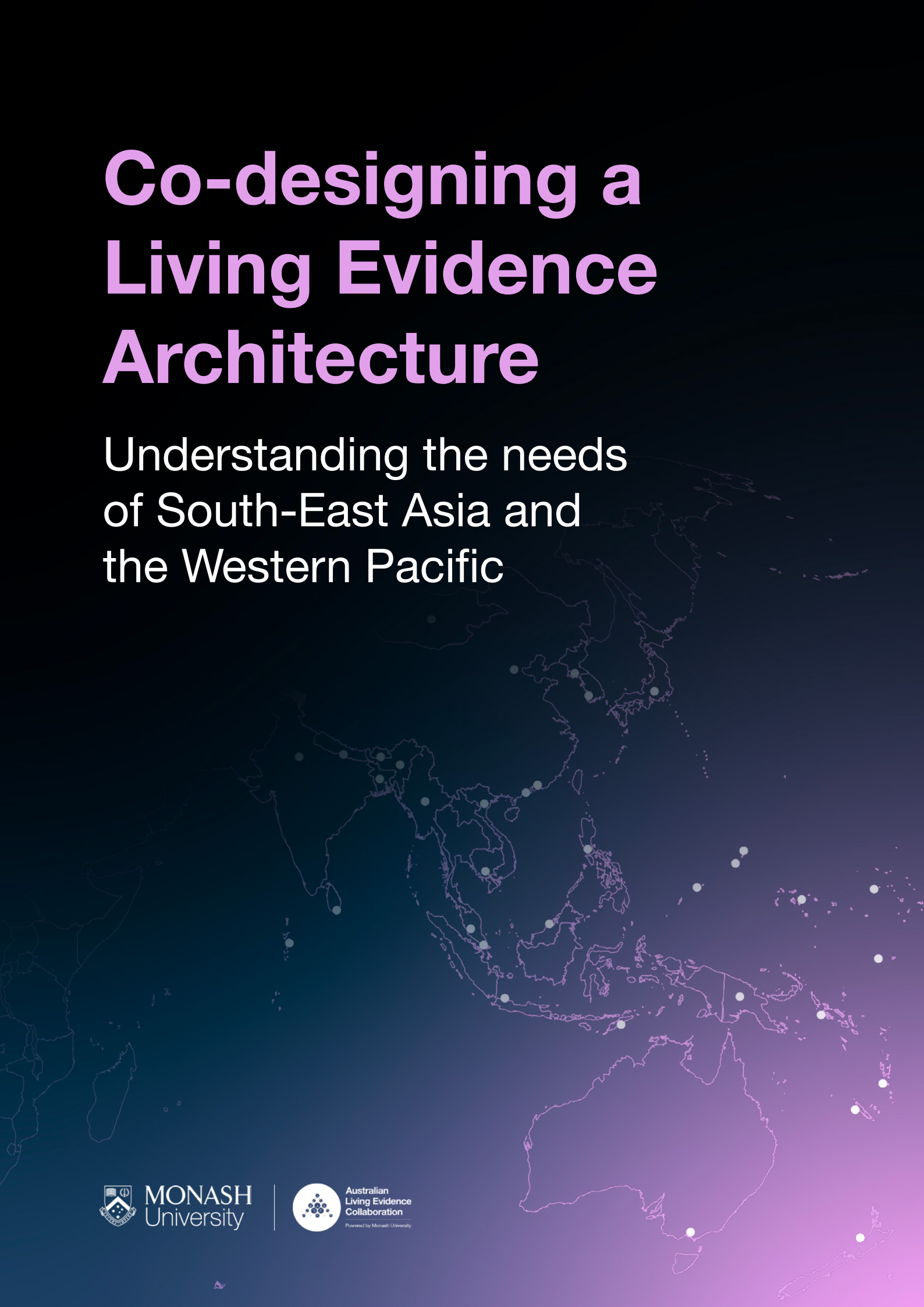
Co-designing a Living Evidence Architecture

Understanding the needs of South-East Asia and the Western Pacific



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Executive Summary

This report presents findings from the Living Evidence Architecture (LEA) project, a collaborative initiative between the Australian Living Evidence Collaboration, Monash University (Australia and Indonesia), WHO regional and headquarters offices, and partners across South-East Asia and the Western Pacific.

The research brought together experts and end users from clinical, policy, public health, and digital sectors to explore how living evidence systems can better support decision-making across diverse health contexts, with a particular focus on South-East Asia and the Western Pacific.

The primary purpose of this work is to co-design a regional vision and practical roadmap for a more inclusive, accessible, and sustainable living evidence system. The project aims to identify system-level enablers, barriers, user needs, and design priorities to guide the development of a context-aware, AI-enabled, and equity-centred evidence platform to support the uptake, interpretation, and contextualisation of evidence across diverse healthcare systems.

Throughout 2025, we conducted two co-design workshops with stakeholders from 10 countries, supported by a thematic analysis of transcripts, facilitator notes, and visual artefacts. The co-design workshops aimed to first explore challenges and opportunities in current guideline development systems (Workshop 1 at Monash University, Australia) and then to understand user needs, barriers, and expectations for accessing and applying living evidence (Workshop 2 at Monash University, Indonesia) across South-East Asia and the Western Pacific. This second workshop also focused on understanding attitudes to, and expectations of AI in relation to living evidence.

Participants from Workshop 2 with the 'Understanding regional needs for evidence' canvas. Photographer Ricky Apriyanto.

The study revealed that while living evidence offers transformative opportunities, such as real-time updates, local empowerment, cross-border collaboration, stakeholder co-design, equity, and evolving evidence framings, it is constrained by critical challenges, including infrastructure gaps, platform fragmentation, trust, policy disconnects, and a lack of contextual relevance. This report highlights the need for centralised, personalised, AI-enabled, and locally adaptable design features for a future living evidence architecture.

The findings from the research paint a picture of living evidence as a catalyst for change technologically, politically, and socially. Moreover, living evidence is envisioned as a new infrastructure for health knowledge that is flexible, inclusive, real-time, and rooted in the realities of its diverse users. To achieve this vision, participants called for sustained investment, regional coordination, and political will to reimagine how evidence is generated, shared, and used.

Contents

Design canvas from Workshop 2.
Photographer Ricky Apriyanto.

Introduction

1

1.1 Living guidelines and their role in decision-making

Clinical guidelines provide evidence-based recommendations to help clinicians optimise patient care. Their development generally follows a standard process; the scope and clinical questions are set, a search is conducted for relevant studies, these studies undergo quality assessment and data extraction and analysis, and then recommendations are developed using both the evidence and other important information (such as clinical expertise, patient preferences and values, equity, and feasibility) as a foundation. The guideline is then published and disseminated and subsequently used to guide health care decisions.

Unfortunately, traditional guidelines are infrequently updated. As a result, new evidence and changes in contextual information are only taken into consideration and reflected in the guideline when it is updated, often several years later. During this period of inactivity, the currency of evidence underpinning these recommendations is reduced, with previous studies demonstrating that one in five recommendations may be outdated within three years (2) and half within six years (3).

Living guidelines overcome this issue through a process of continual evidence surveillance and dynamic updating (4). As new studies are published, these data are included in the existing evidence base, which is used to rapidly update the living recommendations on which they are based. Living guideline processes also allow for adjustments in scope, methods, composition of guideline development panels and other factors needed to maximise relevance and applicability as the healthcare paradigm evolves. In addition, as opposed to traditional guidelines in which there is a single public consultation period prior to finalisation of content, the ongoing updating process in living guidelines enables continual input from end users and other stakeholders. Through staying dynamic and maintaining high currency, living guidelines aim to promote both greater trust in the guideline and, more importantly, better care for the patient.

Design canvas from Workshop 1.
Photographer Michelle McFarlane.

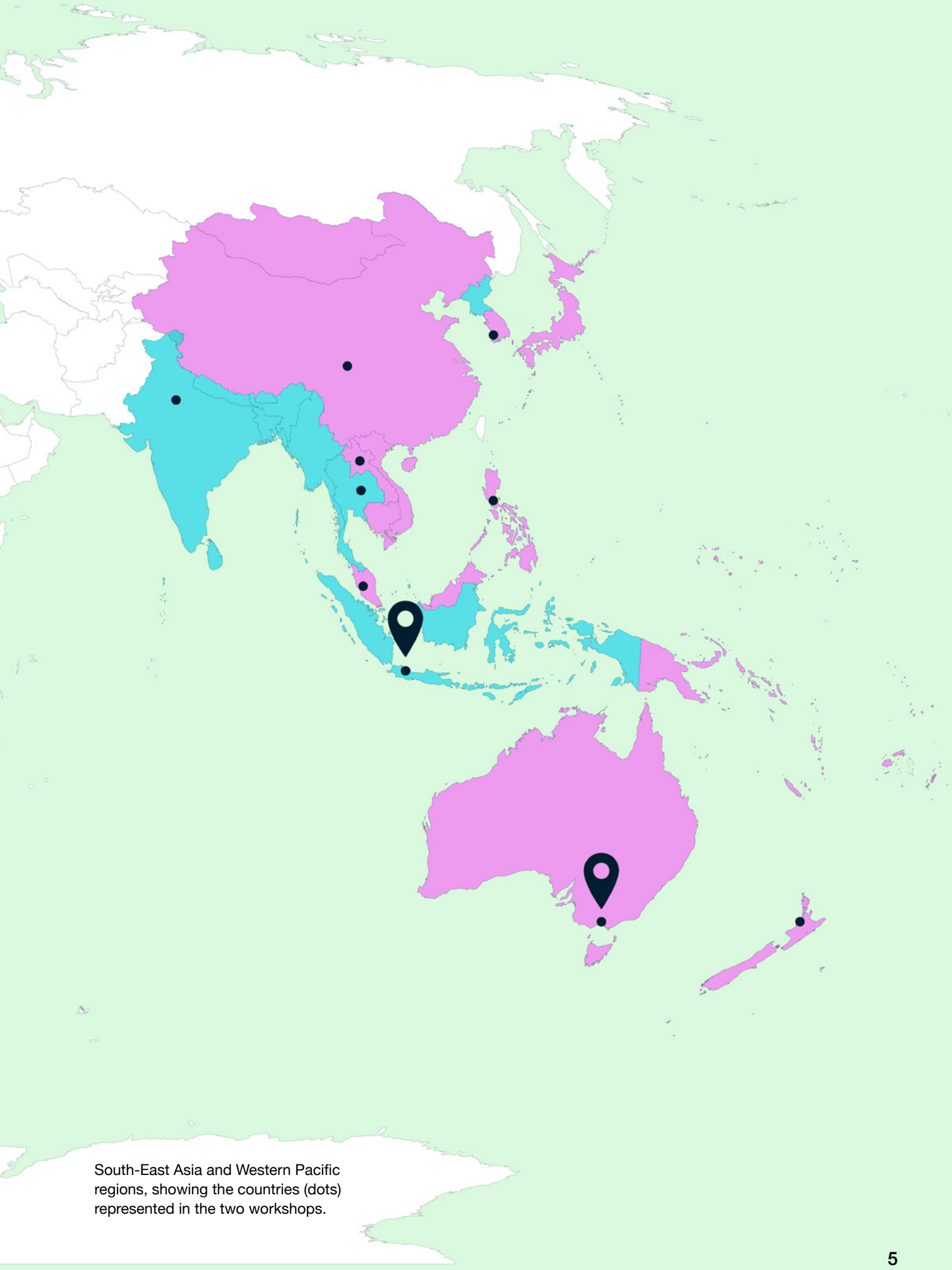
1.2 Ensuring the living evidence approach meets the needs of our region

In September 2024, Wellcome Trust announced a £45 million investment in a global living evidence architecture. To support the decision making around how that investment would best be used to meet international needs, the Evidence Synthesis Infrastructure Collaborative (ESIC) was established. A collaboration between Cochrane, JBI and Campbell, ESIC was created to bring together the global evidence synthesis community to develop a shared vision of how use of evidence could be optimised to address societal challenges (1).

One of the primary goals of ESIC is to harmonise efforts globally that make it easier to learn from others around the world and to support national evidence-support systems, with a strong focus on equity and efficiency.

This Living Evidence Architecture (LEA) project aims to contribute to this program of work by exploring the needs of South-East Asia and the Western Pacific region regarding systems and approaches to generating and using living evidence to support health care decision-making.

A collaboration between the Australian Living Evidence Collaboration (ALEC), Monash Indonesia and Monash Australia, LEA brings together expertise in co-design, technology and AI, and living evidence synthesis and guideline development. The work engages evidence users across the region, with active participation of guideline developers and users from Indonesia, Thailand, Philippines, India, Malaysia, South Korea, China, New Zealand and Australia. The process includes high-level representation from the World Health Organization's (WHO) South-East Asia and Western Pacific Regional Offices (SEARO, WPRO) and WHO headquarters in Geneva, Switzerland; and Cochrane Indonesia, Malaysia and Thailand.



South-East Asia and Western Pacific regions, showing the countries (dots) represented in the two workshops.

1.3 Technological barriers and enablers for accessing living evidence

Traditional guidelines are generally published in PDF format, either as a single comprehensive document with links to additional documents that contain further information, such as methods and processes, funding and administration, guideline development group conflicts of interest, etc., and/or in peer reviewed journal articles. As guidelines are updated infrequently (every 3-7 years, or less frequently), publishing their content in the form of a static, printable PDF makes sense. However, as guidelines undergo more frequent updates (i.e. become 'living'), dynamic publication formats are needed to communicate guideline changes in near real time.

Recently, peer reviewed journals have attempted to modify their publication cycles to accommodate living systematic reviews and living guidelines, such as BMJ and the Annals of Internal Medicine. Although this represents a step in the right direction, there remains a significant delay in publication of updates, and journals often struggle to deal with issues regarding version control, authorship, and the use of a single DOI for multiple records relating to a living document.

Online guideline publication platforms have been developed to address some of these issues, and have been used to publish numerous living guidelines including the Australian COVID-19 living guidelines and the Australian pregnancy and postnatal living guidelines (5, 6, 7). Although these technologies have made important in-roads to developing and publishing living guidelines, users (including clinicians, consumers, policymakers and researchers) have identified limitations regarding software compatibility, formatting, and presentation. In addition, barriers such as limited accessibility and usability have also been recently highlighted, of particular concern in low resource settings and regional areas (8).

The rapid advancements in artificial intelligence (AI) technology over the past few years present an opportunity to create stepwise change in the publication and accessibility of living guidelines. In addition to supporting the generation of the systematic reviews that underpin the development of evidence-based clinical guidelines, AI presents opportunities to display, summarise and disseminate guidelines for multiple audiences in multiple formats, designed to meet different user (e.g. clinician, consumer, policymaker and researcher) needs.

Participants' sticky notes from Workshop 1.
Photographer Michelle McFarlane.

Methodology

2

To understand the needs of South-East Asia and the Western Pacific regarding systems and approaches to generate and use living evidence to support health care decision-making, we conducted a co-design process that engaged participants from 10 countries.

Co-design actively engages participants as collaborators in shaping the tools, systems, and processes that affect them. It aims to foster trust, inclusivity, and collective ownership of design outcomes, especially important in health contexts where users' lived experiences are critical. The LEA co-design process builds on previous research in co-designing health systems through sequenced processes (9), development of co-design tools to engage stakeholder experiences (10), and co-designing for global health (11, 12, 13). The LEA co-design approach sought to facilitate inclusive, collaborative dialogue between diverse stakeholders, evidence users and technology developers, to support ideation on technology-enabled solutions for accessing and using living evidence in health decision-making.

Workshop 2 participants engaging with the workshop canvases. Photographer Ricky Apriyanto.

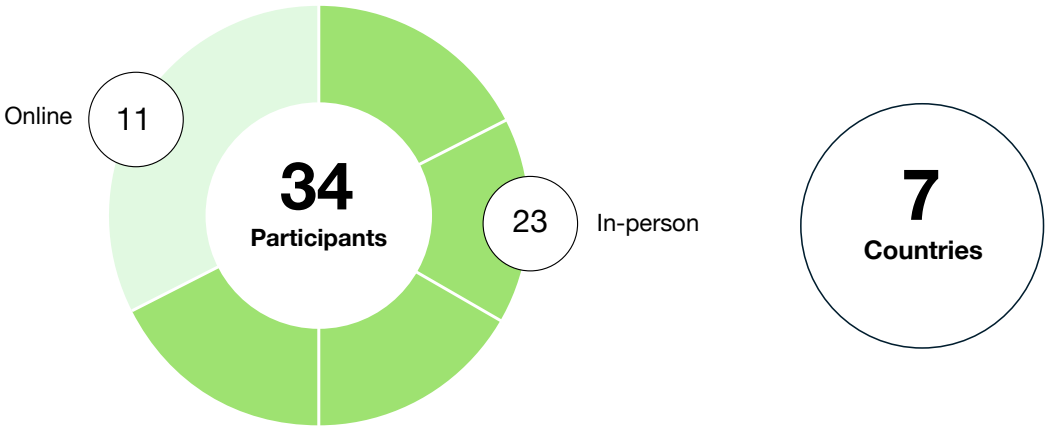
Workshop 1 participants engaging with the Futuring canvas. Photographer Michelle McFarlane.

We conducted two co-design workshops, the first in Melbourne, Australia and the second in Jakarta, Indonesia. The goal of the first co-design workshop was to understand the challenges and opportunities of current systems, from the perspective of guideline developers, and to commence ideation for a future living evidence architecture. In the second workshop we aimed to explore the needs, challenges, and expectations of guideline users in accessing and applying (living) evidence across diverse contexts in South-East Asia and the Western Pacific. The workshops generated actionable insights to inform future design of a user-centric, context-aware, and AI-enabled digital platform to support evidence-informed decision-making in health systems across the region.

2.1 Workshop 1

Understanding challenges and opportunities of current systems and ideating for a future platform

The first workshop was held on 17 February 2025 at Monash University in Melbourne, Australia, and concurrently online via Zoom. It brought together stakeholders involved in the development or use of clinical guidelines across South-East Asia and the Western Pacific region to critically examine the challenges and opportunities related to accessing and using existing evidence systems. A total of 34 participants attended, with 23 joining in person and 11 participating online. Participants represented a diverse mix of academic institutions, governmental bodies, and health research networks, including 15 unique organisations, such as Monash University (Australia and Indonesia), the National Health and Medical Research Council (NHMRC), the CARI Guidelines group, Cochrane (Indonesia, Malaysia and Thailand), WHO Western-Pacific Regional Office (WPRO), WHO South-East Asian Regional Office (WHO SEARO) and WHO Headquarters, Geneva. Geographically, attendees were drawn from across Australia, Indonesia, Malaysia, Thailand, the Philippines, India and Switzerland, supporting rich cross-country dialogue on how different health systems currently engage with evidence and guideline platforms. Insights from Workshop 1 directly informed the design, framing, and personas used in Workshop 2, establishing continuity across the two-part co-design process. Participants were organised into five groups, four in-person and one online, hosted via Zoom videoconferencing software. All sessions were facilitated by trained researchers to ensure inclusive and productive dialogue.



Co-design methods for understanding living evidence enablers, barriers and opportunities, and envisaging futures

Co-design tools were developed to understand the enablers and challenges of developing or using living guidelines and to identify the strengths and weaknesses of existing platforms for living evidence. The final activity utilised a custom-designed futuring canvas (Fig. 1) that prompted groups to imagine they were looking back on the successful development and implementation of a living evidence architecture, and to identify key features, needs, important elements and stakeholders involved in this development process.

Figure 1: Futuring canvases from Co-designing a Living Evidence Architecture Workshop 1. Photographer Michelle McFarlane.

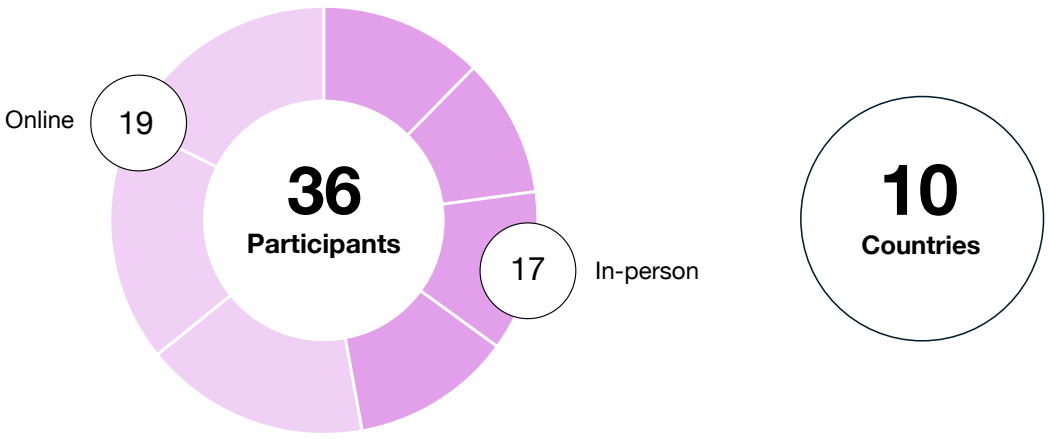
2.2 Workshop 2

Understanding the needs of our region

The second workshop was a two-day event held at Monash Indonesia, Jakarta on May 20 and 21, 2025, and concurrently online via Zoom. Workshop 2 brought together a diverse group of 36 participants involved in the use of clinical guidelines who represented 10 countries across South-East Asia and the Western Pacific. Participants were drawn from a wide range of professional domains, including:

- Clinicians and healthcare providers
- Policy-makers and Ministry of Health officials
- Public health practitioners and program implementers
- Consumer and patient advocates
- Digital health professionals and technology developers
- WHO regional and country offices.

Participants were organised into seven groups, four in-person and three online, hosted via Zoom videoconferencing software. All sessions were facilitated by trained researchers to ensure inclusive and productive dialogue.



Persona-based scenario activities

To anchor workshop 2 discussions in practical and regionally relevant contexts, the research team designed four fictional personas (Fig. 2 and Table 1 and 2), two clinicians and two policymakers, each facing realistic challenges in maternal and child health or pandemic response settings.

These personas included:

- A hospital-based obstetrician managing a high-risk pregnancy with multiple comorbidities
- A national maternal health policy advisor evaluating guideline adoption strategies
- An emergency physician responding to a fast-evolving respiratory outbreak
- A regional emergency advisor coordinating cross-country pandemic supply logistics

Each scenario was designed to spark discussion around the use of evidence in real-time, high-stakes decision-making. The personas helped participants think about their own decision making processes and reflect on how digital tools could better support these through access to living evidence.

Figure 2:
Fictional personas from Workshop 2.

Three design canvases were developed to support teams to discuss issues through the lens of their persona (see Fig. 2 and Appendix D). The first of these asked participants to consider how people in their specific regions accessed and used living evidence to inform decision making, what the challenges of this were, and how, ideally, information should be delivered. The second canvas asked groups to consider, through the lens of their persona, what the challenges are to accessing living evidence, how they could ideally access living evidence, and what type of technologies could support this. The final canvas focused on the role of technology in supporting access to living evidence, the features of an AI-enabled future platform, and concerns in relation to the role of AI in living evidence access and use.

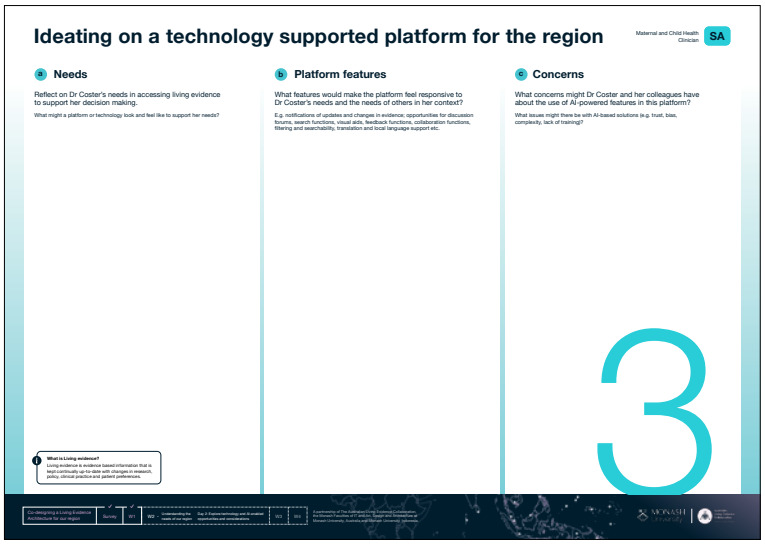


Figure 3:
Design canvases from Co-designing a Living Evidence Architecture Workshop 2. Photographer Ricky Apriyanto.

Table 1 Summary of Personas and Scenarios used in the workshop for Maternal and Child Health.

Setting: Maternal and Child Health		
Name & Role	**Overview**	**Needs**
Dr Joie Coster, Obstetrician, Regional Referral Hospital	In a high-volume maternity hospital, health professionals are navigating increasingly complex cases involving pre-eclampsia, anaemia, and gestational diabetes. Dr Joie Coster sees 20–25 patients a day in the maternity unit. She often encounters high-risk pregnancies complicated by anaemia, gestational diabetes, or hypertension.	Dr. Coster needs rapid access to clear, locally relevant, and up-to-date recommendations. Any platform or tool must align with hospital resources and help her confidently provide care that is safe, effective, and evidence-informed. Moreover, Dr Coster works in an interdisciplinary team with a range of other specialisations including a GP, Nurses, an Endocrinologist etc. so will need to share information with colleagues.
Mr Joko Budi, Policy maker, National maternal and child health program, Ministry of Health	Mr Joko Budi is a policy maker in the National maternal and child health program (Ministry of Health), and leads national strategies for maternal mortality reduction. He must plan procurement and national training priorities for 2026. Currently, Mr Joko is evaluating current evidence-based recommendations on common pregnancy-related complications, including pre-eclampsia, anaemia, and gestational diabetes management, to develop country-level maternal mortality reduction strategies. He must also consider how guidelines address women with multiple coexisting complications, such as anaemia alongside pre-eclampsia.	Mr Joko needs timely access to trusted and up-to-date evidence-based recommendations that support his strategic decision-making and align with national priorities and health system capabilities. He needs confidence that the interventions/ strategies he endorses are informed by the latest global and local evidence while also being feasible, cost-effective, and appropriate for implementation within the country's reproductive health program.

Participants from Workshop 2 reading their Maternal and Child Health scenario. Photographer Ricky Apriyanto.

Table 2 Summary of Personas and Scenarios used in the workshop for Pandemic Preparedness.

Setting: Pandemic Preparedness		
Name & Role	**Overview**	**Needs**
Dr Anthony Wong, Infectious disease specialist, Emergency Department, Public Hospital	Dr Wong, an infectious disease specialist, works in the emergency department of a large public hospital in a major city. Currently an emerging respiratory disease outbreak, like COVID-19, is happening around the world. Dr Wong is seeing an increase in patients of different ages with similar symptoms. For instance, he receives a young adult patient with an unusual combination of severe respiratory and circulatory symptoms after returning from an international event. He has also seen a 65-year-old immunocompromised patient who presents with similar symptoms but no travel history.	Dr Wong needs access to trustworthy, up-to-date evidence-based recommendations that support his clinical decision-making and that can respond to evolving outbreaks. Moreover, he is a senior doctor at a clinic, so he also needs to advise other doctors. Dr Wong needs to make sure that the actions he takes are informed by the latest global and local evidence while also being practical, responsive to emerging threats, and appropriate for implementation in a high-pressure clinical environment.
Ms Faaiza Khan, Health Emergency Advisor, Pacific Regional Health Secretariat	Ms Faaiza Khan, Senior Health Emergency Advisor for the Asia Pacific, is monitoring a virus spreading through the region. ICU beds are limited, and vaccine supply is uncertain. She must decide whether to issue emergency alerts, secure international vaccine supplies, and release contingency funding for oxygen access.	Ms Khan needs timely access to trusted and up-to-date evidence-based recommendations that support her strategic decision-making and align with emergency preparedness priorities and system capacities. She needs confidence that the strategies she proposes, such as vaccine procurement, PPE distribution, and oxygen supply planning are informed by the latest national and international guidance, while also being safe, and feasible for implementation across diverse population groups and health system contexts.

Participants from Workshop 2 reading their Pandemic Preparedness scenario. Photographer Ricky Apriyanto.

2.3 Data collection and analysis

Data collection

Participants engaged in a range of interactive activities designed to elicit first-hand experiences, expectations, and challenges related to accessing and using living evidence in their health systems. Across both workshops, the research team collected qualitative data through multiple channels to ensure depth, diversity, and contextual richness. This multimodal data collection strategy ensured that both verbal and visual contributions were captured and included in the analysis. Data were collected through the following methods:

Audio recordings
All plenary and breakout group sessions were audio recorded. These recordings captured rich, real-time discussions reflecting diverse user perspectives.

Workshop templates and visual artefacts
In-person groups worked with printed templates, sticky notes, and markers to document reflections and co-design ideas. These materials were collected and scanned for analysis. Online participants used digital Miro boards to contribute collaboratively.

Facilitator field notes
Each group was supported by one or two trained facilitators who took detailed observational notes. These notes documented group dynamics, emerging patterns, and notable insights that may not have been captured in audio.

All collected data, audio recordings, visual artefacts, field notes, and digital boards were compiled and securely stored. The recordings were transcribed verbatim to ensure accuracy and completeness of the qualitative dataset prior to analysis.

Data analysis

We adopted a thematic analysis approach supported by NVivo 14 qualitative software for both workshops. Analysis involved three key stages.

1. **Open coding**
   Two researchers independently reviewed transcripts and notes to identify meaningful excerpts related to access, use, challenges, expectations, and concerns. Codes were developed inductively and iteratively refined through discussion.

2. **Theme development**
   Codes were grouped into broader themes and subthemes, with representative quotes and descriptions added. The team collaboratively refined these themes to ensure clarity, relevance, and analytical depth.

3. **Validation**
   The evolving themes were discussed with the broader research team for interpretive validation. Internal triangulation and peer debriefing helped ensure analytical rigour and coherence across data sources.

No translation was required, as the workshop was conducted in English. To maintain participant anonymity, all identifying details were removed or generalised in reports.

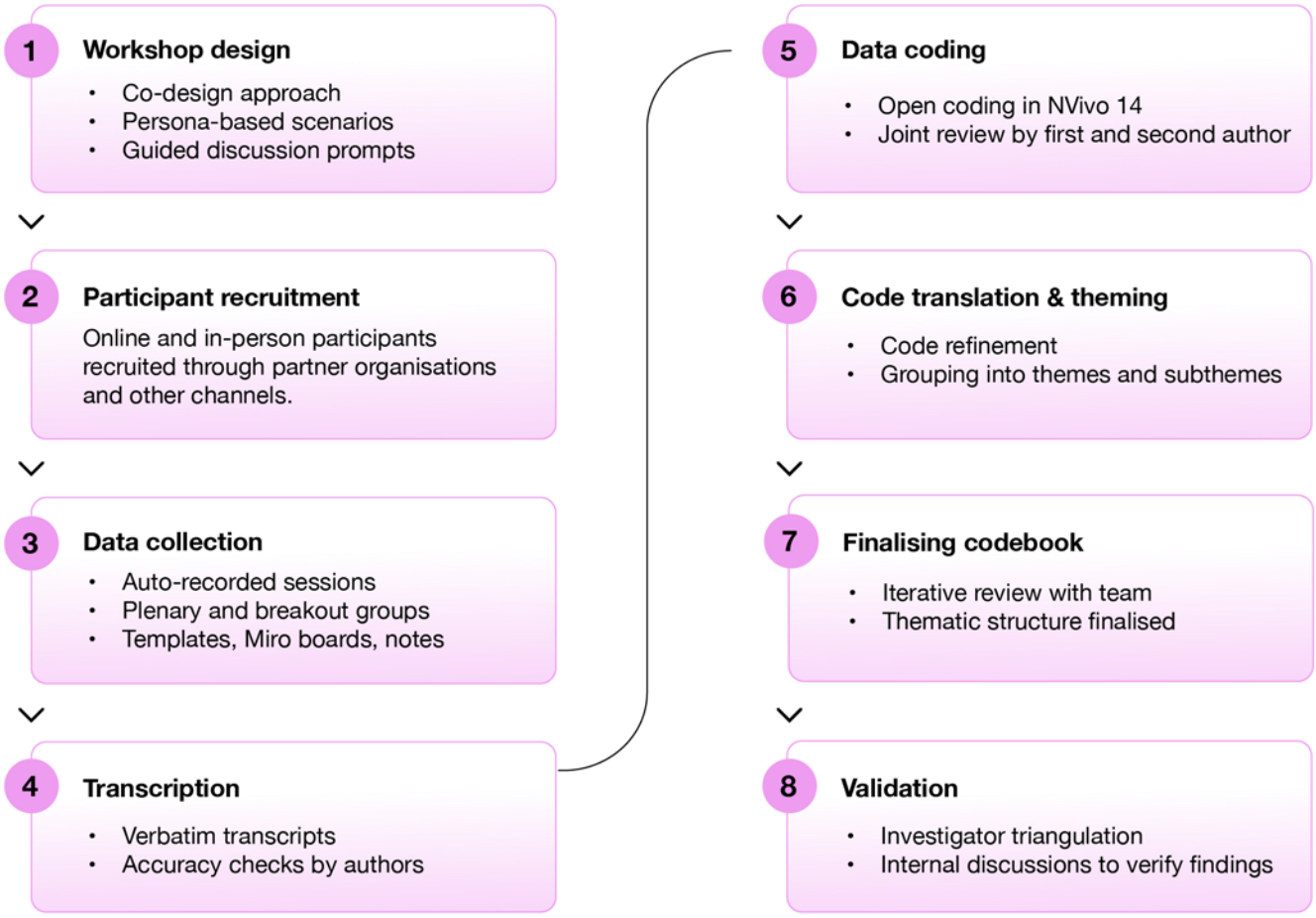


Figure 4 An overview of the research methods.

Ethical considerations

The research received ethics approval from the Monash University Human Research Ethics Committee (HREC number 46408). All participants provided informed consent to participate in both workshops and to being recorded and photographed for research purposes.

Image: Participants from Workshop 1. Photographer Michelle McFarlane.

Findings

3

Overview of findings

The rich qualitative data generated from this co-design process surfaced key insights that reflect the lived experiences, expectations, and challenges of accessing and using living evidence in South-East Asia and the Western Pacific.

The findings presented in the following sections capture perspectives from diverse health system actors including clinicians, policymakers, public health experts, consumer representatives, and technologists, across a wide range of country and regional contexts. Through collaborative coding and iterative synthesis, this report identified both systemic challenges and transformative opportunities that can inform the design of a future-ready evidence ecosystem.

The findings are organised into six interrelated thematic sections. These begin with participants' reflections on opportunities of living evidence to revitalise outdated systems and strengthen real-time, equitable, and locally meaningful decision-making. Findings then reveal the regional contexts that shape evidence access and use, followed by key challenges that hinder uptake of living guidelines. Insights are shared on how to optimise digital platforms for policymakers and practitioners. Our findings also present a synthesis of emerging design directions for scalable, context-aware, and human-centric digital systems that can deliver on the promise of living evidence across diverse settings. Finally, we articulate what participants envision as the ideal future ecosystem for evidence-informed decision-making.

Opportunities for living evidence

4

Our thematic analysis revealed ten interrelated opportunities for using living evidence to improve the design, uptake, and impact of health guidance systems across South-East Asia and the Western Pacific.

Participants did not view living evidence merely as a technical innovation but as a systemic transformation, an opportunity to build a more inclusive, responsive, and sustainable evidence ecosystem. The opportunities reflect emerging possibilities across clinical, policy, and community domains and signal a shift towards context-aware, user-driven, and equity-focused evidence practices.

1 Renewed uses of traditional guidelines

A prominent opportunity voiced throughout the workshops was the revitalisation of traditional, static guidelines through renewed uses of traditional guidelines: dynamic updates and responsiveness. Participants described how conventional guidelines often become outdated due to slow update cycles, sometimes spanning a decade. In contrast, living guideline approaches enable frequent updates, allowing evidence to remain aligned with emerging knowledge and shifting public health priorities. This dynamic updating was seen as particularly critical during health emergencies such as pandemics or outbreaks, where even small delays can compromise effective response. One participant noted: *“Instead of waiting for the traditional guideline to catch up, you have the information available and presented very quickly, up to date.”*

2 Continuous public consultation and engagement

Beyond speed, participants emphasised that living evidence fosters continuous public consultation and engagement, offering a structural shift away from episodic expert-driven reviews. Instead, it enables iterative co-creation and validation by communities, patients, and frontline workers. This approach builds public trust, supports local relevance, and empowers individuals to use evidence in their own decision-making. As one participant stated, *“People are no longer just passive recipients of care, but are empowered to understand and use this information.”* This participatory architecture promotes more transparent, inclusive, and legitimate evidence systems.

3 Strengthening regional, global and cross-border collaboration and shared learning

Another critical opportunity centred on strengthening regional, global and cross-border collaboration and shared learning. Participants spoke of the inefficiencies caused by siloed or duplicated guideline efforts across neighbouring countries. Instead, they envisioned living evidence as a mechanism for sharing tools, data, and infrastructure to harmonise responses, pool resources, and foster mutual learning, especially within South-East Asia and the Western Pacific. *"Why reinvent the wheel?"*, one stakeholder asked. *"Let's start by sharing what already exists."*

4 Enhancing real-time decision-making through timely evidence updates

This spirit of coordination was deeply connected to enhancing real-time decision-making through timely evidence updates. Clinicians and policymakers highlighted the importance of rapid access to updated guidance, particularly during fast-moving crises or disease outbreaks. Delays in evidence uptake were seen as unacceptable in dynamic contexts. One frontline clinician remarked, *"I want to know today if something has changed,"* emphasising the demand for systems that integrate real-time surveillance with practical, point-of-care guidance.

5 Bridging the gap between research and policy

In tandem with responsiveness, participants highlighted the promise of bridging the gap between research and policy. Traditional guideline development often struggles to translate published research into timely, actionable recommendations. Living evidence was described as a way to close this gap, through continuous integration of new data, joint interpretation by researchers and policymakers, and iterative feedback loops. As one participant said, *"We are often relying on papers that are already outdated by the time we apply them. Living evidence could mean we are always working with the most relevant data."*

6 Empowering local and community-level decision makers

Several participants also noted the potential of living systems in empowering local and community-level decision makers. They stressed that national guidelines often fail to reflect the complexities and constraints of facility-level or rural care environments. Living evidence platforms, by contrast, were seen as adaptable tools that can localise content, tailor formats for different literacy levels, and support decentralised application. One participant shared: *"Sometimes the local context is completely different… it doesn't work on the ground unless it's adapted."*

7 Embed equity and representation in evidence development

Central to these discussions was the aspiration to embed equity and representation in evidence development. Participants called for rebalancing power in the evidence ecosystem, ensuring that historically marginalised voices, such as Indigenous, rural, or low-resource communities, are not only represented but central in the production and validation of guidelines. *"We can't continue to build systems for people without them,"* one policymaker asserted, urging the design of inclusive methodologies and platforms.

8 Stakeholder inclusion and co-design

This theme naturally connected to the emphasis on stakeholder inclusion and co-design, where living evidence systems were seen as opportunities to involve users throughout the lifecycle, from design and piloting to updating and evaluation. Unlike static tools developed in isolation, living platforms that incorporate co-design were perceived as more likely to be used, trusted, and sustained over time. *"If we don't involve the users,"* one participant warned, *"it becomes just another tool people don't use."*

9 Cost-effective prioritisation

Living evidence enables cost-effective prioritisation by allowing selective updates rather than overhauling entire guidelines. This was identified as especially important in LMICs, where both time and funding are limited. *"We can focus on priority questions,"* one participant noted, *"not everything needs to be updated all the time."* Coordinated updates and cross-country collaboration were seen as mechanisms to reduce duplication and make better use of limited resources, while aligning guideline revisions with evolving health priorities.

10 Evolving conceptual framing of evidence

Finally, participants described a conceptual transformation in how evidence systems are imagined, reflected in the emergence of evolving conceptual framing of evidence. Rather than focusing solely on "living guidelines," the workshop surfaced terms such as "living recommendations," "living data," and "living registries," signalling a shift toward more modular, dynamic, and interconnected architectures. These evolving framings allow for more strategic investments, targeted updates, and integration with existing digital health ecosystems. *"Maybe the concept is broader than guidelines,"* one participant suggested, *"perhaps we should talk about living data ecosystems."*

Taken together, these ten interconnected opportunities paint a picture of living evidence as a catalyst for change, technologically, politically, and socially. Far from being just a digital update mechanism, living evidence was envisioned as a new infrastructure for health knowledge, flexible, inclusive, real-time, and rooted in the realities of its users. To realise this vision, participants called for sustained investment, regional coordination, and the political will to reimagine how evidence is generated, shared, and used.

Opportunities canvas from Workshop 1. Photographer Michelle McFarlane.

Understanding regional contexts of access and use of living guidance

5

The research provided four insights into the contexts in which living evidence was being accessed and used across South-East Asia and the Western Pacific.

Participants highlighted that access to evidence differed, depending on roles within community or government health settings. This was compounded by time pressures, challenging and static formats, and a top-down approach that limited access at the community level. Trust was identified as a critical factor that needs to be considered, in addition to cultivating champions to promote access and use of living evidence.

1 Access and use of evidence

Access to evidence was found to be highly variable and dependent on professional roles, institutional affiliations, and contextual constraints. Health professionals affiliated with Government Ministries, universities, or global organisations reported easier access to evidence repositories and formal guidelines. One participant noted, *"People working with the Ministry... have access, but others struggle."* Conversely, those in smaller institutions or community-based roles frequently cited barriers to access, relying instead on peer advice or informal methods: *"I usually just ask my friend… I don't know where to find the information."*

Time pressure in clinical settings emerged as a key factor influencing evidence use. Participants described clinicians opting for convenience over rigour: *"Sometimes the doctor is under time pressure… so Google might be the answer to all your questions."* Similarly, junior staff were said to depend on their seniors, rather than directly engaging with primary evidence: *"Junior staff rely on what senior doctors say... not much culture of checking evidence."*

Despite these challenges, efforts to bridge the access gap exist. For instance, Cochrane summaries are shared internally within clinical groups: *"We summarise all the new Cochrane reviews and send them to the clinical groups."* However, such dissemination practices were not consistent across countries or sectors.

2 Formats and types of evidence

Participants across most groups reported that clinical guidelines and SOPs are the predominant formats used in practice. These are often distributed as static PDF files through Ministry of Health websites or institutional repositories. As one respondent stated, *"We use standard operating procedures (SOPs) and national protocols… most of our programs rely on those."* Another added, *"They're usually PDF documents from the Ministry or the hospital."*

In low-resource or time-sensitive environments, downloading PDFs remained the most feasible option: *"We download the PDFs from the website… it's the only way."* Email newsletters or alerts from global or academic sources (such as Cochrane) were also mentioned as helpful ways to receive synthesized evidence: *"We get evidence emails weekly… I always find something to send to my team."*

Although a few individuals or settings mentioned using online platforms for publishing guidelines, these tools were not widely used or fully embedded in practice. One participant admitted, *"I've heard of those tools, but we don't use them… people are used to printed guidelines or PDFs."* Meanwhile, it was raised that the public will often access health information through social media platforms, where content shared by popular figures or community influencers may carry significant weight. As one participant reflected, *"Patients… follow influencers more than health professionals."* This finding reveals the importance of understanding the channels through which people engage with health information and suggests a need to collaborate with trusted messengers in digital spaces to improve the visibility and relevance of evidence-based content.

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> **People working with the Ministry... have access, but others struggle.**

3 Levels of use of living evidence

Evidence was most often developed and distributed from the national or international level, then filtered down to regional, facility, and occasionally community settings. This top-down flow, however, was frequently described as inefficient, leading to outdated or poorly contextualised information. *"Starts at the national level, but by the time it gets to facilities, it's diluted or outdated,"* one policymaker explained.

Facilities may attempt to localise guidelines by developing their own SOPs, but these adapted guidelines are not always updated in line with new evidence. *"Hospitals might make their own SOPs… but they don't always update them,"* a participant noted. This disconnect created a risk of misalignment with best practices or emerging data.

At the community level, participants highlighted substantial gaps in both access and capability. Community health workers were described as being cut off from full-text guidelines or dynamic content. One participant emphasised, *"Community health workers… need capacity building,"* pointing to both technical and training-related barriers to effective evidence use at this level.

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>
> **Starts at the national level, but by the time it gets to facilities, it's diluted or outdated.**

4 Role and use of living evidence

Guidelines were broadly described as foundational to practice and policy but also as static documents, rarely updated or maintained dynamically. *"It's the same guideline for years… people don't expect it to change,"* one respondent admitted. Across settings, practitioners were found to treat guidelines as one-off publications rather than evolving resources. Even where updates were technically feasible, there was often no infrastructure or mandate to support them: *"No infrastructure to keep updating… so we just use what's there."*

Living guidelines were mentioned only occasionally, and most participants had limited familiarity with the concept or experience using such systems. Rather than holding incorrect assumptions, participants expressed uncertainty about what qualifies a guideline to be "living" and how such systems should be maintained in practice: *"Not a clear understanding of which guidelines need to be living… or how to maintain them,"* was a recurring sentiment. Barriers to implementing and sustaining living guidelines were multifaceted: political inertia, lack of sustained funding, inadequate human resources, and digital infrastructure gaps were commonly cited. Moreover, several participants highlighted a lack of champions to advocate for evidence uptake: *"Guideline champions are needed… doctors, policymakers, influencers."* Trust in guidelines was also inconsistent, with users sometimes preferring international over national documents due to past experiences with local guideline inaccuracies.

> "No infrastructure to keep updating… so we just use what's there."

> "Guideline champions are needed… doctors, policymakers, influencers.

Challenges in accessing living evidence

6

Our thematic analysis revealed 12 interrelated challenges that hinder effective access to and use of living evidence in decision-making in health systems across South-East Asia and the Western Pacific.

These barriers reflect not only technological limitations but also deeper systemic issues embedded in how health evidence is produced, disseminated, and operationalised, especially in LMIC contexts. While living evidence aims to improve the responsiveness and relevance of guidelines, our findings suggest that misalignments between the design of these systems and the realities of their intended users can severely constrain their practical uptake.

1

A recurring challenge was the ***disconnect between global guidelines and local knowledge systems.*** In many LMICs, global evidence often fails to reflect traditional practices, resource limitations, or culturally specific care pathways. Participants highlighted that even when guidelines are methodologically sound, their application becomes difficult if they lack contextual adaptation:

> *"What applies in Malaysia might not apply in Indonesia… an international guideline might be harmful."*

2

Another widely reported barrier was ***information overload.*** With the proliferation of evidence sources, clinicians and policymakers struggle to navigate extensive, highly technical documents and platforms to locate timely, relevant recommendations. This cognitive burden was consistently identified as a critical pain point:

> *"There's so much evidence, so many guidelines… which one are we going to use at the particular time and place?"*

> *"Both the clinical practice guidelines and the paper guidelines issued by the Ministry of Health are so lengthy that they make it harder for clinicians to use them in practice."*

3 ***Infrastructure limitations*** were also prominent in the data, especially for rural and remote users. Poor internet access, unstable electricity, and lack of compatible hardware continue to limit equitable access to digital platforms:

> *"Some of the island[s], they don't have any internet connection… they will cross two rivers just to attend something in the capital city."*

4 Compounding these issues is a ***lack of contextual relevance*** in many living guidelines. Participants described how evidence produced elsewhere often fails to consider infrastructural gaps, sociocultural differences, or the availability of treatments in local settings:

> *"Even if we got the best evidence… if we don't have the infrastructure, it's useless."*

5 Another significant theme was the ***fragmentation of platforms and evidence systems,*** where guidelines, SOPs, and decision tools are scattered across different departments or institutional websites. This decentralisation contributes to duplication of effort, confusion among users, and inconsistent implementation:

> *"Too many platforms… each department has their own websites and applications."*

> *"We have to go to five different places to find the same piece of guidance."*

6 Participants also noted ***terminology skill gaps***, where users found it difficult to locate relevant evidence because they were unsure of what terms or filters to use. This was particularly problematic for non-native English speakers or users unfamiliar with evidence platforms:

> *"Sometimes people don't know what words to use to find the right information, or even where to start."*

7 Coupled with this is a ***lack of dedicated training or capacity-building mechanisms***, especially for community health workers, junior clinicians, and policymakers working outside evidence generation roles. Several participants flagged that even when tools are available, there is little support for uptake and use:

> *"CHWs need tailored tools and visual content."*

> *"We talk a lot about the evidence… but not about whether people know what it means or whether they trust it."*

8 ***Status quo bias*** was also evident, particularly among decision-makers who assume that existing static systems are adequate. This slows the adoption of more dynamic, updated approaches:

> *"There is a resistance to change, if something is working reasonably well, people don't really want to change it."*

9 This is further exacerbated by ***delayed updates and maintenance*** of guidelines. Despite their "living" label, many are infrequently revised due to time, labour, or funding constraints:

> *"We just finished the living guideline… but no funding to maintain it."*

10 The ***format of guidelines*** also emerged as a barrier to usability. Static PDF files are frequently described as difficult to navigate, not searchable, and unfriendly for mobile or point-of-care use:

> *"People are used to printed guidelines or PDFs... but they're not helpful when you're under pressure."*

11

The ***lack of quality assurance and trust mechanisms*** was another major concern, particularly among policymakers who noted that guideline users are often expected to accept recommendations simply because they come from an authoritative source. This reliance on institutional trust, without visibility into the underlying evidence or methods, was seen as problematic:

> *"You're meant to trust the Ministry as the expert… but that breaks the connection to the evidence."*

This quote highlights the discomfort some participants felt when users are asked to follow guidelines without access to, or understanding of, the supporting evidence. It demonstrates the importance of greater transparency and evidence traceability within guideline systems, so users can develop trust based on the source, process and data behind the recommendations.

Trust in guidelines was also affected by the lack of access to the underlying evidence, especially when the final published documents followed policy or regulatory formats that do not typically include references or methodological details. In some settings, participants noted that links to evidence are omitted in the public version of guidelines to conform with government publication protocols:

> *"When the guideline is published… they will remove the link to the evidence… because the regulation is that the guideline will be published as a decree of the Ministry of Health."*

Image: Design canvas from Workshop 1. Photographer Michelle McFarlane.

12 Finally, ***high turnover of decision-makers*** (e.g., in Ministries of Health or WHO offices) was identified as a systemic disruption to evidence continuity. When institutional memory is lost, evidence translation efforts often need to be repeated from scratch:

> *"The Ministry changed… the new person didn't know anything about the guideline… we had to start again."*

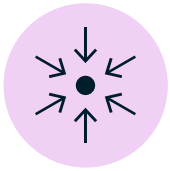
Collectively, these twelve issues highlight barriers to accessing living evidence. They underscore the misalignment between the evolving ambitions of living guideline systems and the realities of daily healthcare practice, particularly in low-resource contexts. Addressing these challenges requires more than technical solutions; it calls for capacity-building, systems thinking, funding stability, and stronger political and institutional support.

Image: Design canvas from Workshop 1. Photographer Michelle McFarlane.

Optimising living evidence for policymakers and practitioners

Our analysis identified six design priorities for optimising living evidence tools, reflecting distinct expectations for both policymakers and clinicians/practitioners. Although both groups seek evidence that is timely, accessible, and relevant, their visions diverge in how evidence should be formatted, delivered, and integrated into their workflows. Below, we outline each shared sub-theme with a comparative lens and rich illustrations from the data.

Image: Participant from Workshop 1 engaging with the design canvases. Photographer Michelle McFarlane.



Centralised platform

Policymakers emphasised the need for a centralised global or national platform that aggregates evidence across regions and sectors to support strategic decisions. This would address the fragmentation they experience across agencies and ensure consistent access:

> *"We need one centralised global or national platform where guidelines, data, and updates are unified. Right now, everything is scattered, and people don't know where to look."*

In contrast, clinicians envisioned a unified clinical decision support tool that integrates various guidelines into a single point-of-care platform, particularly to manage patients with multiple comorbidities. They desired easy, real-time access that complements clinical workflows:

> *"You don't want to be jumping between five different guideline websites. I just need one place where it shows me what to do when someone has diabetes and chronic kidney disease together."*

Visual presentation

Visual representation of evidence was seen as crucial by both groups but with differing priorities. Policymakers preferred data dashboards that present national-level trends, forecasts, and summaries to guide policy formulation:

> *"If we had a dashboard where we can just see updated trends…what's rising, what's falling, what's the evidence telling us in real time…that would help with much faster response."*

Clinicians sought interactive visual tools such as decision trees, infographics, and flowcharts, helping them follow diagnostic and treatment pathways under time pressure:

> *"Give me a flowchart or a visual clinical pathway… something I can click through based on the patient symptoms, not a 60-page PDF."*

Personalisation

Attitudes towards personalisation of evidence also diverged. For policymakers, the priority was to adapt policies based on national health system priorities, including local epidemiology, economic impact, and intersectoral relevance:

> *"If you're planning for a country, you need evidence that reflects your unique population needs, your infrastructure, your priorities. Otherwise, it's not usable."*

Clinicians, on the other hand, required patient-level personalisation, ideally embedded in EMR systems to surface relevant recommendations during consultations:

> *"What we really need is for the guideline to appear in the EMR, based on the patient's record, and tell me; this is the recommended action now."*

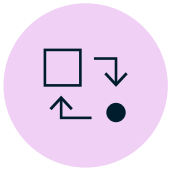
Predictive AI support

Both groups were enthusiastic about the potential of AI, though in different capacities. Policymakers envisioned AI models that simulate the outcomes of policy decisions, particularly to assess economic and health trade-offs:

> *"We need tools that say, if you implement this strategy, this is your likely economic cost, this is your likely DALY [Disability Adjusted Life Year] impact. That's what convinces ministries of finance."*

Clinicians favoured AI-supported risk prediction tools for real-time clinical use, especially for managing comorbidities or predicting deterioration:

> *"It would be amazing if the AI could warn me, based on the labs and symptoms…this patient is likely to need ICU, or this drug will interact."*



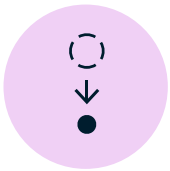
Local adaptation

There was a shared need for localisation of global guidelines, but again with tailored foci. Policymakers stressed national translation and alignment with governance structures:

> *"You can't just copy-paste from WHO into our national guideline. We need to consider national approval processes, resources, and what's actually feasible."*

Clinicians emphasised adaptation to facility realities, whether a drug is available, staff trained, or diagnostic tools accessible:

> *"Sometimes the recommendation is great, but we don't even have that medicine in our hospital. The guideline must match what we can actually do."*



Simplified summaries

Both user groups requested simplified summaries, though again, with different formats and purposes. Policymakers needed executive summaries and fact sheets that could be used during briefings and cabinet meetings:

> *"We don't have time to read full documents. One-pagers, brief policy summaries…that's what we can use."*

Clinicians required quick-reference clinical summaries and job aids, preferably mobile-accessible, to use while treating patients:

> *"A summary with key steps or a visual checklist, something I can print out or use on my phone during rounds."*

Our analysis demonstrates that while both policymakers and practitioners support the broader goals of living evidence, their expectations reflect different levels of decision-making, time constraints, and contextual challenges. Optimising a living evidence ecosystem must therefore prioritise modular, user-centred platforms that serve distinct roles while maintaining shared core infrastructures, transparency, and localisation capacity. As one participant aptly summarised:

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> **It’s like we all need water, but this person needs ice, this person needs steam, and this person needs rain. Same source, different forms.**

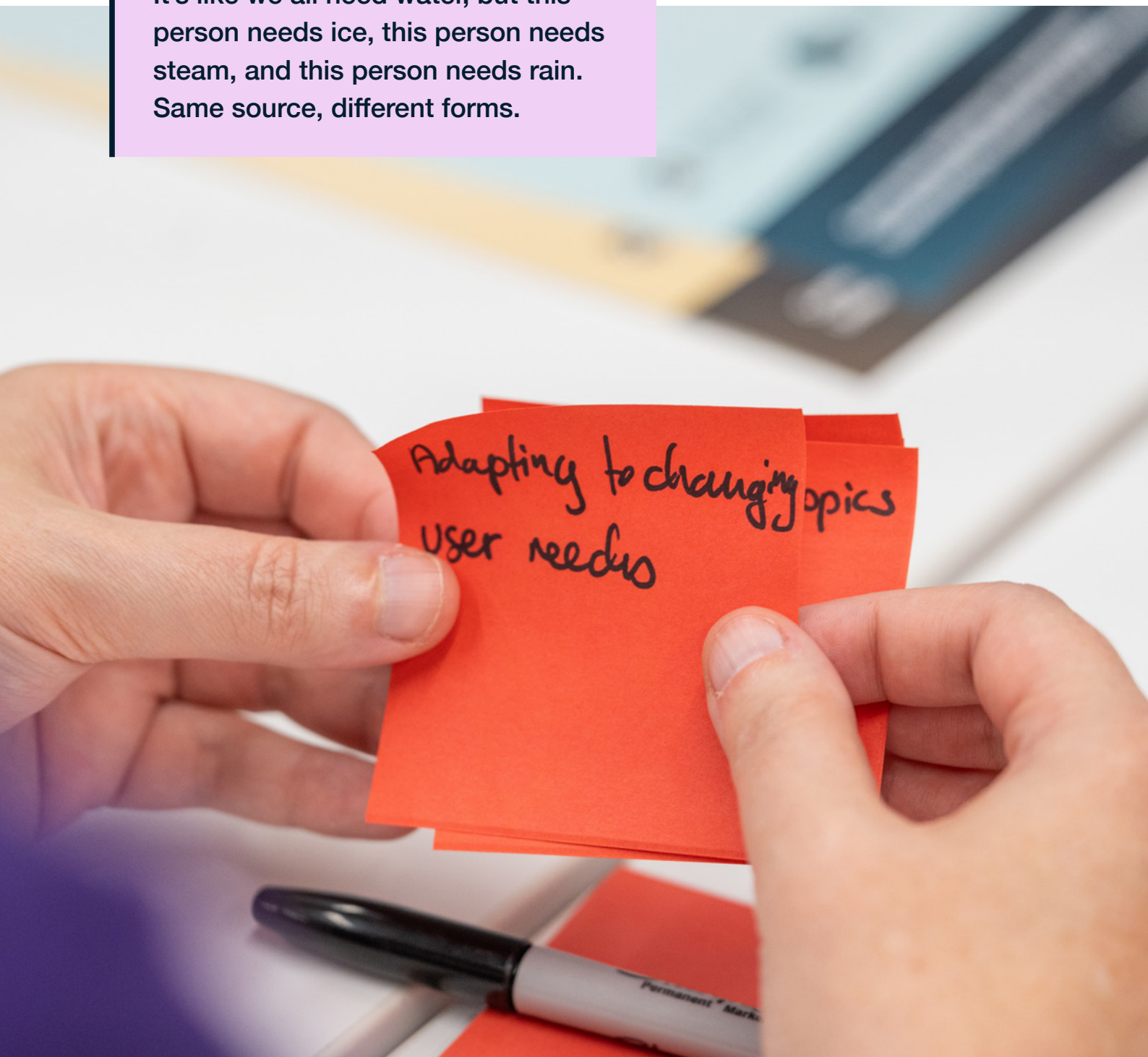


Image: Participant from Workshop 1 holding a sticky note. Photographer Michelle McFarlane.

Designing the future of living evidence: scalable, contextual, and human-centred digital systems

User and system requirements for improved access to living evidence

Our analysis identified fifteen essential user and system requirements for improving access to living evidence, highlighting the importance of both technical capabilities and a broader human-centred design. These requirements reflect expectations for flexible, transparent, and equitable platforms that can operate effectively across diverse health system settings.

A key priority for users is ***contextual adaptation and personalisation***; systems must automatically tailor recommendations based on geographic location, patient demographics, and policy environments without manual filtering. This was strongly linked to the demand for ***cross-system integration***, ensuring platforms work seamlessly within existing clinical and policymaking infrastructures.

The principle of ***human-in-the-loop design*** emerged as a foundational expectation. Participants emphasised that AI should augment, not replace, human judgment, reinforcing the need for systems that allow user control and oversight. As one participant put it:

> *"Definitely we can use AI, we can use multiple AI, but human(s) should be there in every step to guide, to check, to validate."*

Other core requirements included ***transparency and trust-building***, where users need clear explanations of how AI outputs are generated and how evidence is filtered or ranked. Features like ***evidence traceability***, ***open access***, and ***data governance and oversight*** were seen as critical to fostering ethical, trustworthy, and accountable platforms.

Importantly, systems must also address ***equity and inclusion*** by supporting use in low-resource settings, enabling offline access, minimising registration barriers, and offering ***multi-format delivery*** (e.g., audio, visual, mobile). Additional priorities included ***interactive interfaces, qualitative data integration***, and ***support for complex clinical scenarios***.

Together, these findings call for the development of ***user-centred, ethically grounded, and contextually adaptable evidence platforms*** that meet the real-world needs of clinicians, policymakers, and community-level health workers.

Participant from Workshop 1 writing on a sticky note. Photographer Michelle McFarlane.

Desired features of technology platforms for accessing living evidence

To support meaningful and equitable access to living evidence, users across clinical and policy settings identified a suite of key software features necessary for enhancing usability, responsiveness, and real-world integration. Our analysis surfaced 13 core functionalities, reflecting both operational priorities and inclusive design principles.

A fundamental requirement is the incorporation of ***advanced search and filtering tools***, allowing users to efficiently locate relevant evidence based on keywords, regional filters, or clinical categories. To support responsiveness in dynamic contexts, ***real-time alerts and change tracking functions*** were considered essential for keeping users informed of updates in recommendations or evidence synthesis.

Participants emphasised the importance of ***summarisation and multi-format outputs***, such as infographics, bullet points, and simplified summaries, to address varying time constraints and expertise levels. Equally critical are ***translation and voice-based features***, enabling broader access across literacy levels and language backgrounds. As one participant noted:

> *"We want the platform to have a translation and transcription of guidelines and not just textual but also can be using voice, because not all people can read and write."*

Sticky note from Workshop 1.
Photographer Michelle McFarlane.

Beyond these core features, users valued tools that encourage interaction and learning, such as ***collaboration and discussion spaces***, ***real-time peer validation***, and ***feedback and rating systems***. These promote shared learning, improve trust, and enable bottom-up validation of evidence relevance.

For use in low-resource environments, ***offline accessibility and lightweight platform design*** were frequently highlighted, ensuring functionality even in settings with limited bandwidth or digital infrastructure. ***Usage analytics*** were viewed as important to monitor uptake and inform iterative improvements in guideline communication strategies.

Advanced ***visual generation tools***, ***comparative policy views***, and ***clinical calculators*** further enhance comprehension and facilitate evidence application in both routine and complex cases. Tools like ***resource monitoring dashboards*** also support macro-level coordination by providing real-time snapshots of supply availability, hospital capacity, and workforce deployment.

Together, these features create a flexible, user-centred digital ecosystem capable of embedding living evidence in day-to-day decision-making. By prioritising accessibility, collaboration, and responsiveness, these technologies have the potential to dramatically improve the uptake, interpretation, and contextualisation of evidence across diverse healthcare systems.

Image: Design canvas from Workshop 1. Photographer Michelle McFarlane.

Vision for an ideal evidence ecosystem

9

A vision for an ideal evidence ecosystem, as expressed by participants across diverse contexts, revolves around building a dynamic, inclusive, and sustainable infrastructure that supports continuous access to, and updating of living evidence.

Central to this vision is the creation of a ***centralised and integrated digital platform*** where guidelines, updates, and published evidence are unified across countries and organisations, reducing confusion caused by scattered sources. One participant highlighted, *"At the moment, it's very scattered. You might need to go to one website for national guidance, another for WHO updates, and another for training. It would be better if we had just one place where everything is brought together."* This platform must offer ***personalised, patient-centric delivery***, enabling healthcare providers to receive recommendations tailored to individual patients and context-specific needs. A participant highlighted, *"The platform should personalise recommendations. It's not just about giving data–it's about giving the right data for the right patient at the right time."*

Furthermore, ***dynamic, real-time evidence updating*** is essential; participants emphasised the need for automatic notifications and updates that reflect emerging evidence promptly, especially in fast-moving scenarios like the COVID-19 pandemic: *"During COVID, updates were happening so fast that even national guidelines struggled to keep up. We need systems that push those changes in real-time."* ***Transparency*** is another foundational principle: *"Every recommendation should be linked to its underlying sources, allowing users to drill down into the evidence base to validate claims and foster trust."*

> **"At the moment, it's very scattered. You might need to go to one website for national guidance, another for WHO updates, and another for training. It would be better if we had just one place where everything is brought together.**

To ensure that evidence is credible and meaningful, participants stressed the need for ***collaborative validation and peer input***, where regional actors co-create and validate evidence to enhance relevance. One noted: *"We must validate evidence together; peer input from other countries helps build confidence and relevance."* This should be coupled with ***systematic incorporation of local context and data***, acknowledging that epidemiology, cultural norms, and resource levels vary widely. One participant highlighted, *"The best evidence is useless if it can't be applied locally. Localisation is non-negotiable."*

A strong governance structure is also key, and participants called for ***multi-level governance with national ownership***, where national committees are responsible for the adaptation, translation, and implementation of global evidence. For instance, one participant said, *"Without national committees overseeing guideline use, we can't ensure they're actually being used or kept up to date."* This ecosystem must be supported by ***feedback loops and learning systems*** that collect real-world user insights and implementation data to iteratively improve guidance. One noted, *"Every time someone uses a guideline, their experience should feed back into the system. That's how we learn and improve."*

Technology plays a pivotal role in this ideal system, particularly ***trusted AI tools*** that support predictive, personalised, and scalable delivery of living evidence, provided these tools are transparent and ethically governed. One noted, *"If we ban AI, people will still use their phones anyway. Instead, we should focus on ethical, validated AI systems that clinicians can trust."* However, technology alone is insufficient. Participants emphasised the role of ***national policy ownership*** in embedding living evidence within health systems through formal mandates: *"You can't scale adoption without policy. The government needs to say: this is how we do things now."*

> "
>
> **If we ban AI, people will still use their phones anyway. Instead, we should focus on ethical, validated AI systems that clinicians can trust.**

Participants highlighted the importance of ***political commitment*** to drive cross-sectoral adoption and sustained attention at the highest levels. One said, *"Living evidence won't be prioritized unless policymakers at the top care about it. We need political will."*

For evidence to influence practice meaningfully, there must also be ***alignment between incentives and reimbursement systems***, as clinicians are less likely to adopt guidelines not supported by financial or institutional mechanisms. One participant highlighted, *"If it's not tied to reimbursement, clinicians won't bother using it. We've seen this too often."* Finally, ***sustainable funding mechanisms*** were identified as critical to maintaining this vision. One noted, *"We don't even have the funds to run a national guideline team. How do you expect us to keep updating them continuously?"* Participants argued that living evidence systems require continuous investment in updating processes, workforce training, technological infrastructure, and localisation efforts. Without this long-term support, the promise of living evidence remains unfulfilled.

Together, these 13 aspirations form a cohesive vision for an equitable and efficient evidence ecosystem, one that moves beyond static dissemination to embrace collaboration, localisation, digital innovation, and sustainability. As one participant summarised:

> **We want evidence to be international, but it has to be localised. We need an ecosystem that leverages existing tools and expertise without reinventing the wheel.**

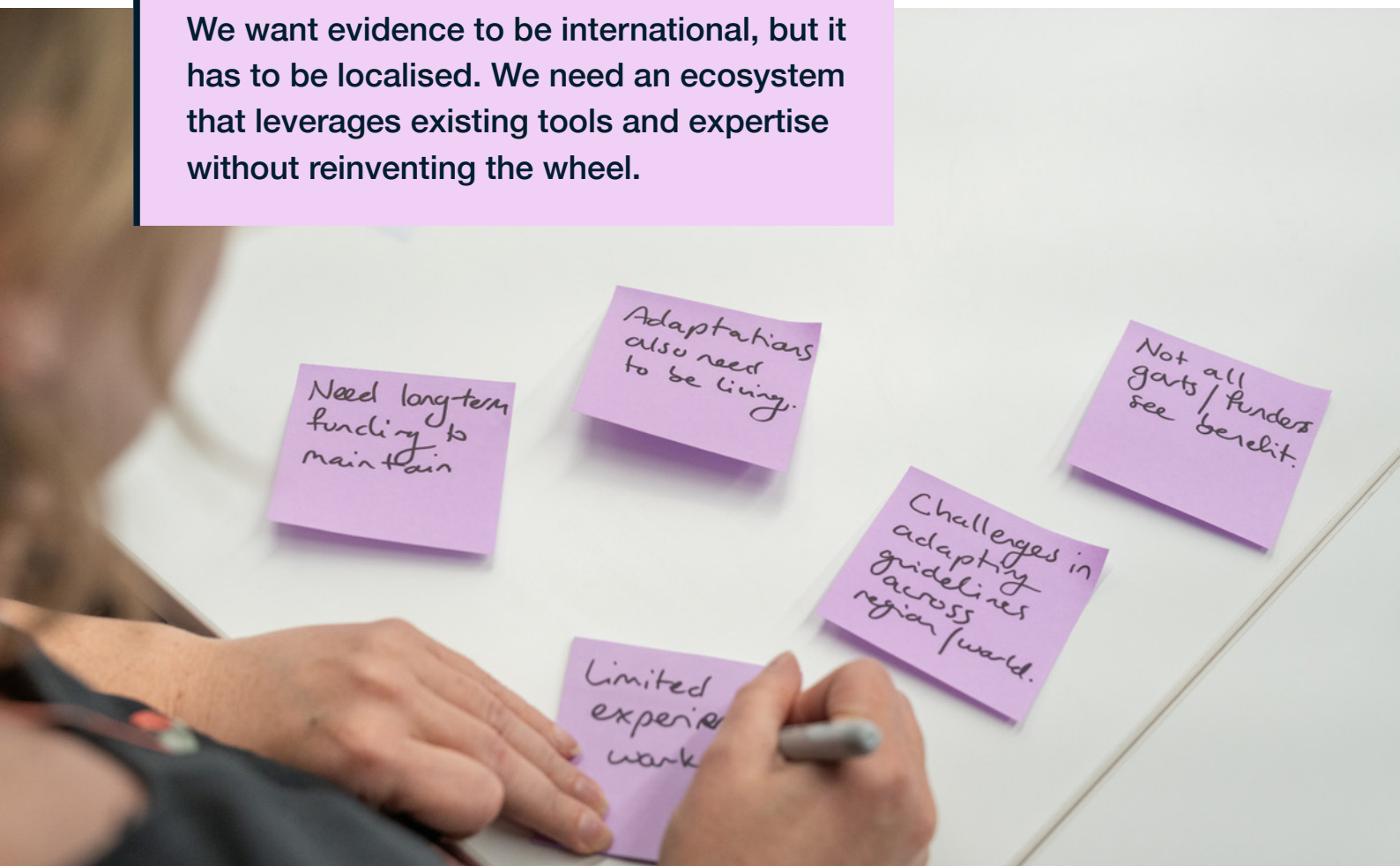


Image: Participant from Workshop 1 writing on sticky note. Photographer Michelle McFarlane.

Figure 5 Our proposed vision for an ideal evidence ecosystem.

Conclusion and next steps

10

Conclusion and next steps

This report provides a critical foundation for shaping the future design and implementation of living evidence systems across the region and globally. The work urges policymakers, funders, and technologists to move beyond static tools and toward dynamic, inclusive, AI/technology-enabled and context-sensitive infrastructures that empower health systems to deliver timely, trustworthy, and equitable care.

Building on the insights from these two workshops, the project team is working with partners to co-develop a technology roadmap for a living evidence system. This roadmap will reflect regional consensus on user needs, design features, and implementation considerations, with the goal of supporting country-level adaptation of global living guidelines.

The roadmap will serve as a strategic foundation to guide future co-design, development, and implementation efforts across the South-East Asia and the Western Pacific.

References

1. Evidence Synthesis Infrastructure Collaborative (ESIC): About ESIC. URL: https://evidencesynthesis.atlassian.net/wiki/spaces/ESE/pages/348094465/About+ESIC accessed 29 August 2025
2. Martínez García L, Sanabria AJ, García Alvarez E, Trujillo-Martín MM, Etxeandia-Ikobaltzeta I, Kotzeva A, et al. The validity of recommendations from clinical guidelines: a survival analysis. Cmaj. 2014;186(16):1211-9.
3. Shekelle P, Eccles MP, Grimshaw JM, Woolf SH. When should clinical guidelines be updated? Bmj. 2001;323(7305):155-7.
4. Cheyne S, Fraile Navarro D, Hill K, McDonald S, Tunnicliffe D, et al. Methods for living guidelines: early guidance based on practical experience. Paper 1: Introduction. J Clin Epidemiol. 2023;155:84-96
5. National Clinical Evidence Taskforce – Australian guidelines for the clinical care of people with COVID-19, version 74.1. URL: https://app.magicapp.org/#/guideline/7252. Accessed 29 July 2024, last updated 30 May 2023.
6. Living Evidence for Australian Pregnancy & Postnatal Care (LEAPP) – Australian Pregnancy Care Guidelines, version 7.0. URL: https://app.magicapp.org/#/guideline/jm83RE/section/jWQoM1, Accessed 23 July 2025, last updated 19 June 2025.
7. Living Evidence for Australian Pregnancy & Postnatal Care (LEAPP) – Australian Postnatal Care Guidelines, version 7.0. URL: https://app.magicapp.org/#/guideline/jW0ZbL/section/Lql69J, Accessed 23 July 2025, last updated 19 June 2025
8. Meteku BT, De Silva K, Green SE, Turner T. Guideline developers in low- and middle-income countries want to develop and use living guidelines, but are currently limited by important barriers: findings from a qualitative study. J Clin Epidemiol. 2025;180:111707

9. Leah Heiss, Olivia Hamilton, Gretchen Coombs, Troy McGee & Cate O'Kane (04 Nov 2024): Sequenced co-design with stakeholder communities to support the development of spaces for mental health recovery and healing, The Design Journal, DOI: 10.1080/14606925.2024.2420156

10. Heiss, L and O. Kokshagina. (2021). Tactile co-design tools for complex interdisciplinary problem exploration in healthcare settings. Design Studies, 75. doi.org/10.1016/j.destud.2021.101030

11. World Health Organization. (2022). Improving the usability and impact of WHO guidelines: report of a WHO workshop. Geneva: World Health Organization; https://apps.who.int/iris/handle/10665/365229

12. World Health Organization. (2023). Testing design principles to improve the usability and impact of WHO guidelines: report of a workshop. World Health Organization. https://iris.who.int/handle/10665/372409.

13. Thiessen, M, Heiss, L, Mcgee, T & Bawden, G. (2023). The Future is Participatory: Collaborative Communication Design for Global Health Initiatives. Visible Language, 57 (1): 14-35. doi.org/10.34314/wn2vpn43

Appendices

11

A Appendix

Agenda for Workshop 1

Co-designing a Living Evidence Architecture: Understanding challenges and opportunities of current systems and ideating for a future platform

Date: February 17, 2025
Location: Monash University, Melbourne, Australia
Online: Zoom

10:00 - 10:45am	Session 1 Welcome and introduction to the Global Living Evidence Architecture initiative
11:00 - 12:30pm	Session 2 Co-design activity: Current state challenges and opportunities - Understanding the experience of guideline developers
12:30 - 1:30pm	Lunch break
1:30 - 2:20pm	Session 3 Short talks and discussion: The current state of living evidence - hearing from our region. SEARO, WPRO, Cochrane SEA
2:20 - 3:45pm	Session 4 Co-design activity: Co-designing the future inputs to a Living Evidence Architecture for our region
3:45 - 4:00pm	Wrap up and next steps

B Appendix

Agenda for Workshop 2

Co-designing a Global Living Evidence Architecture: Understanding the needs of our region

Date: 20-21 May 2025
Location: Monash University Indonesia, Jakarta
Online: Zoom

Day 1: 20 May		WIB	AEST	CEST
Session 1	Welcome and introduction to the Global Living Evidence initiative	10:00am - 10:45am	1:00pm - 1:45pm	05:00 - 05:45
Session 2	Co-design activity: Understanding how people in the region currently access and use evidence to support health decision making. What are the needs and priorities for living evidence/living guidelines?	11:00am - 12:30pm	2:00pm - 3:30pm	07:30 - 08:30
Session 3	Presentations: International, regional and local perspectives	1:30pm - 2:30pm	4:30pm- 5:30pm	08:30-09:30
Session 4	Co-design activity: Exploring the role of technology in supporting health decision making in the region. How should evidence-based information be provided to health decision makers?	2:30pm - 3:50pm	5:30pm - 6:50pm	09:30 - 10:50
Close		3:50pm - 4:00pm	6:50pm - 7:00pm	10:50 - 11:00
Day 2: 21 May		WIB	AEST	CEST
Session 1	Recap on day 1 'What we heard'	10:00am - 10:30am	1:00pm - 1:30pm	05:00 - 05:30
Session 2	Co-design activity: Visualising the future. Ideating on a technology supported platform for the region	10:30am - 12:00pm	1:30pm - 3:00pm	05:30 - 07:00
Session 3	Facilitated shareback of key learnings from days 1 & 2	12:00pm - 12:45pm	3:00pm - 3:45pm	07:00 - 07:45
Close		12:45pm - 1:00pm	3:45pm - 4:00pm	07:45 - 08:00

Co-designing a Living Evidence Architecture

Understanding the needs of our region

DATE
20-21 May 2025

LOCATION
Monash University Indonesia, Jakarta

ONLINE
Zoom

A two-day global workshop at Monash Indonesia bringing together evidence users and technology developers to understand the needs of the Asia Pacific region for living evidence.

20 MAY

Session 1:
Welcome and introduction to the Global Living Evidence initiative
10:00am - 10:45am WIB | 1:00pm - 1:45pm AEST | 05:00 - 05:45 CEST

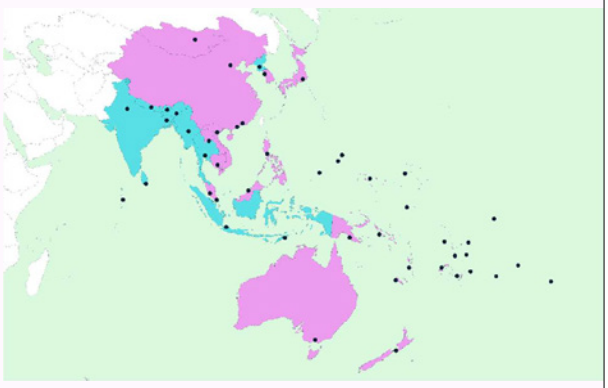
Session 2:
Co-design activity: Understanding how people in the region currently access and use evidence to support health decision making. What are the needs and priorities for living evidence/living guidelines?
11:00am - 12:30pm WIB | 2:00pm - 3:30pm AEST | 06:00 - 07:30 CEST

Break
12:30pm - 1:30pm WIB | 3:30pm - 4:30pm AEST | 07:30 - 08:30 CEST

Session 3:
Presentations: International, regional and local perspectives
1:30pm - 2:30pm WIB | 4:30pm - 5:30pm AEST | 08:30-09:30 CEST

Session 4:
Co-design activity: Exploring the role of technology in supporting health decision making in the region. How should evidence-based information be provided to health decision makers?
2:30pm - 3:50pm WIB | 5:30pm - 6:50pm AEST | 09:30 - 10:50 CEST

Close
3:50pm - 4:00pm WIB | 6:50pm - 7:00pm AEST | 10:50 - 11:00 CEST



21 MAY

Session 1:
Recap on day 1 'What we heard'
10:00am - 10:30am WIB | 1:00pm - 1:30pm AEST | 05:00 - 05:30 CEST

Session 2:
Co-design activity: Visualising the future. Ideating on a technology supported platform for the region.
10:30am - 12:00pm WIB | 1:30pm - 3:00pm AEST | 05:30 - 07:00 CEST

Session 3:
Facilitated shareback of key learnings from days 1 & 2
12:00pm - 12:45pm WIB | 3:00pm - 3:45pm AEST | 07:00 - 07:45 CEST

Close
12:45pm - 1:00pm WIB | 3:45pm - 4:00pm AEST | 07:45 - 08:00 CEST

REGISTER
admin.alec@monash.edu

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Agenda for Workshop 2.

C Appendix

Design Tools from Workshop 1

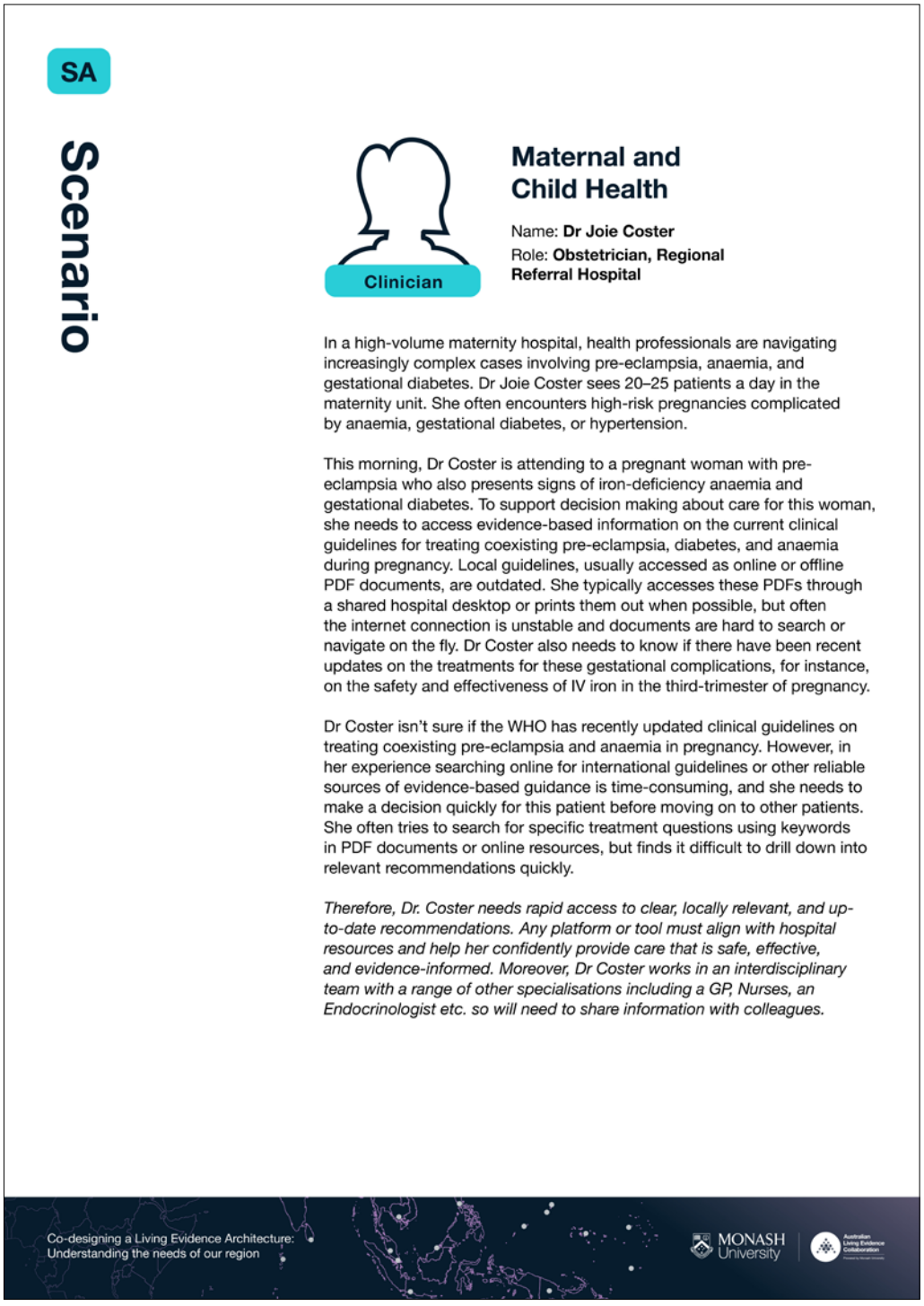
Workshop 1: Opportunities canvas.

Workshop 1: Challenges (left) and Existing Platforms (right) canvases.

Workshop 1: Futuring canvas.

D Appendix

Design Tools from Workshop 2



Workshop 2: Maternal and Child Health Scenario, Dr Joie Coster.

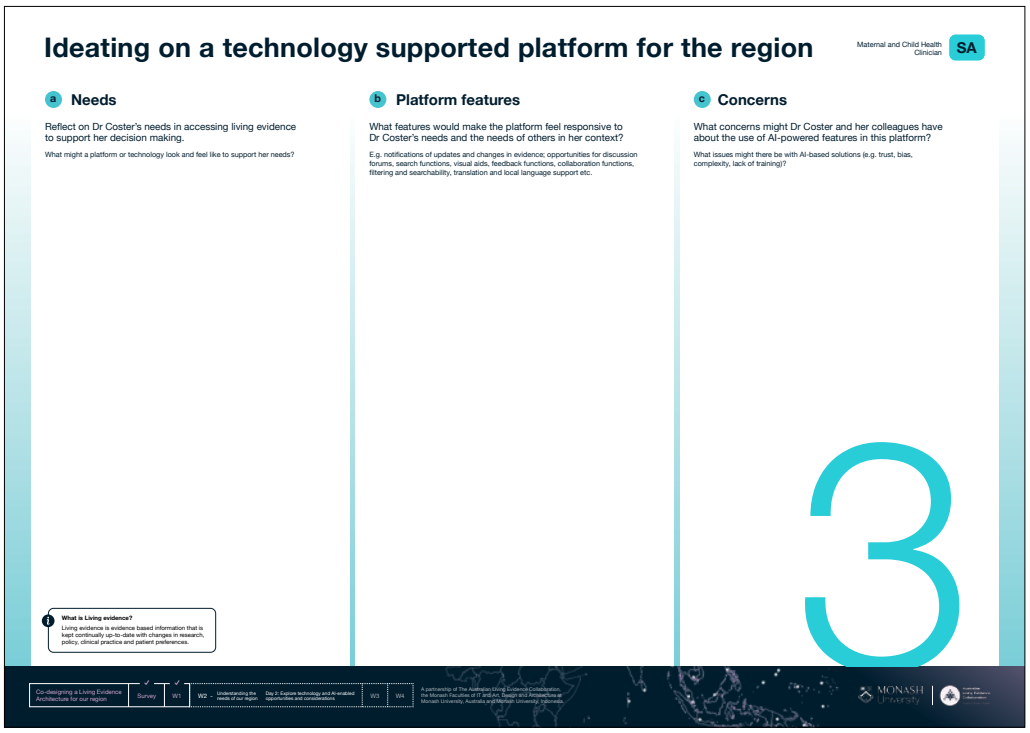
Workshop 2: Maternal and Child Health Scenario, Mr Joko Budi.

Workshop 2: Pandemic Preparedness Scenario, Dr Anthony Wong.

Workshop 2: Pandemic Preparedness Scenario, Ms Faaiza Khan.

Workshop 2: Understanding regional needs for evidence canvas.

Workshop 2: Supporting health decision making in the region canvas for the Maternal and Child Health Scenario.



Workshop 2: Ideating on a technology supported platform for the region canvas for the Maternal and Child Health Scenario.

Co-designing a Living Evidence Architecture

Understanding the needs of South-East Asia and the Western Pacific