

Dear HIFA members, Thanks to Josephine Namitala (Uganda) we have collated the first 28 messages of this in-depth discussion. For background info see www.hifa.org/mhealth

PS. If you are not yet a member you can join here: www.hifa.org/joinhifa

mHealth-Innovate (1) Exploring healthcare workers informal use of personal mobile phones - Research findings and implications for policy and practice

17 March, 2025

Dear HIFA colleagues,

On behalf of the HIFA mHealth-Innovate working group, I'm delighted to re-open discussion on the informal use of mobile phones by health workers.

Those of you who have been members since 2022 will have been engaged in our first discussion on this topic, which was analysed and published in the journal Oxford Open Digital Health: Using an online community of practice to explore the informal use of mobile phones by health workers. Claire Glenton et al. 2023.

<https://academic.oup.com/oodh/article/doi/10.1093/oodh/oqac003/6969411?l...>

Since then we have contributed to a systematic review on the subject, published in the Cochrane Library in 2024. Healthcare workers' informal uses of mobile phones and other mobile devices to support their work: a qualitative evidence synthesis. Claire Glenton et al. 2024 <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015705.pub2/...>

Both the above papers are open access.

In 2024, the research consortium undertook two primary research studies in Uganda, one with health workers and the other with policymakers. We'll let you know as soon as these are published.

HIFA has been recognised as 'a vital part of the mHealth-Innovate research project as it has given us a unique opportunity to discuss topics with healthcare workers, managers and policy makers from across the world'. <https://www.hifa.org/about-hifa/testimonials/professor-claire-glenton-pr...>

NEXT STEPS

HIFA continues to be the main tool for the global health community to contribute to this process.

We now invite all HIFA members to discuss the findings and their implications for policy and practice, here on the HIFA forums (HIFA-English, HIFA-French, HIFA-Portuguese, HIFA-Spanish)

Over the next few days we shall share the top-level findings. We shall then move into a series of 10 topics and questions that emerge from the findings. Finally, from 22 April we shall explore five questions around strategies to maximise the benefits of informal phone use and minimise the disadvantages.

The above in turn will help inform a policy dialogue at WHO headquarters Geneva on 16 June.

For further information, see: www.hifa.org/mhealth

Please forward this message to your contacts and networks and invite them to join us!

The more people who join us for this discussion, the richer will be our interaction!

With thanks, Neil

HIFA profile: Neil Pakenham-Walsh is coordinator of HIFA (Healthcare Information For All), a global health community that brings all stakeholders together around the shared goal of universal access to reliable healthcare information. HIFA has 20,000 members in 180 countries, interacting in four languages and representing all parts of the global evidence ecosystem. HIFA is administered by Global Healthcare Information Network, a UK-based nonprofit in official relations with the World Health Organization. Email: neil@hifa.org

mHealth-Innovate (2) Introducing the research partners

17 March, 2025

The wider mHealth-Innovate research project comprises:

- Centre for Development and the Environment (Oslo)
- HIFA
- Johns Hopkins University
- Makerere University, Uganda
- Norwegian Institute of Public Health
- Norwegian University of Science and Technology
- Western Norway University of Applied Sciences
- World Health Organization

The research is funded by the Research Council of Norway.

For more information see: www.hifa.org/mhealth

HIFA profile: Neil Pakenham-Walsh...

mHealth-Innovate (2) Introducing the mHealth-Innovate working group

17 March, 2025

Dear HIFA colleagues,

I would like to recognise the members of the mHealth-Innovate working group who are implementing HIFA's contribution to the mHealth-Innovate research project:

Allen Nsangi (Uganda)

Claire Glenton (Norway)

Denis Joseph Bukenya (Uganda)

Didier Demassosso (Cameroon)

Eshwar Rajesh (India)

Geoff Royston (UK)

Immaculate Nakityo Lwanga (Uganda)

John Eastwood (Australia)

Josephine Namitala (Uganda)

Josephine Nabukenya (Uganda)

Meena Nathan Cherian (Switzerland)

Michele Meltzer (United States)

Michelle Janse van Rensburg (South Africa)

Neil Pakenham-Walsh (UK)

Rhoda Robinson (Nigeria)

Simon Lewin (Norway)

Smisha Agarwal (India)

Tigest Tamrat (Switzerland)

You can review the profiles for all the above via our project page:

<https://www.hifa.org/projects/mhealth-innovate-what-can-we-learn-health-...>

Some of the above are members of the mHealth-Innovate research team and others are HIFA volunteers with an interest in the topic.

HIFA is grateful to all for giving freely of their time and expertise.

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh...

mHealth-Innovate (4) Introducing the mHealth-Innovate working group (2)

Hello Neil thanks for sharing the list. I am glad to see Rhoda Robinson (Nigeria).

And it's great to acknowledge their support and sacrifice.

Joseph Ana.

HIFA profile: Joseph Ana is the Lead Senior Fellow/Medical Consultant at the Centre for Clinical Governance Research and Patient Safety in Calabar, Nigeria, established by HRI Global (former HRIWA). He is a member of the World Health Organisation's Technical Advisory Group on Integrated Care in primary, emergency, operative, and critical care (TAG-IC2). As the Cross River State Commissioner for Health, he led the introduction of the Homegrown Quality Tool, the 12-Pillar Clinical Governance Programme, in Nigeria (2004-2008). For sustainability, he established the Department of Clinical Governance, Servicom & e-health in the Cross River State Ministry of Health, Nigeria. His main interest is in whole health sector and system strengthening in Lower, Low and Middle Income Countries (LLMICs). He has written six books on the 12-Pillar Clinical Governance programme, suitable for LLMICs, including the TOOLS for Implementation. He served as Chairman of the Nigerian Medical Association's Standing Committee on Clinical Governance (2012-2022), and he won the Nigeria Medical Association's Award of Excellence on three consecutive occasions for the innovation. He served as Chairman, Quality & Performance, of the Technical Working Group for the implementation of the Nigeria Health Act 2014. He is member, National Tertiary Health Institutions Standards Committee of the Federal Ministry of Health. He is the pioneer Secretary General/Trustee-Director of the NMF (Nigerian Medical Forum) which took the BMJ to West Africa in 1995. Joseph is a member of the HIFA Steering Group and the HIFA working group on Community Health Workers. (<http://www.hifa.org/support/members/joseph-0> <http://www.hifa.org/people/steering-group>).

mHealth-Innovate (5) The findings: HIFA discussion 2022

18 March, 2025

Dear HIFA colleagues,

See also: <https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>

Since 2022 HIFA is supporting mHEALTH-INNOVATE, a 4-year international research project exploring how health workers use their personal mobile phones to support their work. HIFA adds value to the project as the main platform for sharing multidisciplinary experience and expertise on this topic. Principal Investigator Claire Glenton noted: "HIFA has been a vital part of the mHealth-Innovate research project as it has given us a unique opportunity to discuss topics with healthcare workers, managers and policy makers from across the world." Your inputs over the coming days and weeks on HIFA are crucial and will feed into high-level policy discussions at WHO.

In this FIRST phase of the HIFA forum discussions, from now until 21 April, we shall discuss the findings.

We start by reviewing one of the first activities in the research programme. In 2022 we held a thematic discussion on the HIFA forums. This was subsequently analysed and published in the peer-reviewed journal Oxford Open Digital Health:

CITATION: Claire Glenton et al. 2023. Using an online community of practice to explore the informal use of mobile phones by health workers. Oxford Open Digital Health, Volume 1, 2023, <https://doi.org/10.1093/oodh/oqac003>

ABSTRACT: Health workers are increasingly harnessing mobile phones to develop their own solutions to work challenges. The mHEALTH-INNOVATE project aims to explore this topic further. In 2022, Healthcare Information for All organized an online discussion among health workers and other stakeholders to inform the project. Twenty-five people joined the discussion. Contributors' descriptions of the varieties of mobile phone use tallied with previous research, including for communication with patients and colleagues. In addition, they described increased mobile phone use in response to the COVID-19 pandemic and the increased need for communication, monitoring and reporting, including during lockdowns. Some solutions were health worker-initiated, including the establishment of WhatsApp groups. The discussion has helped develop a definition of informal mobile phone use.

'We have used the results of the HIFA discussion, in combination with published research on the topic and input from experts within our research team and its international advisory group, to develop a working definition of health workers' informal mobile phone use. We define informal mobile phone use as healthcare workers' use of mobile phones to support their work, using approaches that are initiated by the healthcare workers themselves and that are initially not standardized, regulated or endorsed by the health system or organization to which they belong.'

I invite comments on the above. The co-authors are Claire Glenton, Josephine Nabukenya, Smisha Agarwal, Michele Meltzer, Elisabeth Mukendi, Immaculate Nakityo Lwanga, Josephine Namitala, Sunanda Reddy, Geoff Royston, Tigest Tamrat, and myself, and we are all on HIFA forum. We look forward to hear from them and from you. How did you become involved in this research project? What role have you played and what has been your experience so far?

HIFA mHealth-Innovate is our first example of a HIFA Research-based Project and has proved an innovative approach to bring a wider perspective to health systems research. We now have two HIFA Research-based Projects, with a further two confirmed to start later this year. For more information on HIFA Projects see www.hifa.org/projects

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh...

mHealth-Innovate (6) The findings (2) Systematic review 2024

21 March, 2025

Dear HIFA colleagues,

Over the coming days I invite you to reflect on the findings of our research so far. We shall then explore the topic around 10 themes/questions.

A few days ago I (re)shared the analysis of our first HIFA thematic discussion, which was the first published output (2023) of the international research consortium mHealth-Innovate.

<https://www.hifa.org/dgroups-rss/mhealth-innovate-5-findings-hifa-discus...>

Today I would like to (re)share the mHealth-Innovate's systematic review on the topic, published in the Cochrane Library in 2024.

CITATION: Glenton C et al. Healthcare workers' informal uses of mobile phones and other mobile devices to support their work: a qualitative evidence synthesis.

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015705.pub2/...>

Here are the results and conclusions from the abstract:

Main results: We included 30 studies in the review, published between 2013 and 2022. The studies were from high-, middle- and low-income countries and covered a range of healthcare settings and healthcare worker cadres. Most described mobile phone use as opposed to other mobile devices, such as tablets. We have moderate to high confidence in the statements in the following line of argument. The healthcare workers in this review, like other 'street-level bureaucrats', face a gap between what is expected of them and the resources available to them. To plug this gap, healthcare workers develop their own strategies, including using their own mobile phones, data and airtime. They also use other personal resources, including their personal time when taking and making calls outside working hours, and their personal networks when contacting others for help and advice.

In some settings, healthcare workers' personal phone use, although unregulated, has become a normal part of many work processes. Some healthcare workers therefore experience pressure or expectations from colleagues and managers to use their personal phones. Some also feel

driven to use their phones at work and at home because of feelings of obligation towards their patients and colleagues. At best, healthcare workers' use of their personal phones, time and networks helps humanise healthcare. It allows healthcare workers to be more flexible, efficient and responsive to the needs of the patient. It can give patients access to individual healthcare workers rather than generic systems and can help patients keep their sensitive information out of the formal system. It also allows healthcare workers to communicate with each other in more personalised, socially appropriate ways than formal systems allow. All of this can strengthen healthcare workers' relationships with community members and colleagues.

However, these informal approaches can also replicate existing social hierarchies and deepen existing inequities among healthcare workers. Personal phone use costs healthcare workers money. This is a particular problem for lower-level healthcare workers and healthcare workers in low-income settings as they are likely to be paid less and may have less access to work phones or compensation. Out-of-hours use may also be more of a burden for lower-level healthcare workers, as they may find it harder to ignore calls when they are at home.

Healthcare workers with poor access to electricity and the internet are less able to use informal mobile phone solutions, while healthcare workers who lack skills and training in how to appraise unendorsed online information are likely to struggle to identify trustworthy information. Informal digital channels can help healthcare workers expand their networks. But healthcare workers who rely on personal networks to seek help and advice are at a disadvantage if these networks are weak. Healthcare workers' use of their personal resources can also lead to problems for patients and can benefit some patients more than others. For instance, when healthcare workers store and share patient information on their personal phones, the confidentiality of this information may be broken. In addition, healthcare workers may decide to use their personal resources on some types of patients, but not others.

Healthcare workers sometimes describe using their personal phones and their personal time and networks to help patients and clients whom they assess as being particularly in need. These decisions are likely to reflect their own values and ideas, for instance about social equity and patient 'worthiness'. But these may not necessarily reflect the goals, ideals and regulations of the formal healthcare system. Finally, informal mobile phone use plugs gaps in the system but can also weaken the system. The storing and sharing of information on personal phones and through informal channels can represent a 'shadow IT' (information technology) system where information about patient flow, logistics, etc., is not recorded in the formal system. Healthcare workers may also be more distracted at work, for instance, by calls from colleagues and family members or by social media use. Such challenges may be particularly difficult for weak healthcare systems.

Authors' conclusions: By finding their own informal solutions to workplace challenges, healthcare workers can be more efficient and more responsive to the needs of patients, colleagues and themselves. But these solutions also have several drawbacks. Efforts to strengthen formal health systems should consider how to retain the benefits of informal solutions and reduce their negative effects.

Your comments on any of the above are welcome. I also invite the authors to highlight any points that may not have been captured in the above abstract.

Many thanks, Neil

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (7) Video and script: Exploring healthcare workers informal use of personal mobile phones

23 March, 2025

Dear HIFA colleagues,

We have enhanced our landing page for this project:

<https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>

In particular we encourage everyone to see the 9-minute video by Principal Investigator Claire Glenton:

<https://zenodo.org/records/15012090> or <https://vimeo.com/manage/videos/1068364070>

'This short video summarises the key findings from the mHealth-Innovate research project on healthcare workers' informal use of mobile phones to support their work. This research is funded through a research grant from the Research Council of Norway (prosjektbanken.forskningradet.no/en/project/FORISS/325476). The MHEALTH-INNOVATE project is a partnership between Makerere University, Uganda; the Norwegian Institute of Public Health; Western Norway University of Applied Sciences; the Norwegian University of Science and Technology, University of Oslo, Johns Hopkins University; Health Information for All; and the World Health Organization.'

We have also uploaded the script of the video, which can be read in 5 minutes. I invite HIFA members to cut and paste extracts from the script for discussion here on HIFA.

Reminder: To send a message to HIFA, simply send an email to hifa@hifaforums.org

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (8) Introduction: Claire Glenton, Principal Investigator

23 March, 2025

Hi, I'm Claire Glenton, a professor of evidence-based practice and one of the principle investigators of the mHealth-Innovate project. We've been spending the last few years exploring how healthcare workers use their phones informally to plug gaps in the health services. Our research has helped to identify how healthcare workers frequently use their own phones to call patients and colleagues, store and send patient information, and several other day-to-day work tasks.

As we learn more about this type of informal behaviour, our understanding has become a bit more nuanced. For instance, we were (and still are) sympathetic to the challenges that healthcare workers face and understand how these informal approaches help them deliver the tasks expected of them. At the same time, we were concerned about possible problems, including breaches in patient privacy and confidentiality. We are still concerned about these issues, but our research has also led us to acknowledge that this direct contact between patient and healthcare worker via their own phones can help humanise healthcare by offering personalised solutions. Nevertheless, this comes at a cost to the healthcare worker, including phone and airtime costs as well as being constantly "on call". And while healthcare workers are using their own resources to plug gaps in the formal system, this also weakens the formal system because important information about patients as well as logistical data is sometimes only stored on private phones.

The situation is complex and deserves thoughtful solutions that consider all of these perspectives. We think that some level of regulation is probably necessary, for instance, to protect patient confidentiality. At the same time, we don't think that regulation alone is the answer and believe that the health system gaps that explain a lot of this behaviour also need to be addressed. Even where these gaps have been addressed, we would argue that healthcare workers need some level of independence and flexibility in order to develop locally relevant solutions, to thrive and feel empowered, and to deliver quality healthcare services.

We look forward to hearing HIFA members' thoughts about this phenomenon, why it happens and if and how it should be addressed.

HIFA profile: Claire Glenton is professor of evidence-based practice at Western Norway University of Applied Sciences and a researcher at Cochrane Norway. Claire has a particular interest in systematic review methodology, including methods for disseminating the results of systematic reviews and methods for synthesising qualitative research. She regularly serves as technical advisor on World Health Organization guidelines. She also co-coordinates the GRADE-CERQual Project Group. She is one of the principal investigators of the mHealth-Innovate project, looking at informal use of mobile phones by health workers. Claire.Glenton AT hvl.no

mHealth-Innovate (9) Introduction: Claire Glenton, Principal Investigator (2)

24 March, 2025

[Re: <https://www.hifa.org/dgroups-rss/mhealth-innovate-8-introduction-claire-...>]

Hi Claire,

Many thanks for your self-introduction as one of the Principal Investigators for this research project. It's been great to work with you and others on the team.

What is the back story? How did the researchers and/or Research Council of Norway become interested in this topic? Was the theme developed by a particular researcher or group of researchers, or perhaps as part of a package of topics on mHealth?

"As we learn more about this type of informal behaviour, our understanding has become a bit more nuanced... breaches in patient privacy and confidentiality... own phones can help humanise healthcare... weakens the formal system..."

You've usefully outlined some of the advantages and disadvantages of informal phone use.

"We think that some level of regulation is probably necessary, for instance, to protect patient confidentiality..."

Is this something you found to be a consensus in the primary research studies in Uganda and/or is it more of a statement by the researchers, based on all the research so far (HIFA discussion 2022/3; systematic review 2023/4; primary research Uganda 2024)? We'll be focusing on strategies for ways forward in the thematic discussion phase of our work, from April 22 to May 25, but suggestions are welcome at any stage.

"We look forward to hearing HIFA members' thoughts about this phenomenon, why it happens and if and how it should be addressed."

Yes, my first thought is that using one's own mobile phone through voice calls to communicate with patients or other health workers is an extension of one's voice face-to-face, and guidance on such use would reflect guidance on how one should communicate face-to-face (is there such guidance?). The difference with mobile phones is that messages (or other content such as photos) may be exchanged as text or attachments, and this specifically has potential for breaches of privacy and confidentiality.

We'll be looking at all these issues in depth over the coming days on HIFA, introducing 10 topics/aspects with accompanying questions. I look forward to hear from other researchers in the team, and from HIFA members at large.

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh...

[mHealth-Innovate \(10\) Introduction: Geoff Royston,](#)
[mHealth-Innovate working group](#)

24 March, 2025

HIFA forum colleagues

The mHealth-Innovate project addresses a major issue in this area; health workers' informal use of mobile phones to support their work. I have been pleased to contribute to this project – commenting on draft papers, participating in working group meetings and so on. As well as investigating an important issue, the project is an impressive example of effective collaboration between two very different countries and bringing together highly experienced researchers with those at the beginning of their careers.

(By way of background : I became interested in the potential new uses of telecommunication services to improve health care – particularly selfcare - back in the mid 1990s. That went on to my becoming project leader for the introduction in England of NHS Direct (later to become NHS111); a national health helpline. The global spread of mobile phones clearly opened up world-wide possibilities for what was by then called “m-health” or “e-health” and I became involved with HIFA’s work in this area (see for example [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(15\)00054-6/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(15)00054-6/fulltext))

The current HIFA online discussion on this project, following a successful earlier discussion at its start in 2022, is a key opportunity for HIFA forum members to reflect on the findings of the research about the benefits and challenges of health workers' informal use of mobile phones. The 2022 discussion noted for example the value of mobile phones in supporting healthcare in conflict and disaster situations (including pandemics) ; it would be good to see this revisited in the 2025 discussion. More generally HIFA has noted the potential of m-Health to accelerate progress towards universal health coverage (via accelerating universal access to reliable healthcare information see <https://gh.bmj.com/content/5/5/e002475>); it would be good, as the 2025 discussion progresses, to have comments related to the informal use of mobile phones in this context, especially if they can provide recent examples (or ideally, evaluations).

Best regards

Geoff

HIFA profile: Geoff Royston is an independent health analyst and researcher, former Head of Strategic Analysis and Operational Research in the Department of Health for England, and Past President of the UK Operational Research Society. His work has focused on informing the design, implementation and evaluation of policies and programmes in health and social care, and on fostering the capabilities of others to work in these areas. Associated activities have included modelling for understanding the performance of complex systems, analysis and communication of risk, and horizon scanning and futures thinking. He has also worked on information and communication technology in the health sector, notably in leading the design and national launch of the telephone and online health information and advice service NHS Direct, and has been an adviser to OFCOM. He has served on both scientific and medical UK Research Council panels, and as an impact assessor for the UK higher education Research Excellence Framework. He has been a consultant for the World Health Organisation, and is a long-standing member of the EURO Working Group on Operational Research Applied to Health Services. He is a member of the HIFA Steering Group, and of the mHIFA and the HIFA evaluation Working Groups. [geoff.royston AT gmail.com](mailto:geoff.royston@gmail.com)
<https://www.hifa.org/support/members/geoff>

mHealth-Innovate (11) Introduction: Geoff Royston (2) Bettercare, South Africa

25 March, 2025

Hi Geoff

You may be interested to visit <https://bettercare.co.za> which is used by 10 000 midwives, nurses, students and doctors currently worldwide to manage their own professional growth and continuing education. They form study clubs and access the learning material free on their mobile phones. We do not run courses but empower other to do so. I have attached a publication for your interest. We have used this method for many years in South Africa in both public and private sectors as well as universities and nursing colleges. Bettercare is a non profit organisation previously called the Perinatal Education Programme.

Best wishes, Prof David Woods

HIFA profile: Dave Woods is emeritus professor in neonatal medicine at the School of Child and Adolescent Health, University of Cape Town, South Africa. He is Chairman of Bettercare, a not-for-profit non-government organisations that develop appropriate self-help distance learning material for doctors and nurses who care for pregnant women and their children in under-resourced communities. He has 30 years experience as a clinical neonatologist, with particular interests in perinatal care and training of health professionals. He is currently developing paper-based continuing learning material in maternal care, newborn care, childhealth, and care of adults and children with HIV/AIDS. He is also participating in the design and development of wind-up appropriate health technology for poor countries. <https://bettercare.co.za> pepcourse AT mweb.co.za

mHealth-Innovate (12) What are health workers using their mobile phones to do?

26 March, 2025

Since 2022 HIFA is supporting mHEALTH-INNOVATE, an international research consortium exploring how health workers use their personal mobile phones to support their work. HIFA is the main platform for sharing experience and expertise on this topic. Your inputs over the coming days and weeks are crucial and will feed into high-level policy discussions at WHO.

See <https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>

Our research shows that healthcare workers across the world are using their personal mobile phones to carry out a range of work-related activities. This includes:

1. seeking advice and support from colleagues while handling patients

2. managing referrals and emergencies
3. supervising other healthcare workers, sending reports and sharing practical information
4. retrieving, recording and storing patient information
5. taking and sharing photos, for instance of x-rays and test results
6. searching for information online
7. communicating with patients [and their families]

Our systematic review expands on the above, noting that healthcare workers describe using their personal mobile phones to:

- socialise and exchange emotional support with other healthcare workers and to air work grievances
- search for general clinical and practical information in officially endorsed information sources, but also in sources that are not formally endorsed.

All of the above were noted also in our primary research with health workers and policymakers in Uganda (2024).

QUESTION: Do you (or the health workers in your setting) use personal mobile phones for work tasks? If so, what are you/they using them for?

As an additional question, which of the above uses are most important for the delivery of safe and effective care? Can they be prioritised?

MY THOUGHTS

Depending on context, I would think #1 and #2 are critical. It is hard to imagine how any health worker can carry out either without a mobile phone. #6 would also seem to be very important and #7 would be vital perhaps especially for primary healthcare workers. With regard to 'searching for information online', the informal research summary (<https://zenodo.org/records/15011500>) specifies that we are talking about 'general clinical and practical information' - generic data that might help diagnosis and management in the immediate context (rather than access to personal data such as results of tests).

My sense is that concerns about breaches in privacy or confidentiality are the primary concern about informal phone use. For voice calls there is less risk of breaches, but when personal information is exchanged in text or other format this could be insecure and accessed by others. Here, #4, #5 and #7 would especially carry risks.

What do you think?

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (13) What are health workers using their mobile phones to do? (2) Bettercare, South Africa (2)

27 March, 2025

Dear David,

Thank you for reminding us of the work of <https://bettercare.co.za> 'which is used by 10 000 midwives, nurses, students and doctors currently worldwide to manage their own professional growth and continuing education [accessing] the learning material free on their mobile phones'.

This is an aspect of informal mobile phone use that has perhaps been largely overlooked in our research? Our list of '7 informal uses of mobile phones' identifies 'searching for information online', but not learning/training.

In our 2023 paper analysing our original HIFA discussion we noted 'health workers used mobile phones to participate in online training, education, supervision and monitoring of drug supplies'.

<https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>

A HIFA member from India noted: '2020 saw us do much Covid education for staff and parents together over phone (dos and don'ts) and reach out to allay the fears and anxiety of children and families during the lockdown.' (Paediatrician, India)

Our 2024 systematic review has very little on the use of mobile phones for health worker training and continuing professional development.

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015705.pub2/...>

And I couldn't see a mention of this in the 12-page informal summary.

<https://zenodo.org/records/15011500>

It would be great to hear more about this from other HIFA members.

Also, did this topic emerge in the primary research in Uganda 2024? These papers are in development for publication, but perhaps the researchers can share some of the findings for our current discussion.

Many thanks, Neil

HIFA profile: Neil Pakenham-Walsh is coordinator of HIFA (Healthcare Information For All), a global health community that brings all stakeholders together around the shared goal

of universal access to reliable healthcare information. HIFA has 20,000 members in 180 countries, interacting in four languages and representing all parts of the global evidence ecosystem. HIFA is administered by Global Healthcare Information Network, a UK-based nonprofit in official relations with the World Health Organization. Email: neil@hifa.org

mHealth-Innovate (14) Invitation to publicise the HIFA mHealth-Innovate Project

28 March, 2025

Dear HIFA colleagues,

On behalf of the Project working group I invite you to help publicise the Project. You can do this simply by forwarding the message below to any contacts who may be interested, including your work colleagues, students and faculty members.

Our work will provide valuable stakeholder input into a policy dialogue at WHO headquarters on 6 June.

With thanks, Neil

mHealth-Innovate: Exploring healthcare workers informal use of personal mobile phones - Research findings and implications for policy and practice

<https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>

Watch the video (9 Minutes): <https://zenodo.org/records/15012090>

Exploring healthcare workers' informal use of personal mobile phones

- We know anecdotally that healthcare workers use their own phones to plug gaps in the healthcare system

- This research project aims to explore how they are doing this, the reasons for this, possible benefits and harms, and ways forward

- The mHealth-Innovate research consortium has worked since 2021 on a multi-year project involving:

* A HIFA thematic discussion - published in Oxford Open Digital Health. Glenton C et al. 2023: Using an online community of practice to explore the informal use of mobile phones by health workers

* A qualitative evidence synthesis - published in the Cochrane Library. Glenton C et al. 2024: Healthcare workers' informal uses of mobile phones and other mobile devices to support their work: a qualitative evidence synthesis

* Two primary research projects in Uganda to explore the issues with health workers and with policymakers (2024) - Publication in progress.

OVERVIEW OF RESEARCH AND FINDINGS

Read the summary (12 pages) <https://zenodo.org/records/15011500>

IMPLICATIONS FOR POLICY AND PRACTICE

In 2025 HIFA's role is to review the research findings collectively and discuss the implications for policy and practice.

In the FIRST phase, from now until 21 April, we shall discuss the findings informally. Do the findings resonate with your experience?

Specifically we shall revisit the findings of our 2023 and 2024 papers and invite HIFA members to comment. We shall explore a range of questions that arise from the findings.

In the SECOND phase, from 22 April to 25 May, we shall build on all of the above to look to the future, with a structured thematic discussion to explore strategies for addressing the downsides of informal mobile phone use while retaining the benefits.

JOIN THE DISCUSSION!

If you are not already a member of the HIFA forum, please join us (free): www.hifa.org/joinhifa - all interactions are taking place on the forum.

French, Portuguese and Spanish speakers are invited to join HIFA-French, HIFA-Portuguese and HIFA-Spanish

For more information, see the Health-Innovate project webpage

Are you planning a research project? Learn how HIFA can add value to your research.

THE PARTNERS

The MHEALTH-INNOVATE project is a partnership between Makerere University, Uganda; the Norwegian Institute of Public Health; Western Norway University of Applied Sciences; the Norwegian University of Science and Technology, University of Oslo, Johns Hopkins University; Health Information for All; and the World Health Organization.

Funded by the Research Council of Norway

HIFA profile: Neil Pakenham-Walsh ...

[mHealth-Innovate \(15\) Why are health workers using their mobile phones informally?](#)

29 March, 2025

[Note: Since 2022 HIFA is supporting mHEALTH-INNOVATE, an international research consortium exploring how health workers use their personal mobile phones to support their work. HIFA is the main platform for sharing experience and expertise on this topic. Your inputs over the coming days and weeks are crucial and will feed into high-level policy discussions at WHO. See <https://www.hifa.org/mhealth>]

Our systematic review

[<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015705.pub2/...>] shows that healthcare workers across the world are using their personal mobile phones to plug gaps in the healthcare system. In our study from Uganda, one participant describes the following situation:

“Even if the facility has a landline, these are limited in what they can do. They cannot take pictures for example. Sometimes they need to take a picture of the laboratory results [...], so what they do, which is quicker, they take a picture of the results of this patient, and send it to a doctor in the referral hospital where they are sending the patient. Sometimes this helps that by the time the patient arrives there, the other doctor already knows what needs to be done” (Namaganda 2024).

For many healthcare workers this has become a normal part of work, and healthcare workers may feel pressure or expectations to use their own phones. Healthcare workers are also driven by feelings of obligation towards their colleagues and their patients. In a study from Ghana, one Community Health Nurse says the following:

"You cannot be in the system without saying that you don't want to use your own credit to call somebody. It is part of our work ... you know that you are there to save lives so whatever you will do to save lives, you don't care about [the cost of airtime]" (Abane 2021, in Glenton 2024).

QUESTION: In your healthcare system, do you experience similar gaps to those described in Ghana, Uganda and elsewhere that might drive healthcare workers to use mobile phones informally? To what extent do healthcare workers in your setting feel that the informal use of their personal mobile phone is expected of them? As in the study from Ghana, are they driven by feelings of obligation towards colleagues and patients? Do their supervisors know that informal use is going on and what is their reaction to this practice?

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (16) Why are health workers using their mobile phones informally? (2)

30 March, 2025

Dear HIFA colleagues,

Re: <https://www.hifa.org/dgroups-rss/mhealth-innovate-15-why-are-health-work...>

In our message 29 March, we asked:

"In your healthcare system, do you experience similar gaps to those described in Ghana, Uganda and elsewhere that might drive healthcare workers to use mobile phones informally?"

The example was given that "Even if the facility has a landline, these are limited in what they can do. They cannot take pictures for example..."

What other gaps are there? The informal research review says 'Healthcare workers worldwide explain that they use personal mobile phones because of gaps in the healthcare system, including formal communication systems and other infrastructure not being available or functional, or because personal phones have better functionality and are more user-friendly than the available formal communication systems'. The researchers express high confidence in this finding, which was found in the systematic review and both of the primary research studies in Uganda.

We have four examples from the systematic review:

1. "Some doctors want to see the patient's heart rate and rhythm through the cardiac monitor. I am not able to do that with our unit phone because it is not a smartphone. It is only a feature phone. Using my own smartphone, I can do that by taking a picture of the cardiac monitor screen and sending the image [to the doctors] via Viber [a mobile instant messaging application] because that's what doctors want" (Staff nurse, the Philippines) (Bautista 2016, in [1])
2. "So, if I need a doctor for anything, rather than having to go to a computer and log on to the paging system and send them a page, I will just send a text message or just call them directly and they will call me back. Usually, text message" (Hospital nurse, Australia) (Spink 2020, in [1]).
3. "One MO [medical officer] revealed that he persuades ASHAs and others in the PHC [public health center] to buy smartphones and install WhatsApp on the device as he felt that he could easily pass on work-related instructions easily" ('ASHAs', India). (Venkataraghavan 2022, in [1])
4. "You cannot be in the system without saying that you don't want to use your own credit to call somebody. It is part of our work ... you know that you are there to save lives so whatever you will do to save lives, you don't care about that (i. e. cost of airtime and data bundle)" (Community Health Nurse, Ghana) (Abane 2021, in [1]).

With regard to #1, this raises the question of landline versus basic phone versus smart phone prevalence in health facilities. What is the setup in your setting? Does your unit have a landline? Who uses it and for what purposes? Do you carry your personal mobile phone with you? How do you use your phone for work purposes when working in the unit/ward/facility and when you are outside?

How many people now use smartphones as opposed to basic phones? Do we have any estimates for different countries and different settings?

We do not have any examples yet from the two primary research studies carried out last year in Uganda. How do health workers in Uganda plus gaps in the health system? How do they feel about it? Do they see it as something obvious that they would gladly do? Or do they feel

pressured to use their own phone, to use their own airtime/costs, or even to buy a higher-spec phone to satisfy managers (as in #3)

If health workers do not have, say, a personal smartphone to use for work purposes, this could potentially limit their capacity and might even limit quality of care. If they have a smartphone and are happy to use it, then their use of this tool in itself may not be a problem (we shall talk later about potential breaches of patient privacy and confidentiality, which certainly could be a problem). If they are being expected to buy an expensive phone out of their own pocket, this would seem to be a problem. Is this a common issue? Also, if they are incurring significant personal costs as a result of using their own phone, this too is a problem. With regard to the latter two questions of cost, the solution should be straightforward?

Looking forward to your thoughts.

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (17) Why are health workers using their mobile phones informally? (3) How many health workers use smartphones?

31 March, 2025

Re: <https://www.hifa.org/dgroups-rss/mhealth-innovate-16-why-are-health-work...>

In my message yesterday I asked: "How many people now use smartphones as opposed to basic phones? Do we have any estimates for different countries and different settings?"

I found it difficult to get answers on this. The GSMA Report 2022 states 'In Sub-Saharan Africa, 40% of the adult population are now connected to mobile internet services', presumably referring to 2021 or before. It's not clear what proportion have a smartphone versus a feature phone. <http://gsma.com/solutions-and-impact/connectivity-for-good/mobile-econom...>

Population coverage of smartphones is considerably higher in other global regions.

It would be helpful to know what proportion of health workers have smartphones at different levels in the health system. We would expect the vast majority of doctors, nurses and other health staff in health facilities to have their own smartphones, and almost everyone to have their own phone of some kind (smart or feature). Among community health workers, we may expect a higher proportion of feature phones? Looking at trends year by year, it seems that smartphones are steadily replacing feature phones. I have not been able to find estimates on how long it will take for smartphone ownership to be available to more than, say, 90% of the world population.

mHealth-Innovate (18) Why are health workers using their mobile phones informally? (4) How many health workers use smartphones? (2) ChatGPT

1 April, 2025

One avenue - it may be possible to improve on the (ChatGPT) prompts used below - for more quantitative findings - identify gaps in research?

How are basic phones and smartphones being used across the world by health care professionals?

ChatGPT said:

Health care professionals around the world use both basic phones and smartphones in various ways to enhance patient care, improve efficiency, and communicate better. The usage depends on factors such as the technological infrastructure of a region, the type of health care system, and access to mobile networks and the internet. Here's an overview of how both types of phones are being used:

Basic Phones (Feature Phones)

Basic phones, often lacking advanced internet access or high-end apps, are still widely used, particularly in low-resource settings, rural areas, or regions with limited infrastructure. Here's how they are utilized:

SMS for Communication:

Health care workers in remote or underserved areas often rely on basic phones for SMS-based communication. This includes appointment reminders, health education messages, and communication between staff or with patients.

SMS-based surveys and health monitoring: Some health programs use text messaging to collect health data, track symptoms, and monitor patients, especially in maternal health or infectious disease control.

Data Collection and Reporting:

Health care workers can collect health data via SMS and submit it to central databases for monitoring and reporting purposes. For example, data on disease outbreaks, vaccination rates, and maternal health statistics can be collected via text and transmitted without the need for smartphones or internet access.

-

Community health outreach: Volunteers or health workers can use basic phones to send reminders about health campaigns, vaccination schedules, or preventive care programs.

-

Telemedicine in Remote Areas:

Some countries have implemented basic telemedicine systems that allow patients to receive consultations via voice calls. This is particularly useful in rural areas where access to medical specialists is limited.

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Emergency Communication:

In areas with unstable infrastructure, basic phones are often the primary tool for emergency communication. Health care workers use them to coordinate responses to health crises, such as natural disasters, disease outbreaks, or other urgent situations.

Smartphones

Smartphones have a far broader range of applications in health care, particularly in more developed regions, but they are also growing in usage across the globe, even in low-income settings. Here's how they are utilized:

Telemedicine and Remote Consultations:

Smartphones with internet access are increasingly used for telemedicine services. Doctors can conduct video consultations with patients, provide remote diagnosis, and prescribe treatment. Apps like WhatsApp, Zoom, and dedicated telehealth platforms enable these interactions.

In rural or underserved areas, patients may not have to travel long distances to see specialists, reducing costs and improving access.

Mobile Health (mHealth) Apps:

Smartphones enable the use of a variety of mHealth apps that help with disease monitoring, medication reminders, mental health support, and wellness tracking. These apps can support chronic disease management (like diabetes), maternal health, mental health, and fitness tracking.

Apps like WHO's mHealth apps, MyFitnessPal, Medisafe, and many others help patients and health professionals manage care on a daily basis.

Clinical Decision Support:

Smartphones provide health professionals with instant access to clinical decision support tools, medical references, guidelines, and drug databases. Apps like UpToDate, Medscape, and PubMed allow healthcare providers to access the latest research and treatment guidelines at the point of care.

-

Diagnostic Tools:

Many smartphones are being used as portable diagnostic tools. For example, smartphones can now be paired with devices for things like blood pressure monitoring, ECG readings, and

even mobile ultrasound devices. Apps like AliveCor allow doctors to capture ECGs through the smartphone.

Health Data Collection and Research:

Smartphones can be equipped with apps for patient data collection, making it easier for health professionals to record and analyze patient histories, track symptoms, and monitor health trends in real-time.

In research settings, smartphones are used to collect large amounts of health data via surveys, sensors, and tracking apps, which are then used for epidemiological studies.

Education and Training:

Smartphones are powerful tools for medical education and training. Doctors, nurses, and other health care professionals use apps like Medscape, Figure 1, and online platforms to learn about new treatments, share case studies, and engage with a global network of peers.

Health care workers can also use smartphones to participate in online courses, webinars, and training modules to enhance their skills and knowledge.

Personal Health Monitoring:

Smartphones can be paired with wearable devices (such as fitness trackers, glucose monitors, or pulse oximeters) to monitor patients' personal health data remotely. This data can be shared with healthcare providers to manage conditions more effectively.

Health Advocacy and Communication:

Smartphones are widely used for public health communication. Health campaigns can be pushed via social media, messaging apps, and mobile platforms to raise awareness about disease prevention, vaccination, and hygiene.

Public health organizations use smartphones to share real-time alerts and health guidelines, especially during outbreaks like COVID-19.

Challenges and Limitations:

Internet Access: While smartphones offer more advanced features, many rural or low-income regions still lack reliable internet access, limiting the potential use of smartphones for health care.

Data Security: The use of smartphones for health care comes with concerns about data privacy and security, especially when sensitive health information is being shared or stored.

Digital Literacy: Health professionals and patients in some regions may not be familiar with how to use smartphones or mobile apps effectively.

Conclusion:

Basic phones and smartphones each play an important role in supporting health care worldwide. Basic phones help bridge gaps in communication and data collection, especially in areas with limited infrastructure, while smartphones are increasingly transforming health care with advanced apps, telemedicine, and diagnostic tools. As technology continues to advance, the role of mobile phones in health care will likely expand, especially in resource-limited settings where they can improve accessibility and efficiency.

You said:

What proportion of health workers have a smartphone across the world?

ChatGPT said:

The proportion of health workers with access to smartphones varies widely across different regions of the world, influenced by factors such as the country's level of development, infrastructure, healthcare system, and economic conditions. However, some general trends can be observed:

High-Income Countries:

In high-income countries (e.g., the United States, the UK, Canada, Australia, and many European countries), access to smartphones among health care workers is almost universal. It is estimated that nearly 90-95% of health workers in these countries have smartphones. This is due to high levels of digital infrastructure, government support for mobile health initiatives, and widespread smartphone ownership among the general population.

Smartphones are extensively used in clinical practice, research, and continuous medical education. Doctors, nurses, and other health professionals use smartphones for telemedicine, accessing medical databases, and collaborating with colleagues.

Middle-Income Countries:

In middle-income countries (e.g., India, Brazil, South Africa, and parts of Southeast Asia), smartphone penetration among health workers is rising rapidly. The proportion of health workers with smartphones in these regions is estimated to be 60-80%. Smartphones are used for clinical decision support, telemedicine, and continuing education, although challenges such as infrastructure limitations, internet connectivity, and varying levels of digital literacy persist.

Many health workers in urban centers have access to smartphones, while those in rural or remote areas may face limitations in internet access or may have older basic phones instead of smartphones.

Low-Income Countries:

In low-income countries (e.g., some regions of Sub-Saharan Africa, parts of South Asia, and rural Latin America), smartphone ownership among health workers is lower but still significant. The proportion of health workers with smartphones in these areas ranges from 30-60%, depending on local conditions.

In these regions, smartphones are increasingly being used for mobile health (mHealth) applications, such as SMS-based health alerts, data collection, and telemedicine, especially in remote areas where internet connectivity may be limited. However, the lack of stable internet access and digital literacy among healthcare workers can hinder the full utilization of smartphones.

Global Trends and Data from Key Studies:

A 2019 study conducted by the World Health Organization (WHO) found that in high-income countries, the majority of health workers have access to smartphones (close to 90-95%), while in low-income countries, the number drops significantly, with access ranging between 30-60% depending on the region.

The Global Health Workforce Alliance has reported that about 70-80% of health workers in many countries use mobile devices for healthcare-related tasks, but this figure includes both smartphones and feature phones.

In Africa, studies have shown that around 60-80% of healthcare workers in urban areas have smartphones, but in rural areas, this figure can drop significantly.

Factors Influencing Smartphone Access Among Health Workers:

Digital Infrastructure: Access to reliable internet and mobile networks is a significant factor. Countries with strong mobile networks and digital infrastructure have higher rates of smartphone use among health professionals.

Economic Status: Health professionals in wealthier countries or regions are more likely to own smartphones, whereas in lower-income countries, smartphones might be limited to certain categories of health workers or urban areas.

Training and Support: In countries with established digital health programs, there may be a higher proportion of health workers using smartphones for medical education, diagnostics, and patient monitoring.

Conclusion: While the proportion of health workers with smartphones is generally high in wealthier countries, in middle- and low-income countries, access is still growing but remains lower, often limited by infrastructure and economic factors. However, global trends indicate that smartphone use among health workers is on the rise, driven by the increasing adoption of mobile health tools, telemedicine, and digital health resources.

Peter Jones

Community Mental Health Nurse, Part-time Tutor and Researcher

Blogging at "Welcome to the QUAD"

<http://hodges-model.blogspot.com/>

<http://twitter.com/h2cm>

mHealth-Innovate (19) Why are health workers using their mobile phones informally? (5) How many health workers use smartphones? (3)

1 April, 2025

Hi Neil, colleagues,

The question "how long it will take for smartphone ownership to be available to more than, say, 90% of the world population" depends on what is a "smartphone". Some "feature" phones (broadly those without a touch screen) do have the ability to support commonly used "smartphone" applications like Whatapp - specifically those running KaiOS. This is now changing because of limited support for this mobile operating system:

<https://www.techadvisor.com/article/2524806/whatsapp-will-soon-stop-work...>

A related question is whether "ownership" of a smartphone is sufficient for healthcare use. Smartphone ownership does not mean that healthcare workers can or are able to use their phones for healthcare purposes like those your post/article talks about (e.g. use as a cardiac monitor). Whether they "can" relates to phone memory, or internet access needed to run such apps, and it is likely that a number of cheaper smartphones available in LMIC markets are unable to support such uses. Whether they are "able to" relates to a number of factors, but includes the design (formal or informal) of how smartphones need to be used to support healthcare (a simple call? Sharing an image on WhatsApp? Zoom meeting for training? Downloading and using a cardiac monitor for some patients? Using a medical record system to document every patient/client encounter?).

While smartphone availability to healthcare workers is an important step, it tends to hide many important factors that determine the use of smartphones (personal or shared) for healthcare. My personal feeling is that these are the systemic, "wicked" problems (some broadly related to equity and access to technology, and others specific to the use of technology in health) that the health tech community should focus on.

HIFA profile: Pratap Kumar is CEO / Sr. Lecturer of Health-E-Net Limited / Strathmore Business School, Kenya. Professional interests: Health information, clinical quality improvement, paper interfaces to electronic data. Email address: pratap AT health-e-net.org

mHealth-Innovate (20) Why are health workers using their mobile phones informally? (6) How many health workers use smartphones? (4)

2 April, 2025

Hi Pratap and colleagues,

Thanks for your point about some 'feature' phones having 'smartphone' functions. The edges between the two are blurred.

"Smartphone ownership does not mean that healthcare workers can or are able to use their phones for healthcare purposes like those your post/article talks about (e.g. use as a cardiac monitor)."

Yes, I think you refer both to whether the function is possible on any given smartphone, and if so, whether the health worker knows how to use it? The original quote about cardiac monitor was simply for the health worker to take a photo of the trace "Some doctors want to see the patient's heart rate and rhythm through the cardiac monitor... I can do that by taking a picture of the cardiac monitor screen and sending the image [to the doctors]" That said, additional devices are available that can record ECG traces on a smartphone.

If we look again at the seven uses of mobile phones reported by health workers in our study:

1. seeking advice and support from colleagues while handling patients
2. managing referrals and emergencies
3. supervising other healthcare workers, sending reports and sharing practical information
4. retrieving, recording and storing patient information
5. taking and sharing photos, for instance of x-rays and test results
6. searching for information online
7. communicating with patients [and their families]

Functions 1,2,7 and (to some extent) 3 and 4 can be done with basic feature phones. The availability of smartphones facilitates all these five functions and also enables 5 and 6.

"While smartphone availability to healthcare workers is an important step, it tends to hide many important factors that determine the use of smartphones (personal or shared) for healthcare. My personal feeling is that these are the systemic, "wicked" problems (some broadly related to equity and access to technology, and others specific to the use of technology in health) that the health tech community should focus on."

Yes, what do you feel are the most important factors to focus on?

My initial thought is that the world is inevitably moving towards a future where every health worker will have a smartphone. All smartphones share basic characteristics, including all of the above seven functions. I would think the focus could be on facilitating the availability and use of smartphones for health workers, together with guidance on how to use them to support quality of care (and guidance on how to minimise risk of breaches of confidentiality).

These discussions on HIFA are feeding into a meeting at WHO headquarters on 6 June, where the full results of the project will be discussed. One way forward could be for WHO to

develop international guidance that could then be adapted for use by each Member State. I look forward to learning more from you and others.

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (21) Why are health workers using their mobile phones informally? (7) Chat GPT (2)

2 April, 2025

Re: <https://www.hifa.org/dgroups-rss/mhealth-innovate-18-why-are-health-work...>

Dear Peter and colleagues,

Many thanks for sharing with us the results of asking Chat GPT two questions relating to our discussion:

How are basic phones and smartphones being used across the world by health care professionals?

What proportion of health workers have a smartphone across the world?

The Chat GPT responses are impressive.

In a sense, Chat GPT is being modest (!) because it doesn't recognise itself as a potential source of reliable healthcare information. For anyone with an internet connection it is now possible to ask basic (and advanced) healthcare questions and the responses can be expected to be very accurate - not 100%, but approaching this, dependent on context.

In 1987 in rural Peru I witnessed a child who had died minutes before because her parents thought they should treat her diarrhoea by withholding fluids. Later I learned this is a common misconception worldwide, and this belief *continues* to contribute to avoidable child deaths. Similar lack of basic healthcare knowledge prevails. In the past decade or more this has been fuelled by misinformation and disinformation.

A large part of the problem is that people are unable to differentiate reliable information from misinformation. This is true for much of the general public, and it is even true at the highest levels of the US Administration.

I believe Chat GPT (and similar AI tools) will be a game changer. Increasingly they will be more available and more accurate/reliable. In turn, the general public will gradually come to use and trust them more and more. Checking how Chat GPT responds to healthcare questions will become second nature. It will also dramatically weaken the efforts of mavericks to spread disinformation.

Best wishes, Neil

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (22) Mobile phones: connecting health workers with colleagues and patients

3 April, 2025

[Background: Since 2022 HIFA is supporting mHEALTH-INNOVATE, an international research consortium exploring how health workers use their personal mobile phones to support their work. HIFA is the main platform for sharing experience and expertise on this topic. Your inputs over the coming days and weeks are crucial and will feed into high-level policy discussions at WHO. See <https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>]

Our systematic review and primary research in Uganda points to several advantages of using mobile phones. Healthcare workers explain that they use their own mobile phones informally because these make it easier and faster to communicate with colleagues and patients and ultimately leads to better quality care. In Uganda, a policy maker describes it like this:

“Right now, a person working from deep far in Adjuman when they have a senior colleague [in the university hospital], they can simply reach out to that person and make consultations. So [informal use] has made consultations and therefore care for patients much better.” (Namaganda 2024).

In some low- and middle-income countries, healthcare workers also describe how they use their own phones informally to connect with patients and their families. This gives patients access to individual healthcare workers rather than being assigned to an available healthcare worker. In Kenya:

“... peer mentors at Kenyatta [National Hospital] went to extraordinary lengths to make themselves available to their clients, including giving out their private phone numbers to clients they met at the hospital and when visiting patients in their homes” (Moyer 2014, in Glenton 2024).

However, one of the disadvantages of this type of informal phone use is that it can blur the boundaries between work and personal life as healthcare workers are always ‘on call’. A community nurse in Taiwan describes the following situation:

"One time during the holidays a patient had a nasogastric tube fall out after it was inserted ... The patient’s family continued sending me Line messages, asking me to visit them. This was during my nonworking hours, but it seemed that I had to go ... I felt a little conflicted. They can find you anytime.” (Chiang 2016, in Glenton 2024).

QUESTION: In your setting, have healthcare workers found ways similar to those in Kenya, Taiwan and elsewhere of using their mobile phones to help ensure easy access to colleagues and patients, while also protecting their personal life?

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (23) Mobile phones: connecting health workers with colleagues and patients (2)

Personal mobile phones versus 'work' mobile phones

3 April, 2025

Thanks everyone for your messages to date. You can follow the discussion on our RSS feed here: <https://www.hifa.org/rss-feeds/17>

Please continue to publicise our discussion by sharing our landing page: <https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>

In order to understand better the pros and cons of using personal mobile phones, I would like to ask you are aware of situations where health workers are banned from carrying or using their personal mobile phone (whether for work or otherwise).

It seems likely that there may be guidance on restriction of personal mobile phone use among health workers in facilities such as clinics or hospitals. This might possibly range from putting personal mobile phones on mute through to trivial use of social media. Does anyone have any experience or awareness of this?

By contrast, for the peripatetic worker, such as a community health worker, it seems to me that it is **essential** that the health worker carries and uses a mobile phone in their work. In this case, I assume that this will nearly always be the health worker's own personal phone? The alternative would be that a health worker would need to carry a work phone (in addition to their personal phone), which would seem to be very cumbersome. Is anyone aware of this or similar arrangements? If so, it would be good to explore. If not, then a personal mobile phone is a prerequisite for some kinds of health worker. The question then becomes to identify those health workers for whom it is necessary, and to have pragmatic guidance to address issues such as remuneration of cost of using the phone.

HIFA profile: Neil Pakenham-Walsh ...

mHealth-Innovate (24) Pressure to use a personal phone or buy a smartphone

5 April, 2025

[Re: <https://www.hifa.org/dgroups-rss/mhealth-innovate-19-why-are-health-work...>]

Hi Pratap

Thanks for sharing this. You are right that smartphone availability is only a starting point.

Another interesting point is the pressure that healthcare workers may experience to use their personal phone or get a smartphone. In our review of qualitative studies on informal uses of mobile phones, one study reported that a manager had suggested that healthcare workers purchase a smartphone and install whatsapp as this would make it easier for him to communicate with them.

Have others seen examples of this kind of pressure in their settings?

Best wishes

Simon

(One of the mHealth-Innovate project researchers)

HIFA profile: Simon Lewin is a health systems researcher at the Norwegian University of Science and Technology (NTNU) (<https://www.ntnu.edu/employees/simon.lewin>), the South African Medical Research Council (www.mrc.ac.za) and the Norwegian Institute of Public Health (<https://www.fhi.no/en/kn/ceir/>). He has a keen interest in how research evidence can be used to inform decisions for health systems in low- and middle-income countries (LMICs) and at the global level in multilateral organisations such as the WHO. As Co-Lead of Cochrane People, Health Systems and Public Health, he has played a key role in strengthening Cochrane's work in the field of health systems and in developing Cochrane methods for qualitative evidence synthesis. Cochrane is a HIFA supporting organisation and Simon is a member of three HIFA working groups: CHWs; mHealth-Innovate (informal use of mobile phones by health workers) and Support-Systems - How can decision-making processes for health systems strengthening and universal health coverage be made more inclusive, responsive and accountable? https://www.hifa.org/support/members/simon_simon.lewin AT ntnu.no

mHealth-Innovate (25) Pressure to use a personal phone or buy a smartphone (2)

6 April, 2025

Dear Simon and all,

You say:

"Another interesting point is the pressure that healthcare workers may experience to use their personal phone or get a smartphone. In our review of qualitative studies on informal uses of mobile phones, one study reported that a manager had suggested that healthcare workers purchase a smartphone and install whatsapp as this would make it easier for him to communicate with them. Have others seen examples of this kind of pressure in their settings?"

Yes, it would be very helpful to see if this experience is shared by others.

In the example you give above, health workers may have been willing to buy a smartphone for their work (and personal use, especially if there was an incentive). I think this issue is likely to be come progressively less important as more health workers own smartphones anyway. The issue of remuneration for the cost of the phone and airtime remains important and it would be interesting to hear how great an issue this is for health workers and managers, and what they do to address it.

Our systematic review notes: 'In some settings, healthcare workers' personal phone use, although unregulated, has become normal and part of many work processes. Healthcare workers may therefore experience pressure or expectations from colleagues and managers to use their personal phones.' 'This statement is based on two individual findings. One of the findings is high confidence, and the same statement could still be made without the other finding, which is of moderate confidence.'

The second statement does not necessarily follow from the first. It would be good to understand this further from the perspective of the primary studies in Uganda.

I would expect the vast majority of health workers to find it acceptable that they use their personal phones for work, although remuneration of costs is likely to be an issue.

HIFA profile: Neil Pakenham-Walsh...

mHealth-Innovate (26) Mobile phones: connecting with home versus distractions

6 April, 2025

[Background: Since 2022 HIFA is supporting mHEALTH-INNOVATE, an international research consortium exploring how health workers use their personal mobile phones to support their work. HIFA is the main platform for sharing experience and expertise on this topic. Your inputs over the coming days and weeks are crucial and will feed into high-level policy discussions at WHO. See <https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>]

Our research indicates that one of the advantages of having access to a personal phone at work is that it can help healthcare workers stay connected to home. A nurse leader in the USA puts it like this:

"The nurses feel more comfortable when their children call and say they are home safe and sound. New mothers can view live video of their child's first words, steps, etc. [...]. I can go on and on about the advantages. This is a way of life for certain ages and as long as the phone doesn't distract from patient care, I feel the advantages outweigh...." (Brandt 2016, in Glenton 2024).

But others are concerned about how personal phone use can lead to distractions at work because of calls from colleagues and family members or because of social media use.

QUESTION: Do healthcare workers and managers in your setting have similar views to those from the USA and other settings? How do they find a balance between the use of personal mobile phones for 'legitimate' tasks such as staying in touch with their children, and unnecessary distractions, such as social media use?

COMMENT (NPW): 'Connecting with home' and 'distractions' are arguably two separate issues. The ability to connect with home (and indeed with friends) could be considered a right - every health worker should in my view have the right to be connected to family and loved ones in the event of an emergency. I would be surprised if any work policies block such connections. On the other hand, it seems reasonable to restrict social connections during work hours in some circumstances. There again, the health worker should be free to use their phone for this purpose in their break times. It would seem straightforward to provide guidance in any work setting on the use of personal mobile phones for connecting with family and friends, and social media.

Are you aware of the above being an issue in your work? What measures could be taken to address it?

HIFA profile: Neil Pakenham-Walsh...

mHealth-Innovate (27) Policy dialogue today at WHO EMRO

8 April, 2025

Dear colleagues

It is great to see this discussion moving forward.

Later this afternoon we will be joining colleagues from the Eastern Mediterranean region of the WHO (EMRO) for a dialogue on the findings of the mHealth-Innovate project, focusing on strategies to address the challenges arising from informal mobile phone use while retaining the benefits. We will be able to share some of the suggestions and ideas from that dialogue here, later today or tomorrow.

Best wishes

Simon

HIFA profile: Simon Lewin is a health systems researcher at the Norwegian University of Science and Technology (NTNU) (<https://www.ntnu.edu/employees/simon.lewin>), the South African Medical Research Council (www.mrc.ac.za) and the Norwegian Institute of Public Health (<https://www.fhi.no/en/kn/ceir/>). He has a keen interest in how research evidence can be used to inform decisions for health systems in low- and middle-income countries (LMICs)

and at the global level in multilateral organisations such as the WHO. As Co-Lead of Cochrane People, Health Systems and Public Health, he has played a key role in strengthening Cochrane's work in the field of health systems and in developing Cochrane methods for qualitative evidence synthesis. Cochrane is a HIFA supporting organisation and Simon is a member of three HIFA working groups: CHWs; mHealth-Innovate (informal use of mobile phones by health workers) and Support-Systems - How can decision-making processes for health systems strengthening and universal health coverage be made more inclusive, responsive and accountable? <https://www.hifa.org/support/members/simon>
simon.lewin AT ntnu.no

mHealth-Innovate (28) Legal implications of using personal phones for work purposes

10 April, 2025

[Background: Since 2022 HIFA is supporting mHEALTH-INNOVATE, an international research consortium exploring how health workers use their personal mobile phones to support their work. HIFA is the main platform for sharing experience and expertise on this topic. Your inputs over the coming days and weeks are crucial and will feed into high-level policy discussions at WHO. See <https://www.hifa.org/news/mhealth-innovate-exploring-healthcare-workers-...>]

Some of the healthcare workers in our secondary research (systematic review) were concerned about the legal implications of using their personal phones informally. For example, some wonder if they could be punished for offering advice to patients and colleagues through informal channels such as WhatsApp. One pharmacist in the UK asked the following question:

“[What if] someone answered and that was the wrong answer, but no one corrected you, and if something had gone wrong with [...] the case, who would take the responsibility for that? Because officially you weren't on-call on that day, you were just helping [...]” (Rathbone 2020, in Glenton 2024).

The above quote is not easy to interpret and I was unable to find it in the original source (Rathbone 2020). One interpretation is that the subject is asking a question to another health worker, who gives incorrect information leading to a negative health outcome. May I ask our systematic reviewers if this interpretation is correct, and did they come across other examples in the review? I would expect, for example, that breaches of patient confidentiality would be important.

One response to the use of WhatsApp (or email, or other written communication) is perhaps to say that the same 'rules' apply to written communication as they do to oral communication, with the additional point that written communications constitute a temporary or permanent record of the communication that is potentially verifiable in the case of an investigation. That said, WhatsApp uses end-to-end encryption which can prevent scrutiny by third parties - also you can configure WhatsApp to 'disappear' messages after 24 hours. This means that it is possible to have (for example) breaches of patient confidentiality that leave no written evidence.

I understand from the informal 12-page review <https://zenodo.org/records/15011500> that concerns were expressed also by health workers in our primary research in Uganda, although I do not have further details. Please could our primary researchers add further information on this? According to our review, these concerns were not replicated by policymakers/managers, which is also interesting.

QUESTION: In your setting, do you or other healthcare workers have concerns about the legal implications of using personal mobile phones for work purposes? What is the nature of these concerns?

Many thanks, Neil

HIFA profile: Neil Pakenham-Walsh ...