Achieving universal health coverage in Latin America: The role of quality of care research

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Achieving universal health coverage in Latin America: The role of quality of care research

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Preface

Universal health coverage (UHC), providing all with access to essential health services without risk of financial hardship, is embedded within the Sustainable Development Goals (SDGs). However, although SDG 3.8 includes a commitment to provide access to 'quality' essential healthcare services, in many low- and middle-income countries the quality of care provided is suboptimal.

Poor quality of care impacts on the health and wellbeing of individuals and populations, and has wider implications. It wastes resources that could be better used and slows progress towards the achievement of other SDGs.

Many Latin American countries have achieved high levels of healthcare coverage, but the quality of care varies significantly both between and within countries. This contributes to major inequities in health outcomes.

In October 2020, the UK Academy of Medical Sciences (AMS) and the Argentinian National Academy of Medicine organised a joint virtual meeting to discuss progress made towards achieving high-quality UHC in Latin America and the role that research could play in improving the quality of care provided. The meeting was funded by the AMS, through the Global Challenges Research Fund.

The workshop programme was developed by organisers from both academies and a steering committee chaired by Dr Roberto Chuit, Epidemiological Research Institute, Argentina, and Professor Catherine Law FMedSci, University College London, UK (Annex 1). This report provides a summary of the key themes to emerge at the workshop. It reflects the views expressed by participants at the workshop and does not necessarily represent the views of all participants, all members of the Steering Committee, the AMS or the National Academy of Medicine.

Executive summary

Universal health coverage (UHC), the provision of essential healthcare services to all without risk of financial impoverishment, is a core element of the Sustainable Development Goals (SDGs). As such, it is a key objective of all countries, including those in the Latin American region.

As well as access to healthcare services, UHC also incorporates a commitment to ensure the quality of those services. While access and coverage tend to receive most attention, quality of care is also integral to the definition of UHC.

However, quality of care is a complex concept, encompassing multiple dimensions, including effectiveness, safety and patient satisfaction. It can also be seen through multiple lenses, such as at the health system or institution level or through the eyes of service users. This can make it difficult to establish indicators to assess quality of care so that progress towards quality UHC can be monitored and decision-makers can be held accountable.

Despite some improvements in health indicators, such as life expectancy, health outcomes in Latin America are generally below those of high-income countries. Furthermore, countries in Latin America show particularly high levels of health inequalities, with socioeconomically disadvantaged and other marginalised communities showing markedly worse health outcomes. These communities have been especially hard hit by the COVID-19 pandemic. Although commitments to UHC have been made, government investments in health have mostly not reached agreed targets of national income.

In October 2020, a virtual workshop jointly organised by the UK Academy of Medical Sciences (AMS) and the Argentinian National Academy of Medicine sought to assess the current status of UHC in the region, to discuss how consideration of quality in the UHC agenda could be advanced, and to identify the potential contributions that could be made by the regional and global research community. Following breakout groups and plenary presentations and discussions, participants identified a range of priority issues:

- **Political factors:** Participants identified the need to ensure strong political commitment to UHC, to investment in UHC and in primary care, to tackling health inequalities, and to ensuring appropriate support for research. Promoting evidence-based decision-making and addressing corruption within the health system, to build public trust and ensure efficient use of resources, were seen as critical.

- **Inequalities:** Unequal exposure to health risks and inequitable access to high-quality care were seen as central to health inequalities affecting disadvantaged populations, creating critical gaps in UHC.

- **Definitions:** The challenges in defining 'quality' in healthcare, and the lack of standardised and agreed metrics, were felt to be major obstacles to the prioritisation of quality; participants argued that UHC initiatives needed to focus on outcomes and quality rather than just access.

- **Data:** Limited data make it hard to track progress towards quality UHC and to hold authorities accountable for UHC commitments. Weak health information systems were also felt to be a major issue.

- **Community engagement:** Involving communities in the development of UHC was felt to be essential, for example to inform the development of definitions, metrics and care standards. Health messaging to communities was felt to be suboptimal, particularly in the context of COVID-19.

- **COVID-19:** As well as its direct impact, the COVID-19 pandemic has had a highly disruptive impact on health systems. It has exacerbated existing issues, such as health inequalities, and highlighted the importance of primary healthcare and the need for robust healthcare systems. But it has also catalysed innovations in care, such as the greater use of 'mHealth', the practice of medicine and public health supported by mobile devices; and may create conditions for the re-engineering of health systems that better achieve quality UHC goals.

Participants also identified a range of ways in which the research community could address these challenges and advance the quality UHC agenda in the region:

- **Metrics framework:** There is an urgent need for suitable metrics for monitoring UHC, including quality, as well as for IT/data systems for the collection and analysis of data.

- **Equity:** Research is needed to understand the barriers to healthcare use, particularly among disadvantaged communities, as well as to develop and evaluate interventions to overcome them.

- **Implementation/operational research:** Research is needed on the adaptation and introduction of proven interventions and system improvements in local contexts.

- **Health economic research:** As well as cost-effectiveness analyses to generate the evidence to inform policymaking, wider studies of health financing are required to ensure that resources are being used wisely, appropriately and efficiently.

- **Innovation:** Further research is needed to develop and evaluate innovations, such as 'mHealth' and digital interventions, to advance UHC and patient-centred primary care.

- **Political engagement:** The research community has an important role to play in communicating with politicians and policymakers to promote UHC and evidence-based practices.

COVID-19 has had a devastating impact on Latin America. As well as deaths directly attributed to the virus, complications associated with the infection and disruptions to health services will inevitably have a long-term impact, increasing the demand for health services in the coming years. The pandemic has also highlighted the economic impact of health emergencies and the consequences of inadequate investment in health systems. This experience may encourage greater commitment to healthcare systems, while the inevitable challenges to public finances will also re-emphasise the need to make best possible use of limited healthcare resources. In these difficult times, the research community has a key role to play in delivering the evidence to ensure that healthcare systems deliver quality care to all, effectively and efficiently.

Introduction

According to the World Health Organization (WHO), universal health coverage (UHC) is a means of ensuring that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.[1] UHC is an integral part of the WHO Constitution agreed in 1948, which declared health a fundamental human right, and of the 'Health for All' agenda set out in the Alma Ata Declaration in 1978.[2] UHC is specifically referred to in Sustainable Development Goal 3 (SDG 3)[3] and, by ensuring the health of populations, it also makes a fundamental contribution to the achievement of other SDGs.

The concept of UHC is based on three key dimensions:

- **Equity:** Services should be available to all, regardless of their ability to pay.
- **Quality:** Services should be of the highest possible quality.
- **Financial protection:** Using health services should not place individuals at risk of financial hardship.

Discussions on UHC often focus on access and equity, and the need for healthcare services to be available to all. However, SDG 3.8 also stresses the quality of such services. Increasingly, the research community and policymakers are highlighting the importance of healthcare service quality, reflecting the fact that 60% of deaths from treatable conditions occur among those who actually gained access to care.[4,5] Similarly, a joint report from WHO, the World Bank and the Organisation for Economic Co-operation and Development (OECD) has argued for the importance of care quality from health, economic and social justice perspectives.[6]

The 'quality' of healthcare services encompasses multiple different elements and can be viewed from a range of perspectives. Several definitions of quality have been proposed, for example by the US Institute of Medicine (now the US National Academy of Medicine),[7] the OECD[8] and WHO.[9] The definition of quality is typically broad, encompassing both the safety and efficacy of a medicine or other intervention, but also how that intervention is delivered and how an overall health system is organised (see Dimensions of quality in healthcare box).

1. WHO. *Universal health coverage (UHC).* https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)
2. WHO (2018). *Declaration of Alma Alta.* Geneva: WHO. https://www.who.int/publications/almaata_declaration_en.pdf
3. United Nations. *Sustainable Development Goals: Goal 3: Ensure healthy lives and promote well-being for all at all ages.* https://www.un.org/sustainabledevelopment/health/
4. Kruk ME, *et al.* (2018). *High-quality health systems in the Sustainable Development Goals era: time for a revolution.* Lancet Glob Health **6(11)**:e1196–e1252. doi: 10.1016/S2214-109X(18)30386-3.
5. Kruk ME, Pate M (2020). *The Lancet Global Health Commission on High Quality Health Systems 1 year on: progress on a global imperative.* Lancet Glob Health **8(1)**:e30-e32. doi: 10.1016/S2214-109X(19)30485-1.
6. WHO, World Bank, OECD (2018). *Delivering quality health services: A global imperative.* Washington DC: World Bank. https://www.worldbank.org/en/topic/universalhealthcoverage/publication/delivering-quality-health-services-a-global-imperative-for-universal-health-coverage
7. Institute of Medicine (IOM) (2001). *Crossing the Quality Chasm: A New Health System for the 21st Century.* Washington, DC: National Academy Press. https://www.nap.edu/catalog/10027/crossing-the-quality-chasm-a-new-health-system-for-the
8. OECD. *Health Care Quality Framework.* https://www.oecd.org/health/health-systems/health-care-quality-framework.htm
9. WHO. *Quality Health Services.* https://www.who.int/servicedeliverysafety/areas/qhc/en/

In addition, quality can be considered at different levels. For example, patients will have a particular perspective on quality of care, based primarily on their interactions with healthcare workers. But quality can also be viewed at an organisational or institutional level, focusing on how well a facility is managed and delivers care, and at a system level, which incorporates additional higher-level factors such as how well different elements of a health system operate together and geographic variation in care and health outcomes. Whatever perspective is taken, however, a key feature of quality is that services should be delivered in ways that are designed around patients – a patient-centred approach.[10]

Box: Dimensions of quality in healthcare[4]

- **Safe:** Avoiding harm to patients from the care that is intended to help them.
- **Effective:** Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and misuse, respectively).
- **Patient-centred:** Providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- **Timely:** Reducing waits and sometimes harmful delays for both those who receive and those who give care.
- **Efficient:** Avoiding waste, including waste of equipment, supplies, ideas, and energy.
- **Equitable:** Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

Despite this global focus on quality, it remains elusive in many settings, particularly (although not exclusively) in low- and middle-income countries (LMICs). WHO estimates that poor quality care leads to up to 9.4 million deaths a year, while one in three patients experience disrespectful care and poor communication.[6] The knock-on effects of these shortcomings are substantial: poor quality care leads to US$1.4–1.6tn in lost productivity in LMICs every year.[6]

Latin America has achieved some notable successes in healthcare in recent decades. National expenditure on healthcare has increased and social protection has been enhanced, leading to improved access to health services. This has contributed to falling death rates in the region – avoidable mortality fell by 46.9% between 1990 and 2016 in Latin America and the Caribbean.[11] However, most countries have not met their commitments to spend 6% of GDP on health, and only four countries have reduced out-of-pocket expenditure on health to target levels.

Moreover, demographic transitions are leading to changing patterns of disease, particularly the growth of non-communicable diseases,[12] while increasing longevity is projected to lead to ageing populations with additional healthcare needs. In the short term, COVID-19 has had a major impact in the region, directly and indirectly. As well as deaths caused by COVID-19, the pandemic has disrupted both the delivery of healthcare and healthcare-seeking behaviour.

To explore progress towards UHC in Latin America, particularly in light of the COVID-19 pandemic, and to consider the role that research could play in enhancing the quality of healthcare services, in October 2020 the UK Academy of Medical Sciences (AMS) and the Argentinian National Academy of Medicine organised a joint virtual discussion meeting. As well as presentations, breakout groups explored three key issues – healthcare access and coverage, health and other sectors and public health (summarised in Annex 2).

10.   WHO. *What are integrated people-centred health services?* https://www.who.int/servicedeliverysafety/areas/people-centred-care/ipchs-what/en/

11.   GBD 2017 Mortality Collaborators (2018). *Global, regional, and national age-sex-specific mortality and life expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017.* Lancet **392(10159)**:1684-1735. doi: 10.1016/S0140-6736(18)31891-9.

12.   GBD 2019 Diseases and Injuries Collaborators (2020). *Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019.* Lancet **396(10258)**:1204-1222. doi: 10.1016/S0140-6736(20)30925-9.

Discussion themes

A range of converging themes emerged from the plenary presentations and discussions.

Political factors: Participants argued that high levels of **political commitment** are required to achieve high-quality UHC in Latin America. This needs to include a commitment to address marked health inequalities. Participants urged Latin American governments to increase expenditure on health, particularly to strengthen primary healthcare systems, the bedrock of UHC. Out-of-pocket expenditure is high in comparison to OECD countries, and has fallen by only a small degree in most countries in recent years; in some, it has increased.[13]

It was also argued that Latin American countries need to improve **governance** of healthcare systems to tackle corruption at multiple levels.[14] In many countries, public perceptions of corruption are greater than the OECD average.

A further challenge is the need to adopt a **long-term perspective**. In many Latin American countries, a volatile political landscape can lead to frequent changes of government, and to changes in health policy or the undoing of a previous administration's health reforms.

Addressing inequalities: It was recognised that the achievement of UHC in the region would depend on improved access to quality primary healthcare among **disadvantaged populations**. With health strongly influenced by environmental and social factors, disadvantaged populations typically carry a higher burden of disease. This unequal burden is often exacerbated by less access to care and lower quality of care.

Populations may be disadvantaged for multiple reasons. As well as socioeconomic disadvantage, populations in poor urban areas and remote rural areas may be poorly served by health systems. Populations may also be marginalised for sociocultural reasons, with ethnic minority populations often having worse health outcomes in many countries.[15] Civil conflict may lead to displacement, which also tends to have detrimental impacts on health and wellbeing and access to healthcare.

Participants suggested that a further challenge in the region is the **fragmentation** of health services, with multiple delivery mechanisms across public and private sectors. Fragmentation is an obstacle to the development of strategies to deliver higher-quality care to all.

Definitions: Participants noted that **defining 'quality'** in healthcare is not straightforward. The concept of quality encompasses multiple different aspects of care, and can be viewed at several different levels – at a clinical level, a systems level and from the perspective of individuals. Because of these challenges, there is a lack of agreed and standardised metrics for assessing quality.

In terms of UHC, it was suggested that metrics need to cover health outcomes and quality, and not just focus on access and out-of-pocket expenditure on health (the basis of the main two SDG UHC indicators).[16,17] However, limited outcomes data are available in many countries in the region.

13. OECD and World Bank (2020). *Health at a Glance: Latin America and the Caribbean 2020.* Paris: OECD. https://www.oecd.org/health/health-at-a-glance-latin-america-and-the-caribbean-2020-6089164f-en.htm

14. García PJ (2019). *Corruption in global health: the open secret.* Lancet **394(10214)**:2119-2124. doi: 10.1016/S0140-6736(19)32527-9.

15. Mesenburg MA, et al. (2018). *Ethnic group inequalities in coverage with reproductive, maternal and child health interventions: cross-sectional analyses of national surveys in 16 Latin American and Caribbean countries.* Lancet Glob Health **6(8)**:e902-e913. doi: 10.1016/S2214-109X(18)30300-0.

16. https://www.sdg.org/datasets/f6c3182a119748dcb8db841cfce94e95_0

17. https://www.sdg.org/datasets/indicator-3-8-2-proportion-of-population-with-large-household-expenditures-on-health-greater-than-10percent-as-a-share-of-total-household-expenditure-or-income-percent-5

Data: One consequence of the lack of agreed metrics is a **dearth of data** on progress towards UHC and improvements in quality of care in the region. It was suggested that this lack of data also contributes to limited accountability for achieving UHC and quality of care objectives.

Participants also maintained that **information systems** for gathering, sharing and analysing data were generally weak in the region. A stronger IT infrastructure needs to be supported by effective mechanisms of data governance and capacity for data usage, so that the results of monitoring activities inform changes in policy and practice to achieve UHC and quality of care objectives.

Community engagement: Participants argued that **communities** need to be intimately involved in conversations around UHC and quality of care. Given the importance of patient-centred care, it was suggested that public input is required to shape definitions of care quality, care quality standards and methods for assessing quality. Informed and engaged communities could also play a key role in holding governments accountable for UHC and quality of care commitments.

Particularly in the context of COVID-19, it was argued that communities had been subject to confused and sometimes contradictory **messaging**. Improved coordination and evidence-based messaging are required to ensure greater clarity and consistency in public communication.

COVID-19: COVID-19 was felt to have had a highly **disruptive impact on healthcare delivery** in the region. As well as the direct loss of life – Latin America has been one of the regions most badly affected by COVID-19 – the pandemic has undermined both the capacity of the health system to deliver care and people's willingness or ability to make use of healthcare services.

Notably, COVID-19 has dramatically emphasised existing issues, particularly health inequalities, with the burden of disease again falling disproportionately on the disadvantaged. It has also highlighted the importance of primary healthcare, the need for robust health systems, and the catastrophic financial impact of health challenges such as epidemics and pandemics.

More positively, COVID-19 has catalysed **innovations** in healthcare delivery, including more flexible and patient-centred delivery models. Virtual consultations and the direct supply of medicines to patients from pharmacies to support palliative care, were highlighted as areas where practice has changed significantly.

Potential research contributions

The discussions and breakout sessions identified a range of ways in which the research community could accelerate progress towards quality-focused UHC in the region.

Metrics framework: It was suggested that researchers could help to develop **a set of agreed metrics** for monitoring progress towards UHC, including the quality of healthcare delivery. These metrics would need to take account of the multiple dimensions of quality, as well as the levels at which they are applied – system-level, institution-level and patient/community-level. Ideally, these measures would be standardised internationally to support comparisons across countries.

Underpinning this work, the research community could support the development of **information management systems** to collect, share and analyse data on UHC and quality of care. It was noted that timely access to data for research purposes was essential. Researchers could also help to ensure that appropriate systems for data governance were in place, to ensure data were handled ethically and to build public support for data gathering and analysis.

Equity: Participants argued that ensuring equitable access to quality healthcare requires a good understanding of the **barriers to healthcare usage**, many of which are likely to be specific to local contexts. It was suggested that a key role for research was to explore the reasons underlying poor health outcomes, limited access to services and inadequate quality of services among disadvantaged populations. This would involve working with the communities directly affected, as well as with the healthcare systems involved in delivering services to them.

A further important role for research would be to **develop and evaluate interventions** to improve access and service quality. Again, it was argued that the development of interventions needs to be done through strong engagement with communities and the involvement of healthcare workers. Building relationships with **policymakers** could also promote buy-in and increase the likelihood of implementation of new practices.

Implementation/operational research: It was suggested that in many areas, such as maternal and child health, proven interventions already existed that could enhance quality of care and improve health outcomes. The key challenge is to **enhance the uptake and scale of these interventions** and to improve their application within existing health system structures, taking into account local contextual factors. There is a great need for implementation and operational research to support the introduction of evidence-based interventions and to enhance the performance of health systems.

Health economic analyses: To inform policymaking, evidence is required on the **cost-effectiveness** of interventions. Health economic analyses can generate such evidence and help to accelerate the introduction of new interventions and quality improvements. Ideally, such analyses should include as complete a picture as possible of the financial implications of interventions, including secondary social benefits. These kinds of studies are likely to require **interdisciplinary approaches**, particularly the involvement of health economists and social scientists.

More generally, participants argued that there was a need to **review the use of financial resources in health systems** to identify inefficiencies, skewed allocation of resources, and misuse of funds. With resourcing likely to be under ever-greater pressures following COVID-19, it is essential that money is spent in the right areas at the right time and in the right way.

Innovation: As the response to COVID-19 has illustrated, there is considerable scope to introduce **innovative new practices** into healthcare, particularly 'mHealth' and other digital innovations to advance UHC and patient-centred primary care. Participants noted that there is a need to develop a robust **evidence base** for these innovations to support their implementation and scale-up. It will also be important to review the extensive existing literature on digital innovations to identify those with the most relevance to the local regional context. implementation research (see above) will be important for the wider take-up of effective interventions.

Political engagement: It was argued that researchers also need to **engage with politicians and policymakers** to promote the UHC agenda, to advocate for quality primary healthcare services, and to make the case for reducing health inequalities, for example, by stressing the economic and social as well as health benefits of reduced inequalities. There were some suggestions that promoting **legislation** to enshrine the universal right to health would be beneficial, but also agreement that the evidence suggests that the sticking point is rarely the legislative or policy basis for UHC, but the implementation of these commitments in practice.

Political engagement is also required to promote **evidence-based decision-making** and the capacity of government structures to use research evidence. These approaches could help to address the issue of continuity across government administrations, if a commitment to acting on evidence was shared across the political spectrum.

Conclusion

Although UHC is embedded within the SDGs as a key global ambition, the meeting highlighted that there is a need for governments to consider not just access to health services but also the quality of those services. This calls for a common understanding of quality across stakeholders; one that incorporates community perceptions of quality, as well as agreed metrics to be able to assess and monitor quality of care.

Research has the potential to play a key facilitative role in establishing a foundation for quality-based approaches to UHC, including the formulation of suitable metrics. Participants argued that this required national recognition of the importance of research, prioritisation of research and capacity building.

It was also seen to be important to apply a wide range of approaches, including quantitative and qualitative studies, through interdisciplinary collaborations. International collaborations were also seen as critical, including South–South partnerships and collaborations between middle-income countries in other regions to support international comparisons and sharing of experiences.

While the generation and analysis of data were seen as critical, it was also agreed that such activities would only have impact if governments were committed to evidence-based policymaking. Greater engagement with policymakers would help to stimulate an appetite for evidence, and would also help to ensure that research activities were driven by policymaker needs, making it more likely that evidence would be acted upon.

Finally, it was noted that the region has been particularly badly affected by the COVID-19 pandemic. Although COVID-19 has presented and continues to present major challenges, it has also been a catalyst for change and may provide an opportunity to advance the UHC and quality of care agenda so that the region is better prepared for future health emergencies.

Annex 1: Steering committee membership

Co-chairs:

- Dr Roberto Chuit, National Academy of Medicine and Epidemiological Research Institute, Argentina
- Professor Catherine Law FMedSci, University College London, UK

Members:

- Dr Helena Legido-Quigley, Saw Swee Hock School of Public Health, Singapore/UK
- Dr Jorge Daniel Lemus, National Academy of Medicine, Argentina
- Dr Maria Carmen Lucioni, Universidad de Ciencias Empresariales y Sociales, Argentina
- Dr Juan Antonio Mazzei, National Academy of Medicine and University of Buenos Aires, Argentina
- Dr Diana Pinto, USA
- Dr Joanna Raven, Liverpool School of Tropical Medicine, UK

Annex 2: Breakout group summaries

Healthcare access/coverage

What does existing quality of care research say about barriers and challenges to achieving high-quality UHC?

- A lack of accountability.
- Continuity issues: Specifically, high attrition rates of policymakers means that research can be initiated by an incumbent and then never implemented by their successor.
- Quality has no agreed definition or construct:
  - Different patient expectations of quality can skew results.
  - Access is often used as a surrogate measure, which results in misalignment between payers and providers.
- Clinical and system quality are not recognised as separate entities, and system quality in particular is under-researched.
- Lack of infrastructure to conduct research (e.g. institutions and human resources).

Success stories – many examples in progress

- Development of a standardised tool to measure patients' perception of quality of care to understand how well UHC is being implemented across multiple geographies within and beyond Latin America.
- Residential treatment centre to review access to and screening practices for cardiovascular and cancer patients.
- Big data gathering to enable a focused response to Chagas disease.
- Understanding barriers to the uptake of vaccines: education, religious, physical access or supply chain issues.

What challenges has the COVID-19 pandemic highlighted for quality of care research in Latin America?

- There is a huge focus on COVID-19, which means research into UHC is being neglected, existing projects are being paused and field work is not possible.
- Care quality has diminished and patient perceptions of care may have reduced, so future qualitative research may be flawed.
- The lag in access to data is an issue; real-time data are not real time (not COVID-19 specific).

What opportunities does the COVID-19 pandemic provide to improve quality of care research in Latin America?

- In some instances, the importance of research has gone up the agenda as a result of COVID-19, but this is not the case for research into quality of care.
- COVID-19 has highlighted fragilities in the quality of the healthcare system; research could help with future challenges.
- An increase in funding in some countries.

What research priorities in quality of care exist?

- The development of a list of the top 10 priority areas on which to focus.

- The mismatch between needs and research delivered.

- Resources should be focused on how to improve implementation and adoption rather than the development of more interventions; improving implementation would benefit all future projects.

- Culture and leadership needs that are impacting on implementation and therefore on the quality of care need to be understood.

What different research approaches and methodologies are required to improve quality of care and how can research capacity be built to put these into practice?

- The maximum benefits that can be delivered from an intervention and the actual benefits seen in the real world need to be identified to highlight implementation issues.

- Qualitative data needs to be gathered to sit alongside quantitative data to give the 'why' behind the data.

- Outcomes need to be included as a measure of quality rather than just access to care.

- Diagnosis, intervention, policy.

Health and other sectors

What does existing quality of care research say about barriers and challenges to achieving high-quality UHC?

- Social determinants of health:
  - Education, environment, living conditions etc.
- Major risks and barriers to high-quality healthcare:
  - The lack of infrastructure for vulnerable populations (e.g. indigenous and other).
  - Misinformation leading to a significant mistrust in science.
  - The fragmentation of health assistance.
- Key points to achieving high quality in UHC:
  - Integrality in healthcare through proper funding.
  - An intersectoral approach through collaborative work.
  - Consistency in communication from science, health sector and governments.

Success stories

- e-Health/mHealth strategies:
  - Health services delivered through different ways.
  - Palliative care medication sent directly from pharmacies to patients.
- Empowerment of populations:
  - Self-identification of medical issues.
  - In some cases, COVID-19 enabled countries to change the delivery of care for the better.

What challenges has the COVID-19 pandemic highlighted for quality of care research in Latin America?

- Resistance to change:
  - Particularly by healthcare providers.
- The management of death and access to palliative medicine.
- A lack of communication supported by evidence and data:
  - Transparency and trust are imperative to enable meaningful data to be collected.
- The digital divide and poverty leading to poor outcomes:
  - IT access for disadvantaged communities.
  - The lack of resources to afford healthcare.

What opportunities does the COVID-19 pandemic provide to improve quality of care research in Latin America?

- Highlighted the role of healthcare.
- Created a focus on primary care access instead of secondary care:
  - Promotion of access to vaccination campaigns.
  - Continuous efforts to build relationships with vulnerable populations (e.g. indigenous and other communities lacking support).
- The use of real data in large-scale collaborations.
  - Collaboration in research to improve quality in UHC.
  - The role of computational methods, including artificial intelligence.

What research priorities in quality of care exist?

- The disparity between science and policy/politicians needs to be explored.
- Preventative medicine:
  - Key in primary care.
  - Chronic disease monitoring and impact.
- International cooperation:
  - Consider learnings from other countries.
- Financial pressures:
  - A focus on cost-effective strategies is needed.

What different research approaches and methodologies are required to improve quality of care and how can research capacity be built to put these into practice?

- A patient-centred approach is needed.
- Qualitative research on:
  - The prevention and diagnosis pathway.
  - Human resources within healthcare organisations.
  - Communication strategies for community engagement.
- Quantitative research on:
  - Modelling techniques applied to quality in healthcare.
  - The analysis of differences among countries.

Public health

What does existing quality of care research say about barriers and challenges to achieving high-quality UHC?

Political leadership – need to drive leaders to prioritise health

- Each health minister decides their own policies. When there is not good leadership there is huge inequality (demonstrated through COVID-19, e.g. in Brazil). There needs to be a clear political message (driven by expert opinion) and it needs to be the right message.
- Political desire will improve access to quality healthcare (effective, safe, timely, appropriate). Quality public health is also key.

Economic

- There is not enough investment (exacerbated by the pandemic) and quality healthcare is not prioritised.
- Resources are lacking or inefficient.
- Public health has a very low budget.
- Corruption – 'No money is going to be enough for health if we have corruption'.

Technological

- Ineffective information systems.

What challenges has the COVID-19 pandemic highlighted for quality of care research in Latin America?

- The pandemic has shown us the current priority of healthcare. It has highlighted failures in the current healthcare structure and the resourcing/information technology surrounding it.
- The intersection of public health and politics is key (e.g. in Brazil, politicians ignored the health experts). There is a need to enshrine human rights into law; this would make it easier to establish UHC.
- There is a large amount of disinformation/lack of trust in government.
- The monitoring system has failed – there are serious problems with data manipulation, a complete lack of transparency and therefore a huge impact on quality. 'Test, test, test' hasn't worked.

What opportunities does the COVID-19 pandemic provide to improve quality of care research in Latin America?

- The forced move towards the virtual world and IT has helped with access to healthcare.

- However, IT implementation has also shown its weaknesses during the pandemic (e.g. a demonstrable failure in Argentina, and in the UK, 20,000 cases of COVID-19 lost because of an Excel spreadsheet!).

- COVID-19 has shown that in organised countries with good IT, you can have daily counts of cases/deaths. Supermarkets can restock their shelves daily based on demand, showing it is possible, but healthcare IT is lagging behind.

- Healthcare IT is not organised, funded or politically supported. The pandemic has helped to expose this important issue.

What research priorities in quality of care exist?

- A full review of the healthcare system and government structures for health delivery is needed, including the relationship between primary, secondary and tertiary sectors.

- Research topics to help with political decisions:
  - How to solve inequalities.
  - Access – rural versus cities (and how to avoid a two-tier system).
  - Public/private sectors – their relationship and how they can work together (e.g. in Spain/UK, governments used the private sector to source machinery and beds. The private sector could be further integrated into public systems so new legislation is not needed every time.)
  - How to attract professionals to unsafe regions or rural areas and how to incentivise/apply payment mechanisms for health providers. Currently doctors are mainly in big city areas, which further drives inequality.

What different research approaches and methodologies are required to improve quality of care and how can research capacity be built to put these into practice?

- Research is needed into 'efficiency'. It is not always about the lack of resources, but about how resources are used. It is about expenses versus results, and there must be an assessment and follow-up to the quality of the tools.

- Research into the relationship between unequal societies and health is critical, including what stops access in the poorest areas.

- The IT infrastructure. Research must respond to the needs of public health, be aimed at public wellbeing, and promoted through national programmes of research. Digital data sheets are needed.

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