

Learning Health Systems: From Knowledge to Action *Key Findings and Trends*

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Nonhlanhla Nxumalo

Centre for Health Policy, University of the Witwatersrand

The Centre for Health Policy
Health Policy and Systems Research

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Roadmap

- Foundational reflections on Learning Health Systems (LHS)
- Purpose of the Learning Health Systems edition
- Overview of papers
  - Key findings and trends

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Foundational Reflections on Learning Health Systems

- Initial discussion on LHS via quality improvement discourse
  - Strengthening practices for evidence generation and use

- Alliance for Health Policy and Systems Research (WHO)
  - LMICs and LHS – investment for health system improvement…in the future



Sheik & Abimbola, 2021

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Purpose of SAHR Learning Health Systems edition

- Current SAHR edition, response to recurring themes
  - Poor translation of generated data, experience and innovation
    - Limited service and system-wide improvement

- Recognition of importance of learning in SA
  - Existing practices of quality improvement > e.g. PDSA cycle & DHS strengthening

    …but limited recognition of broader LHS

- Current SAHR edition showcases
  - Wider range of learning experiences
  - Approaches, collaborations and challenges

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Overview of latest edition & key findings

PART 1: Learning in Context

- Addresses why learning matters in the South African health system
  - Current health & related indicators
  - 1 paper

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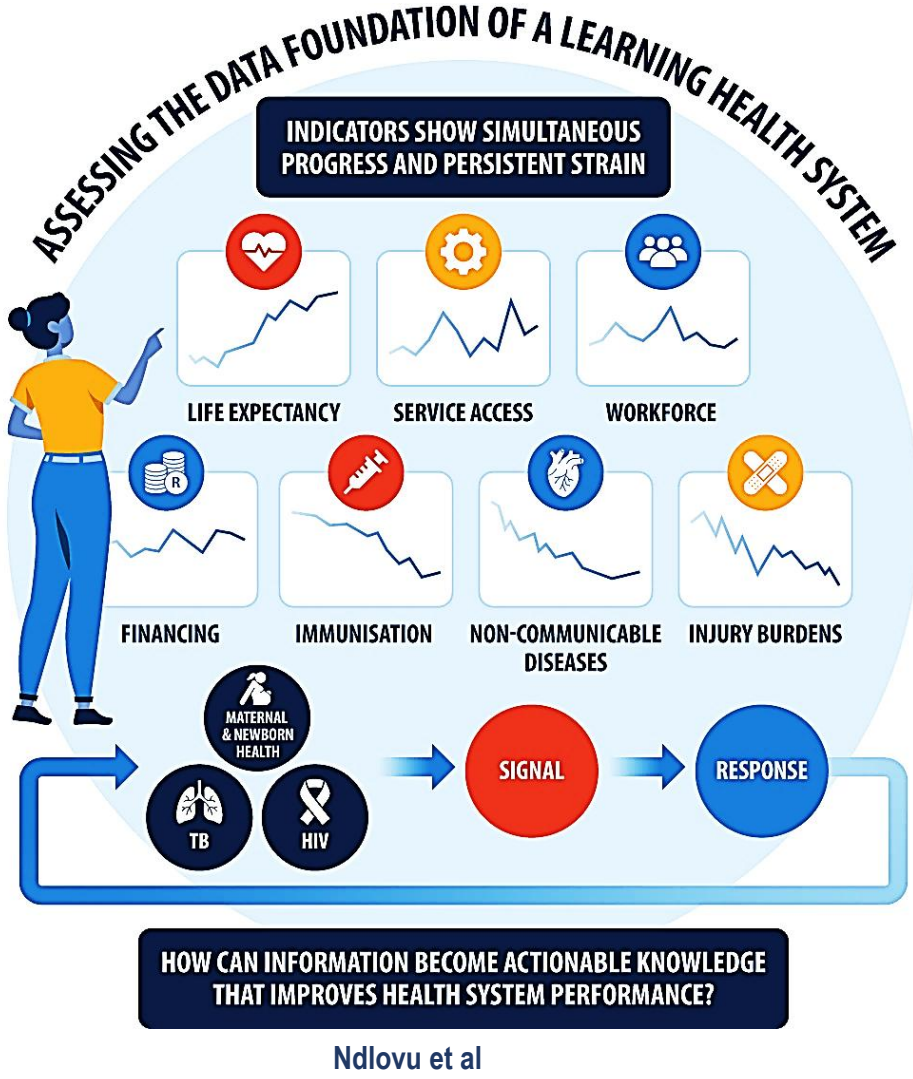
PART 1: Learning in Context



Ndlovu et al

Health and related indicators: assessing the data foundation of a learning health system (Ndlovu et al)

- Extensive health system data generated
  - Improvements & challenges in key indicators
- Weaknesses in data governance, integration, accountability
  - Limited capacity to translate data into timely action
- Use indicators to drive vs describe improvement
- Need to consider how information can become actionable knowledge > strengthen HS performance

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PART II: Learning from Information (1)

- Examine health system capacity to convert data, information, experience > actionable knowledge
- Illustrate that generating information creates opportunities to learn BUT depends on organisational, human capabilities
- 4 papers

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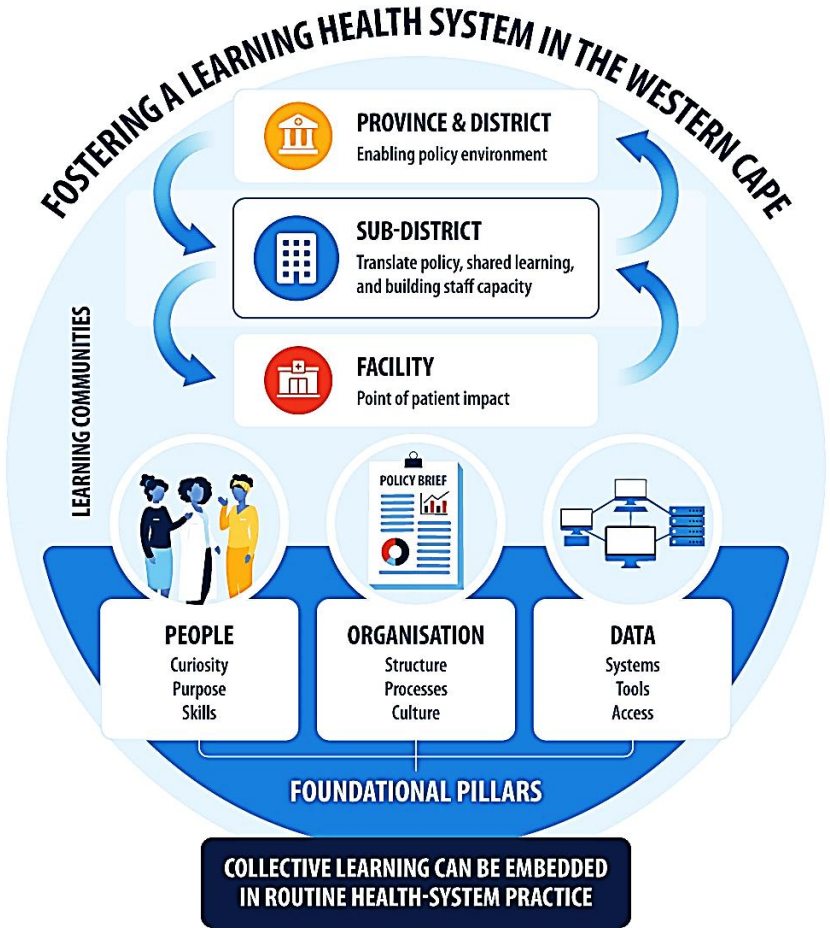
PART II: Learning from Information (2)



Collyer et al

Fostering a learning health system: emerging insights from the Western Cape, South Africa (Collyer et al)

- Examine how data can inform decision-making, support improved health outcomes

- Learning from interaction of data systems, skilled, motivated workforce, enabling organisational processes, culture
  - Information into collective learning and action

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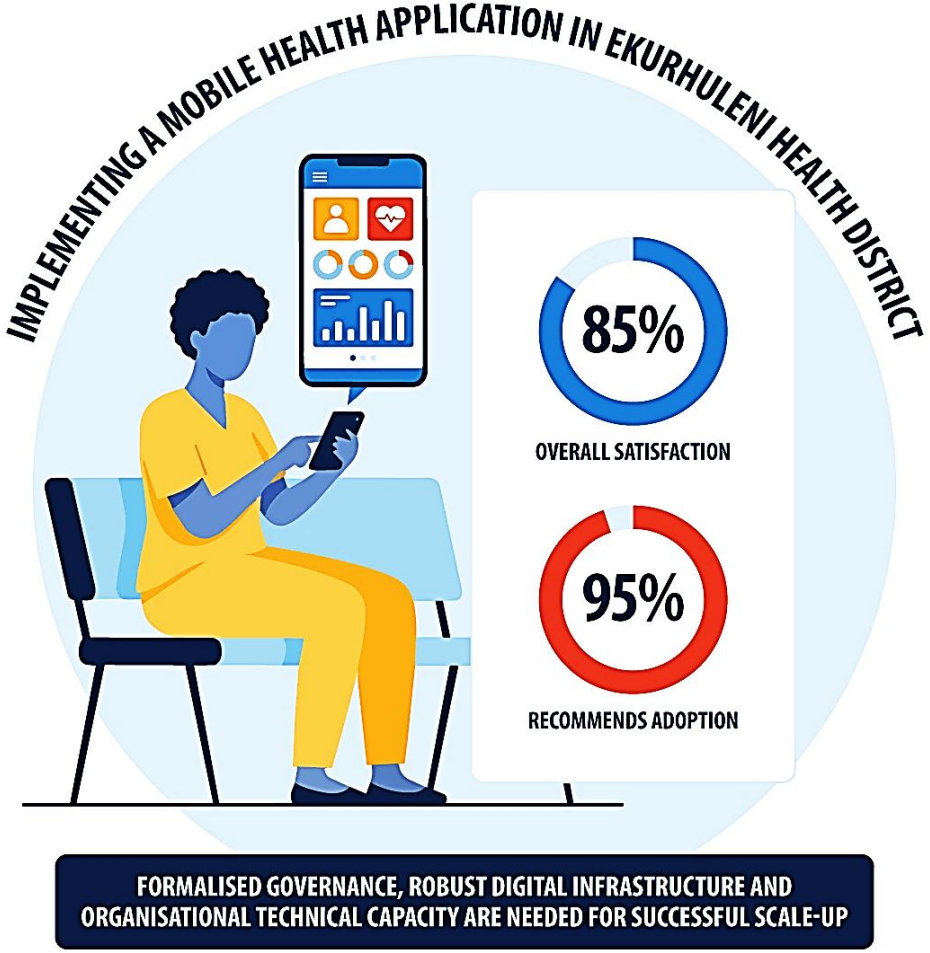
PART II: Learning from Information (3)



End-user perceptions and stakeholder experiences of implementing a mobile health application in Ekurhuleni Health District, South Africa (Ndombi et al)

- Insights into opportunities, challenges of using digital technologies to strengthen information flows, continuity of care, decision-making
- Need to address key organisational barriers for digital health integration within health system
  - Robust digital infrastructure
  - Build internal technical capacity
  - Formalise governance – planning, stakeholder management

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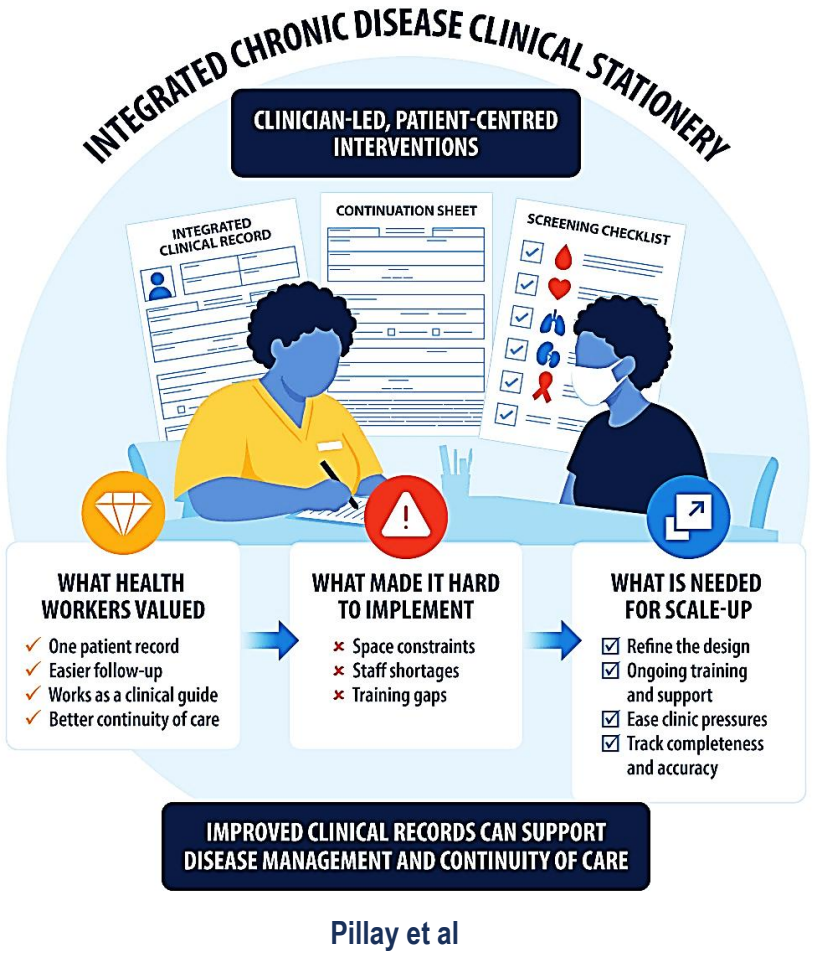
PART II: Learning from Information (4)



Pillay et al

Evaluation of the pilot implementation of an integrated chronic disease clinical stationery and comprehensive screening checklist in Ekurhuleni, South Africa, 2022–2023 (Pillay et al)

- Improved clinical information systems can support disease management, continuity of care
- Standardised documentation practices > important for future data use
- Practical realities pose challenges to implement in busy services
  - Strengthen training, supportive supervision
  - Embed routine audit and feedback mechanisms

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PART II: Learning from Information (5)



Mthethwa et al

Establishing a good practices repository to support health system learning in South Africa: methods, implementation processes and lessons learnt (Mthethwa et al)

- Describes processes to identify, assess, document good practices
- Demonstrates range of local innovations developed
- Experiential knowledge can be captured and shared
- Practical support and tools to document experiences and achievements required

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PART III: Learning Together (1)

- Explores learning as a social process > shaped by dialogue, collaboration, collective reflection
- Papers illustrate how learning is strengthened through collective of people
- 5 papers

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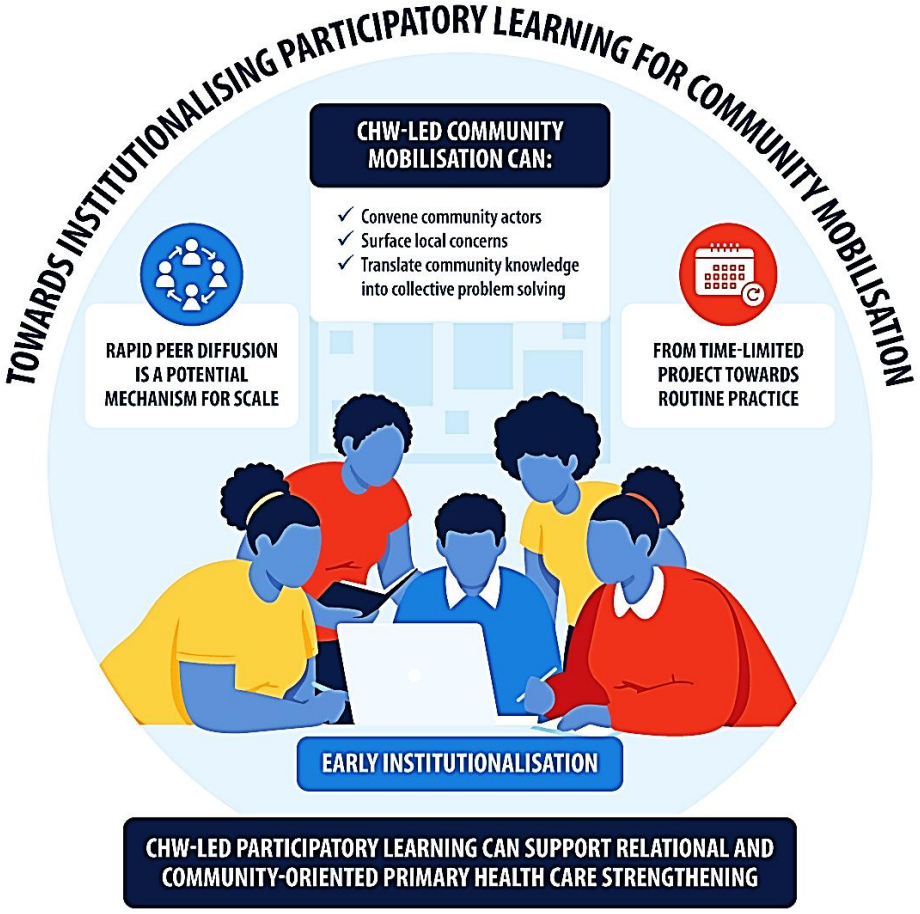
PART III: Learning Together (2)



D'Ambruoso et al

Towards institutionalising participatory learning for community mobilisation in primary health care: evidence from community health worker training in rural South Africa (D'Ambruoso, et al.)

- Examine how participatory learning intervention strengthened CHWs' mobilisation, collective problem-solving
- Role of communities, frontline PHC workers as active contributors to health system learning
- Embed participatory learning in routine systems

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PART III: Learning Together (3)



Steps towards establishing a learning health system at the sub-district level:
Healthy Futures South Africa (HFSA) (Reid et al)

- Describe creation of learning circles and forums of communities, health service staff, civil society
- Deliberate structures for dialogue, foster learning across organisational boundaries
- Sustainability requires leadership, investment, embedding learning as central feature

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PART III: Learning Together (4)



Sekhesa and Olivier

Health system learning through responsiveness mechanisms in the Cape Winelands District health system: a descriptive qualitative study (Sekhesa and Olivier)

- Examine if/how learning occurs through responsive mechanisms (patient complaints systems, community, health system, political governance structures)
- Learning potential of feedback mechanisms
- Barriers > organisational hierarchies, power dynamics, resource constraints

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PART III: Learning Together (5)



Boersema and Van Rensburg

Sustaining collaborative research in nursing and health care: reflections on six South African case studies (Boersema and Van Rensburg)

- Explore how trust, shared purpose, leadership & role clarity shape successful research partnerships
- Lessons for strengthening collaboration to support learning for continuous improvements
- Develop teams with complementary expertise, shared decision-making

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PART III: Learning Together (6)



Developing a community of practice in health professions education: reflections from the Africa HPE ECHO project (Suleman et al)

- Examine community of practice > Africa HPE ECHO network
- Peer engagement, reflective dialogue, shared learning supports health educator development, educational change

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PART IV: Learning through practice (1)

- Focus on learning through implementation, experimentation, improvement
- Illustrate how practical experience > source of adaptation, innovation
- 4 papers

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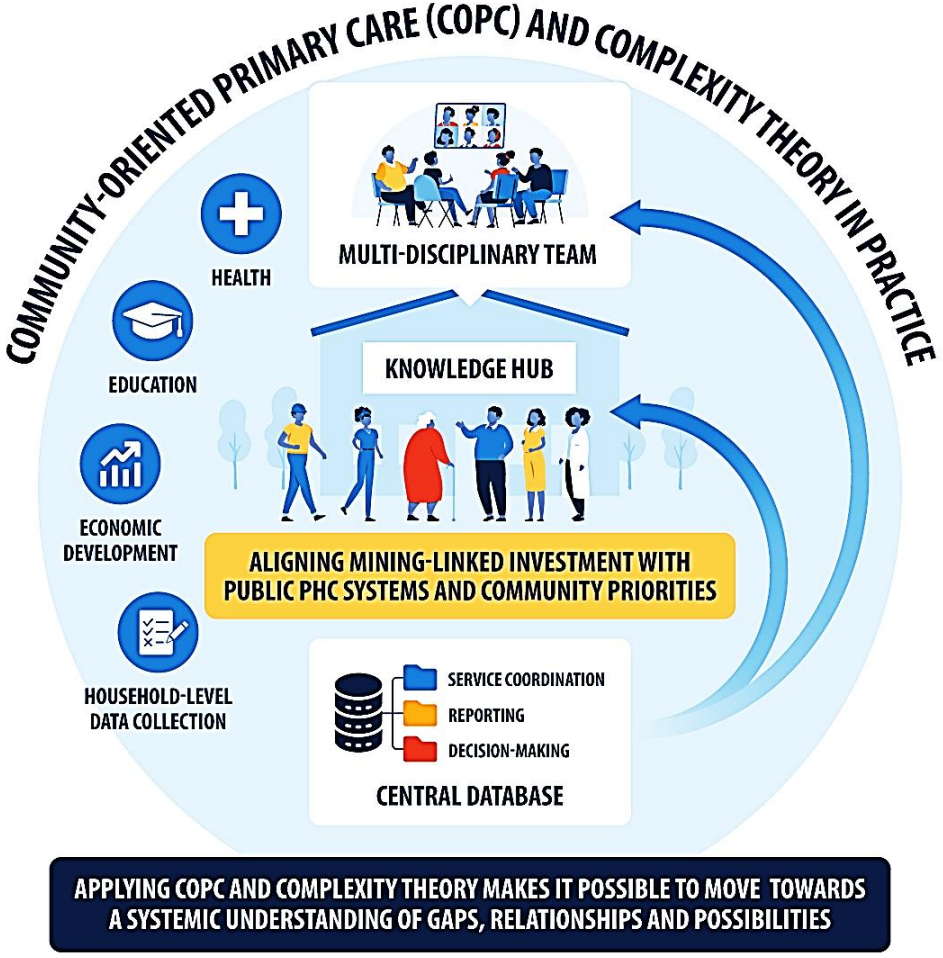
PART IV: Learning through practice (2)



Renkin and Hugo

Community-oriented primary care (COPC) and complexity theory in practice: a case study in the Northern Cape and Limpopo (Renkin and Hugo)

- Implementation experiences > reveal fragmentation in health programmes
- Lessons for more integrated service delivery
- Challenges in implementing lessons
- Knowledge Hub & multidisciplinary team model > intersectoral services

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PART IV: Learning through practice (3)



Odendaal et al

The whole is greater than the sum of the parts: insights into resilient, well performing, quality improvement teams for maternal and neonatal healthcare in South Africa before, during, and after the COVID-19 pandemic (Odendaal et al)

- Examine how QI teams learnt & adapted processes during COVID-19 pandemic
- Importance of interactions amongst advisors, leaders, members, facility context/work culture > sustain quality improvement

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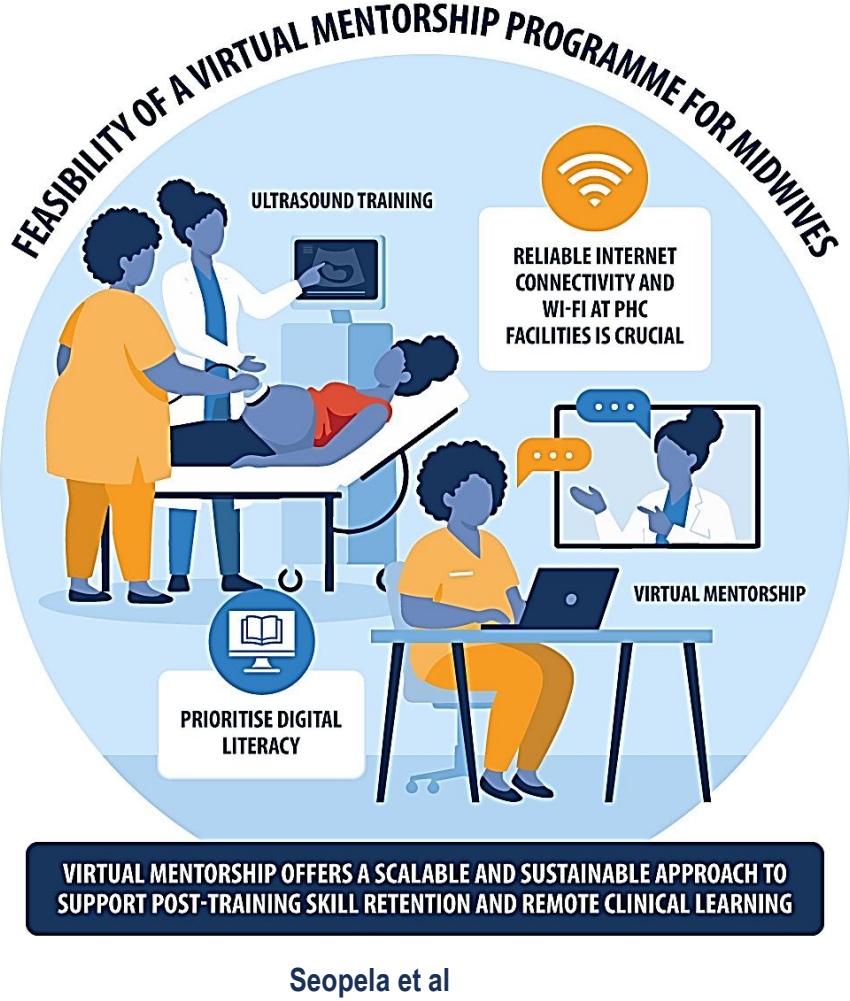
PART IV: Learning through practice (4)



Digital engagement, feasibility, and acceptability of a virtual mentorship programme for midwives following antenatal ultrasound training (Seopela et al)

- Evaluate mentorship model to support midwives
- Virtual mentorship, peer support supports post-training skill retention, continuous remote learning in PHC settings

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PART IV: Learning through practice (5)



Pillay and Moodley

Learning health systems and simulation in audiology training in South Africa (Pillay and Moodley)

- Opportunity to engage with diverse, contextually relevant caseloads, ensuring patient safety
- Experiential learning with real world context simulation designs > align professional training with service needs & population priorities

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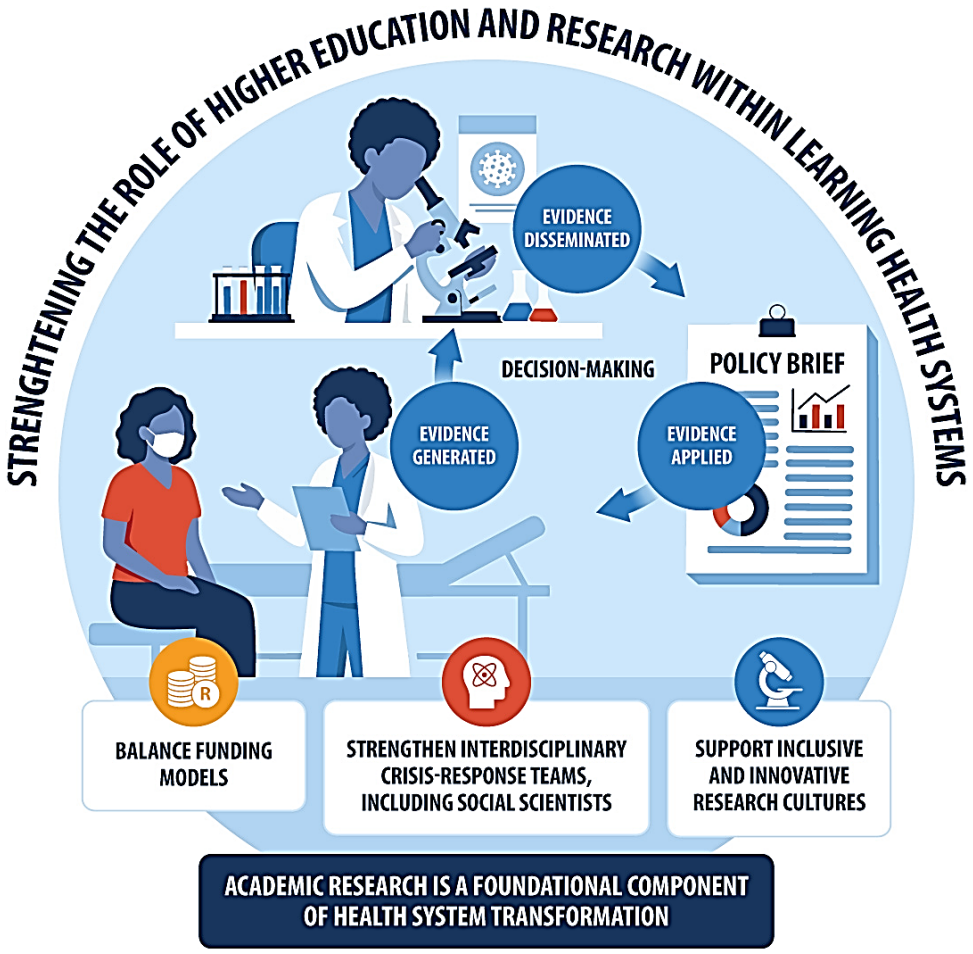
PART IV: Learning through practice (6)



Sibanda et al

The role of higher education and research in addressing the challenges posed by the COVID-19 pandemic: lessons for the future (Sibanda et al)

- Analyse how HEIs, researchers, policy actors adapted to major crisis
- Highlight innovation, resilience, and structural inequalities
- Provide sustained institutional support > inclusive, innovative research cultures

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PART V: Learning for Emerging Priorities (1)

- Consider how health systems learn in response to emerging risks, changing priorities, previously neglected needs

- 3 papers

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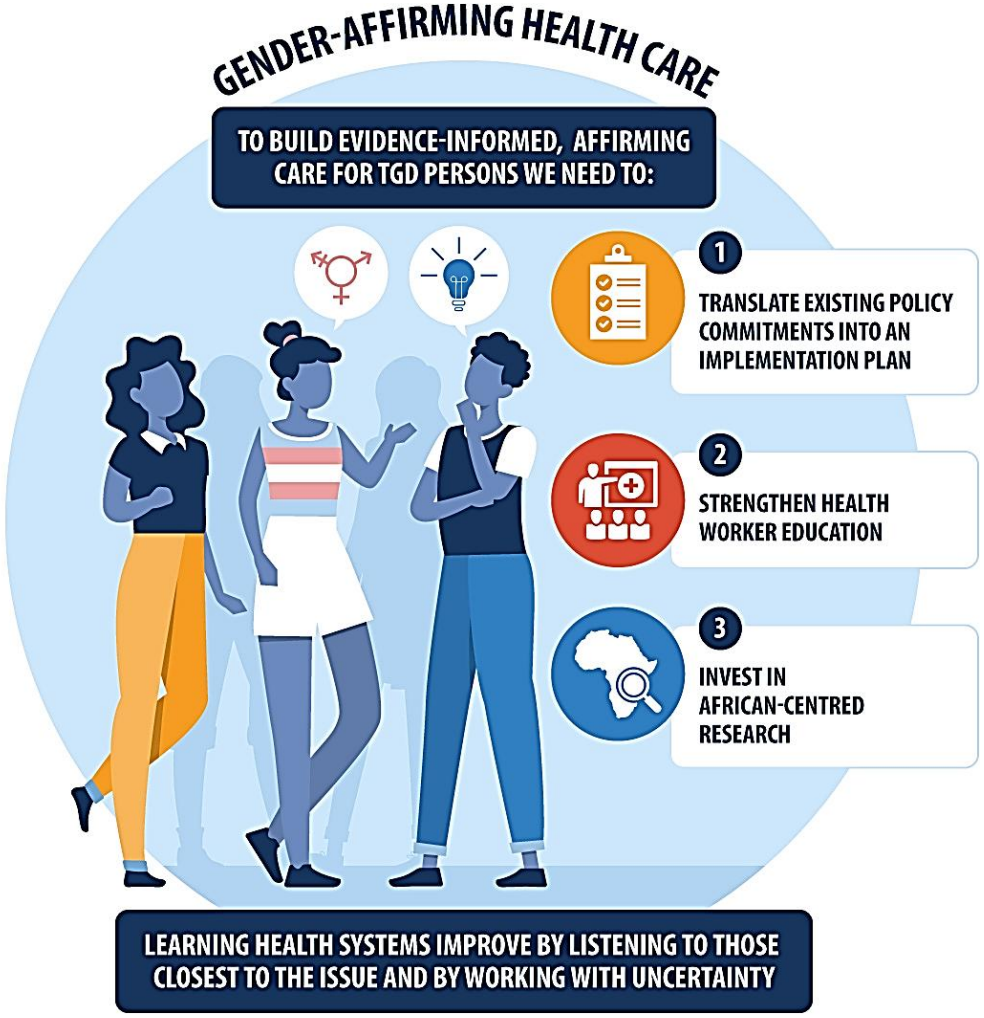
PART V: Learning for Emerging Priorities (2)



Stevens et al

Rooting gender-affirming health care within the public health sector (Stevens et al)

- Offer insights on two different implementation processes
- Learning involves interrogating assumptions
- Requires reframing service responses to promote inclusion, equity
- Operationalise GAHC in NSP with budget & accountability mechanisms

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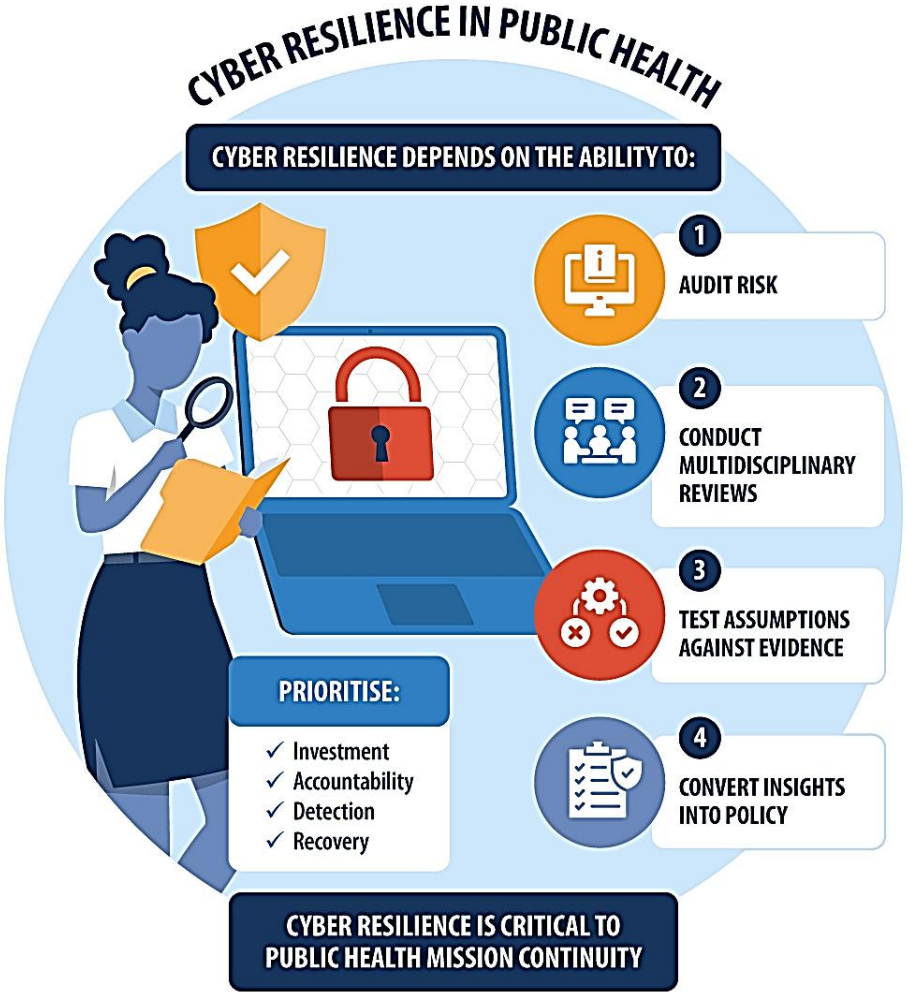
PART V: Learning for Emerging Priorities (3)



Paterson et al

Cyber resilience in public health: a narrative case study of the Aurum Institute ransomware attack (Paterson et al)

- Explore how organisations learn from crisis
- Opportunities and innovations emerging from disruptions
- Preparedness, governance, recovery processes > resilience in digital environments

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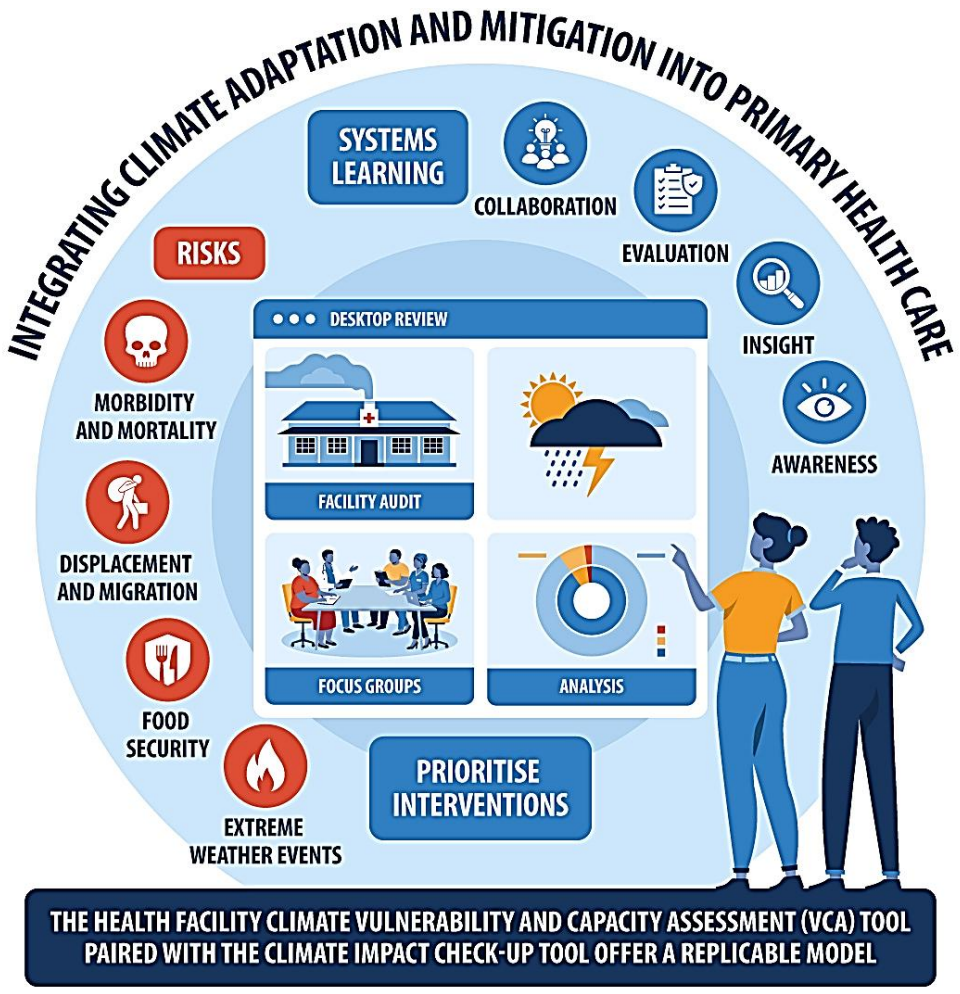
PART V: Learning for Emerging Priorities (4)



Mash et al

An approach to improving the climate resilience and environmental sustainability of primary care facilities in Cederberg sub-district (Mash et al)

- Adapted Climate Vulnerability and Capacity Assessment (VCA) & Climate Impact Checkup tool
  - Fostered awareness; approaches for emissions reduction
- Structured reflection enable PHC to incorporate learning on climate adaptation, mitigation
- Long-term infrastructure changes require resources

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Collective message from experiences of LHS

- Significant learning generated across South African health system
- Critical challenges undermine health system learning
  - Weaknesses in individual, organisational capabilities
    - Limited learning at both levels
  - Demands of service delivery
    - Limits reflection, experimentation and collective learning
  - Localised learning, and pilot innovation
    - Isolated learning vs transforming system-wide improvement

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THANK YOU