



health

MPUMALANGA PROVINCE  
REPUBLIC OF SOUTH AFRICA



# **Mpumalanga Department of Health Research Agenda 2025-2030**

<b>TABLE OF CONTENTS</b>	<b>Page</b>
<b>ABBREVIATIONS</b>	<b>2</b>
<b>INTRODUCTION</b>	<b>3</b>
<b>RESEARCH-POLICY NEXUS</b>	<b>4</b>
<b>SITUATIONAL ANALYSIS</b>	<b>5</b>
<b>KEY THEMES</b>	<b>6</b>
<b>CONCLUSION</b>	<b>9</b>
<b>REFERENCES</b>	<b>10</b>
<b>APPENDIX 1: RESEARCH PRIORITIES</b>	<b>11</b>
<b>APPENDIX 2: RESEARCH FOCUS AREA (Submitted by staff and unit managers)</b>	<b>15</b>
<b>APPENDIX 3: RESEARCH UPTAKE PROCESS</b>	<b>28</b>
<b>APPENDIX 4: MPUMALANGA RESEARCH APPROVAL/PERMISSION PROCESS</b>	<b>29</b>
<b>APPENDIX 5: FACILITY/DISTRICT LETTER OF SUPPORT</b>	<b>30</b>
<b>APPROVAL OF THE RESEARCH AGENDA</b>	<b>31</b>

**ABBREVIATIONS**

CEO	Chief Executive Officer
MDoH	Mpumalanga Department of Health
MPHREC	Mpumalanga Provincial Health Research and Ethics Committee
NDoH	National Department of Health
NDP	National Development Plan
NHRC	National Health Research Committee
NRDS	National Research & Development Strategy
R&D	Research and Development

## INTRODUCTION

The slow adoption of new research knowledge into healthcare practice and policy development poses a significant challenge to improving patient care outcomes. This could lead to the unintended consequences of a major policy development shortfall and poor practices in operations and programs due to the lack of credible and sufficient empirical evidence. The situation is worse in developing countries, where enormous time lags between discovery and integration in practice and policy are affected by a shortage of resources and competing priorities; this trend is likely to continue for some time in developing countries unless initiatives to promote research uptake strategies take all challenges faced by these countries into consideration.

The Mpumalanga Department of Health has initiated the development and implementation of the Research Agenda and further facilitated the alignment of research activities within the department.

Following these principles:

- To align the Department with research strategies advocated at the national (National Department of Health) and provincial (Provincial Research Forum) level;
- Ensure researchers have a sound purpose and demonstrate a clear link to the research agenda, policy, practice, or developing new knowledge that will improve service delivery;
- Ensure that researchers (internal and external) strive at all times to achieve the highest possible level of scientific quality in their research;
- Ensure that the pursuit of knowledge contributes to the greater good and is not regarded as the supreme goal of an individual and for personal gain;
- Ensure that the research agenda is current and addresses real-life problems that affect the government.
- Becoming a partner of choice to ensure that most research studies conducted are based on the government's research agenda.

This Research Agenda will serve as a guide that will focus our efforts on delivering a transformational change in the quantity and quality of research outputs from Mpumalanga Province.

## **RESEARCH-POLICY NEXUS**

### **Constitutional Mandates**

The Constitution guarantees freedom of expression, including academic freedom and freedom of scientific research. The Bill of Rights as enshrined in the Constitution stipulates the right to bodily and psychological integrity, including the right of subjects not to be subjected to medical or scientific experiments without their informed consent.

### **Declaration of Helsinki**

The Declaration of Helsinki regulates human experimentation in the medical community. It serves as a cornerstone document on human research ethics.

- White Paper on Science and Technology 1996:
- National Research & Development Strategy (NRDS), 2002:
- Vision of the National Development Plan (NDP) for 2030
- South African Health Research Policy and Strategy
- National Health Research Strategy (2000)
- Health Research Policy (2001)
- National Health Act (No. 61 of 2003)
- Draft integrated strategy for health research in South Africa (2016)
- Draft health research policy in South Africa (2018)

## SITUATIONAL ANALYSIS

### **Statistics**

According to Statistics South Africa (2022), Mpumalanga Province has a population of approximately 4 720 467 million people or 7.8% of the national population (an increase from 4 039 939 million in 2001 or 14%). The municipal area is predominantly rural in nature, since approximately 56% of the population reside in rural areas. The province has a total surface area of 76 495 square kilometers, the second smallest province after Gauteng, accounting for 6.3% of South Africa's total land area, with a population density of 62 people per square km. shares borders with other African Countries (eSwatini and Mozambique). The rate of migration from the said bordering states is high both for economic opportunities and healthcare services.

Figure 1: Geographical map of Mpumalanga Province



*Mpumalanga Provincial Government (2023)*

### **Health Facilities**

The Mpumalanga province consists of three districts, namely Ehlanzeni, Gert Sibande and Nkangala districts, all consisting of 17 subdistrict municipalities, all sharing a total of 319 health facilities, supplemented by the use of scheduled visits by mobile clinics. There are 29 hospitals, 230 clinics and 60 community health centres in the province. As one of the rural provinces in South Africa with 56% residing in rural areas, the majority of people rely on provincial health facilities scattered throughout the province.

### ***Mpumalanga ten (10) Leading Underlying Natural Causes of Death***

Statistics South Africa has published a report on the top 10 leading causes of mortality in South Africa, based on all death notification forms maintained by the Department of Home Affairs. In South Africa, tuberculosis remained the leading cause of death in the 3-year period, although the proportion of deaths from tuberculosis declined in the 3-year period from 8.3% in 2014 to 6.5% in 2016 (StatsSA, 2022). In Mpumalanga province, Statistics South Africa depicts tuberculosis as the most frequently mentioned cause of death on death notification forms, accounting for 7.3% of deaths. It is followed by hypertensive diseases at 5.5%. Diabetes mellitus became the third most common natural cause of death and remained in the same position in 2018, being responsible for 5.5% of deaths (StatsSA, 2022). The top three were followed by influenza and pneumonia at 5%, cerebrovascular diseases at 4.9% and human immunodeficiency virus (HIV) disease, responsible for about 4.8% of all deaths.

### ***Mpumalanga Leading Underlying Nonnatural Causes of Death***

The table below shows the underlying non-natural causes of death for 2018 in Mpumalanga Province (StatsSA, 2022). It is shown that the most common cause of nonnatural deaths is other external causes of accidental injury, which accounted for 72% of all unnatural deaths in the province. Transport accidents came second with 16%. These causes of unnatural deaths were followed by assaults, which accounted for 7% of deaths.

## **KEY THEMES**

The Mpumalanga Department of Health MDoH had recently revised its research strategy into a streamlined model arranged by three categories: clinical, public health/health systems and community, as they reflect the health system from the inside (service providers) and outside (users), however, the three areas can overlap. In this section, a review of the current research evidence organised by the 3 health research areas as defined by MDoH and data extraction are discussed. Subsequently, Annexure 1 lists the Mpumalanga Research Agenda Themes/research priorities with suggested current local challenges.

## **Theme 1: Clinical**

Clinical research priorities were concentrated on infectious diseases, as they can appear as co-infections, especially when pregnant women follow-up without paying attention to other medical conditions besides pregnancy. According to the experiences of HIV-positive mothers, factors that help to prevent effective mother-to-child transmission include partner support, a history of having HIV-free children, and guidance from mother support groups (Mustapha et al., 2018). Malindi and Maputle (2024) study revealed that there are perceived practices that hinder the provision of support and perceived support provided to sustain Vertical Transmission and Prevention intervention during childbirth. Sustaining PMTCT interventions included how the male partner adheres to interventions that prevent the transmission of the virus, such as consistent condom use, especially during breastfeeding, support in exclusive breastfeeding, adherence to ART, and limiting the use of cultural practices. However, the persistently high prevalence of HIV among pregnant women in the rural community is deeply concerning, despite the encouraging decline in teen infection rates (Kharsany et al., 2015). The study findings revealed that there are a range of factors that influence HIV positive women on the use of the Prevention of Mother-to-Child Transmission (VTP) service. Stigma, discrimination, limited HIV knowledge, lack of partner and family support, and lack of friendly service from the health facility were factors that could hinder the utilization of the VTP service. The experiences of HIV positive mothers revealed that continuous partner support, a history of having an HIV free child, good health worker support, and advice from the mother support group were factors that promote utilization of VTP service (Malindi et al., 2024).

Regarding malaria, if the source reduction method was used to help lower malaria rates, it was expected that malaria would be eradicated and there is a guarantee of a favourable return on investment (Njau et al., 2021).

## **Theme 2: Public health / health systems**

The primary contributing factor identified in the literature that predisposes young people to susceptibility to serious diseases was malnutrition. Malnourished children's immune

systems are compromised, and they are more likely to die (Morales, Montserrat-De la Paz, Leon, Rivero-Pino, 2023) With a rapidly growing burden of noncommunicable diseases, chronic disease management has become a major priority for health systems / public health. Regarding the distribution of central chronic medications, the ratio of pharmacy staff to patients frequently exceeds the specified regulations. Therefore, staff members are overworked and there are long wait periods for patients (National Department of Health, 2018). In addition, Africa is expected to experience a three-fold increase in vaccine demand by 2040, although the continent has few domestic capabilities for vaccine production. This lack of production capacity, heavy reliance on foreign aid (Thompson, Grubo, Veller, Badenhorst, Nott, Debruyne et al., 2023). Public health is an important indicator of the healthcare system in any country. Other areas of public health research priorities include mental health, central chronic drug administration, and immunisation comes in the next place after infant and child health.

### **Theme 3: Community**

Alcohol and substance abuse are acknowledged as an increasing problem in SA, and the synergistic relationship between HIV and substance abuse is well documented. Although poorly understood, there has been a discernible increase in women abusing drugs (Oladeinde et al., 2020). There is a need for the development of interventions to address this topic through well-conducted research. Furthermore, traditional medicine has a significant impact on the population, especially pregnant women. This puts extra inquiries regarding the benefit of these remedies, making this a very essential research priority.

The prevalence of traditional medicine used during pregnancy and in labor was 69.9% and only 17.3% used these medicines for postpartum care. During pregnancy, 27.7% used soil from a mole hill, 21.6% used elephant dung, and 13.3% used *Fadogia ancyrantha*. These medicines were used primarily to facilitate labor (43.5%), avoid tears/stitches (19.7%), make delivery easy and safe (18.3%) and avoid prolonged labor (5%). However, only 9% of the participants reported having experienced adverse effects from using traditional medicines.

The use of traditional remedies in different forms during pregnancy and labor was very common, as confirmed by the high prevalence rate of 69.9%. However, some women

used more than one type of traditional medicine during pregnancy, labor, and postpartum care. However, the exact effects of some of these drugs on both mother and infant are not known and therefore it is necessary to study them in greater detail (Madiba and Ledwaba, 2022).

## **KEY FOCUS AREAS AS PROVIDED BY STAFF AND UNIT MANAGERS**

The Mpumalanga Department of Health has embarked on a novel approach to promote the adoption of research by engaging internal staff and managers in identifying key focus areas. Through a collaborative process, staff members were invited to contribute suggestions on research topics that would address their everyday needs and challenges. This inclusive strategy aims to foster a culture of continuous research and ensure active participation of employees. By involving staff from the outset, the department encourages ownership and investment in the research process, ultimately leading to more practical and relevant findings that address the pressing questions and challenges faced by employees in their daily work.

## **CONCLUSION**

Improving research acceptance is significant for healthcare practice and policy development. It not only leads to better working relationships between researchers and researchers, but it is vital to make better decisions about public health. Additionally, policymakers need information that is reliable, timely, clear, simple, and free from bias. All of these require adequate resources, extensive collaborative efforts, and constant engagements among stakeholders. However, collaborative and engagement efforts can be mainly effective when all parties agree in advance on a common research agenda and priorities. The extensive consultation process on the research agenda has resulted in research priorities being communicated clearly to a wider audience, while ensuring that they are current and address real-life problems affecting local communities and government.

**Appendix 1:** details the research priorities for the Department of Health in Mpumalanga Province

**Appendix 2:** Focus area: As submitted by unit managers and staff within the Mpumalanga Department of Health, these are structured as questions or problems that each unit wants answers to. Researchers are encouraged to use these to develop their own research topics, questions, and objectives

**Appendix 3** Outlines the process to be followed to improve research uptake.

## REFERENCES

Malindi, F.C. and Maputle, M.S. 2024. Involvement of male partners in sustaining interventions for preventing mother-to-child transmission of hiv among women with hiv. *International Journal of Maternal and Child Health and AIDS*. 13e023.

Morales, F., Montserrat-De La Paz, S., Leon, M.J., and Rivero-Pino, F. 2023. Effects of malnutrition on the immune system and infection and the role of nutritional strategies regarding improvements in children's health status: A review of the literature. *Nutrients*. 16(1):1.

Mpumalanga Provincial Government (2023). Mpumalanga District Municipalities- Spatial Overview. Available at <https://www.mpumalanga.gov.za> (accessed 5 November 2025)

Thompson, L.J.R., Grubo, M., Veller, M., Badenhorst, R.H., Nott, J., Debruyne, L. et al. 2023. Building global vaccine manufacturing capacity: Spotlight on Africa. *Vaccine*. 41(27):4050-6.

## APPENDIX 1: RESEARCH PRIORITIES

Key Theme	Sub-themes	Broader research topic	Immediate/Specific research questions if any	Responsive Departmental priority/strategy
1. C	1. HIV	Developing strategies for effective prevention of mother-to-child transmission.	Factors driving pediatric HIV infection, in the context of effective prevention of mother-to-child transmission program and regimens.	
li		Understanding awareness, knowledge, family support, and healthcare services providing on HIV.	Transmitted HIV Resistance, Treatment Outcome, Socioeconomic Effects of HIV, Safety of Medication, and Stigma in HIV.	
n			Evidence on knowledge and timing for women of childbearing age to seek medical consultation for HIV.	
i			HIV infection among high-risk professionals: Health workers.	
c				
a				
I				
2. Malaria		Combating malaria: research prevention and treatment	The efficiency of drug, vaccine, and diagnostic intervention options in the context of eliminating malaria.	
			Recognize how antimalarial medications interact with medicines used to treat other diseases such as HIV.	

<p><b>3. Tuberculosis</b></p>	<p>TB infection prevention, treatment, management and control</p>	<ul style="list-style-type: none"> <li>● Contributory factors for relapse in TB reinfection.</li> <li>● TB infection among high-risk professionals: Health workers.</li> <li>● The effect of multidisciplinary support in the management of TB.</li> <li>● The achievement of the national response goals needed to reduce the morbidity and mortality associated with tuberculosis.</li> <li>● Nurse-initiated MDR-TB treatment: feasibility, safety, and outcomes.</li> <li>● Socioeconomic effects of TB, safety of medication, and stigma in TB patients.</li> <li>● The impact of migrant workers on the management of tuberculosis.</li> </ul>
<p><b>4. COVID-19</b></p>	<p>Sequelae of COVID-19</p>	<ul style="list-style-type: none"> <li>● Incidence of cardio-pulmonary disease in patient diagnosed with COVID-19</li> </ul>
<p style="text-align: center;"> </p>		
<p><b>2. P u b li c h e a</b></p>	<p><b>1. Infant and child health</b></p> <p>Improvement in the accuracy of the data on death certificates, particularly when it comes to cause-of-death information.</p> <p>Determining factors that lead to immaturity and preterm birth.</p> <p>Feasibility and cost-effectiveness of establishing a national screening program for congenital and metabolic abnormalities.</p>	<ul style="list-style-type: none"> <li>● Retrospective study on the causes of pediatric deaths.</li> <li>● Identify and address the differences between the reported numbers of newborn deaths in the various systems.</li> <li>● Risk factors associated with intrauterine deaths.</li> <li>● Early prenatal care screening</li> <li>● Genetic counselling and genes for congenital anomalies</li> </ul>

I t h / H e a l	2. Mental health	Evaluation of postpartum depression	Assessment of medicalization of childbirth and motherhood and stigma.
			Prevalence and treatment of postpartum depression.
			Evaluation of governmental mental health services in primary care.
			Psychosis evaluation research
		Behavioural problems among schoolchildren.	Prevalence of behavioral problems among schoolchildren.
t h s y	3. Epilepsy, Leprosy and Albinism	People living with Epilepsy/ albinism/leprosy/	Management of people living with Epilepsy/ albinism/leprosy.
s t e m s	4. The Central Chronic Medicines Dispensing and Distribution (CCMDD)	Level of Satisfaction and Adherence to Using CCMDD: Healthcare Providers and Patient Perspective.	DAPLANEDS (Chronic Care Medicine Delivery and Dispensing): CCMDD efficiency, effectiveness and disease outcome in low-resource community setting.
			Evaluation of supply chain management in terms of prioritization of needs, procurement policy, and resource distribution.
			Assessment of access to essential medicines.
	5. Immunisation	Expanded Program on Immunization (EPI)	Cost-effectiveness and bio-efficiency of Expanded Program on Immunization (EPI).
			Assessment of the effect of the undocumented / migration population on the success and effectiveness of vaccination programs.

6. Diabetes and hypertension	Incidence and prevalence of diabetes and hypertension	Audit of life-style; Health-seeking behaviours
3. C	1. Alcohol and substance abuse among individuals.	Association of substance abuse with mental health (psychosis)
o	substance abuse	Interventions to address parental and parental substance abuse.
m		Overcoming psychological obstacles in the treatment of drug misuse
u		Development of guidelines and protocols for collaboration initiatives between western medicine and traditional medicine;
n	2. Traditional medicine	Assessment of policy and practice disconnect of traditional health practices and legislation.
i	Impact of health promotion and social networks on health seeking behaviors and the use of traditional medicine.	Traditional medicine and outcomes in pregnancy, labour and delivery
t		Linkage of the health facilities to traditional health practice in the community
y		Traditional medicine and morbidity and mortality in children and adults

**APPENDIX 2: RESEARCH FOCUS AREA (Submitted by staff and unit managers)**

<b>Directorate and unit/ section</b>	<b>Research problem or challenge</b>	<b>Additional aspects</b>
<p><b>1. Internal Audit</b></p>	<p>a) The Effects of Inadequate Consequence Management Following Investigative Stakeholder Reports</p>	<ul style="list-style-type: none"> <li>• Causes of inadequate consequence management</li> <li>• Impact of poor consequence management</li> <li>• Non-compliance with laws and regulations</li> </ul>
<p><b>2. Pharmaceutical Services</b></p>	<p>a) Why are Government officials (all) who have worked more than 10 to 20 years not partially helping minors with post-matric study loans? Yet, they are tax-compliant and have been ravaged by COVID challenges.</p>	<p>Standardised selection criteria for the student, not what the parent earns, as this is for the child's future, not the parent's. Equality!!</p>

<p><b>3.PHC Ehlanzeni District</b></p>	<p>a) Why are patients on ART not receive treatment and therefore have a high lost to follow-up rate and difficulty in realising the second 95.</p>	<p>Utilization and capacity of CHWs to trace and follow patients.</p> <p>Capacity/understanding of OPMs in retrieving and taking action on the patient list from tier.net.</p> <p>Are current tracking and tracking systems helping the Department?</p>
	<p>b) Relation between herbal intoxication and neonatal deaths in facilities.</p>	<p>Does herbal intoxication lead to a high death rate among newborns?</p> <p>Relation between herbal intoxication and neonatal deaths in facilities.</p>

<p><b>4. Obstetrics and Gynaecology</b></p>	<p>a) How can the curative effect of pregnancy on dysmenorrhoea and endometriosis be emulated to treat these conditions without requiring sufferers to go through a pregnancy?</p> <p>The answer to this question could diminish the number of working days lost by incapacitating dysmenorrhoea (period pains) in young female healthcare workers (and young women working generally)</p>	<p>How advanced must a pregnancy be to provide permanent relief from endometriosis and/or dysmenorrhoea?</p> <p>Can a pregnancy be emulated to provide permanent relief from endometriosis and/or dysmenorrhoea?</p>
---------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>5. Primary Health Care (PHC)- Pharmacy section</b></p>	<p><b>Background:</b></p> <p>a) There are a number of Primary Health Care (PHC) facilities (clinics) in the province whose pharmacies/dispensaries operate without the custodians of medicines, that is, pharmacists and / or pharmacist assistants. Medicine-procurement, handling, distribution, dispensing and management, in these facilities, solely becomes the responsibility/duty of nurses (who are not trained for this).</p> <p>It has been my observation that there is generally a huge wasteful expenditure in PHC facilities that operate without professionally trained pharmacy personnel in terms of pharmaceutical costs.</p> <p><b>Research problem:</b></p> <p>b) A study that will compare the cost burden that the provincial health department would incur if it were to employ pharmacy personnel in PHC</p>	<p>The study should also compare the wasteful expenditure on drugs from PHC pharmacies run by pharmacists or pharmacists' assistants</p> <p><b>VERSUS</b></p> <p>The wasteful medicines expenditure of PHC pharmacies run by nurses.</p>
--------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

facilities operating without pharmacists or pharmacist assistants **VERSUS** the current cost incurred through wasteful expenditure of medicines in PHC facilities operating without pharmacists or pharmacist assistants.

<p><b>6. Human Resource/ EAP</b></p>	<p>a) Effects of Employee Assistance Programs (EAP) on employee mental well-being</p>	<p>The availability or lack of manpower to address EAP challenges faced by employees in the Department of Health</p>
<p><b>7. Pharmaceutical Service</b></p>	<p>a) Effect of central dispensing on health outcomes or patient satisfaction and perception of CCMDD</p>	<p>Impact of centralized dispensing on medicine adherence  Cost-effectiveness of the program  Policy implications and best practices</p>
<p><b>8. Rehab</b></p>	<p>The use of assistive devices in the community: Follow-up in the community of everyone that was issued standing frames: Have they made a difference, are they being used correctly + maintained</p>	<p>Other devices can also be studied, e.g. hand splints, APT chairs, etc.</p>

**9. Physio**

*Compliance to the Ponseti method of club foot management: Parents of some children with club foot drop out of the programme, especially in the bracing stage. This leads to relapse, meaning that the process of weekly POP casts has to be started all over again. What are the reasons? How can these be addressed?*

**10. Steve & Emakhazeni PHC**

- a) Training and retention strategies for nurses, community health workers, and general practitioners.*
- b) Impact of workforce burnout and staff turnover on the quality of PHC services, particularly in rural areas.*
- c) The effectiveness of task shifting (eg, delegation of roles to nurses and community health workers) in improving service delivery*

<p><b>11. Steve Tshwete &amp; Emakhazeni PHC</b></p>	<p>Exploring the challenges and opportunities of digital health tools in PHC service delivery.</p>	<p>Examining the integration of digital health tools (eg, electronic health records, telemedicine) within integrated service models.</p>
<p><b>12. Emakhazeni PHC</b></p>	<p>The role of community health workers (CHWs) in improving health outcomes.</p>	<p>Impact of CHWs on health outcomes</p>
<p><b>13. Kwazamokuhle CHC-Steve Tshwete</b></p>	<p>The effectiveness of community-based care models for the treatment of chronic diseases and HIV/AIDS.</p>	<p>The impact of integrating maternal, neonatal, and child health (MNCH) services with chronic disease management at the PHC levels.</p>
<p><b>14. Middelburg Civic</b></p>	<p>Factors Influencing the Bypassing of Semi-Urban Primary Health Care (PHC) Facilities by Patients in Favour of Urban Health Facilities: A Case Study in South Africa"</p>	<p>Patient Perceptions and Expectations</p>
<p><b>15. Provincial Office</b></p>	<p>M&amp;E &amp; Data Quality Assessment Assess completeness, accuracy, timeliness and use of routine health data across priority programmes and recommend system fixes.</p>	<p>How complete and timely are routine reports (DHIS, programme registers) for facility, district and provincial levels? Which indicators show inconsistent reporting or major errors? How often is data used in managerial decision-making, planning and resource allocation?</p>

<p><b>16. Provincial Office</b></p>	<p>PHC performance and referral system evaluation Evaluate PHC service availability, quality and effectiveness of referrals to higher care.</p>	<p>Are PHC facilities providing the full expected package (preventive, promotive, curative)? What proportion of referrals are appropriate and completed? Where do delays occur? What are the key community barriers to PHC utilisation?</p>
<p><b>17. Provincial Office</b></p>	<p>HIV/TB cascade evaluation Measure losses along the HIV/TB cascades and test interventions to improve linkage and retention.</p>	<p>What are testing, linkage, retention and viral suppression rates by district and population subgroup? What service delivery or social determinants predict loss to follow-up? What interventions (adherence clubs, community ART distribution) are most promising?</p>
<p><b>18. Provincial Office</b></p>	<p>Maternal, Newborn &amp; Child Health (MNC) Quality &amp; Outcomes Evaluation Assess clinical quality of MNC services and impact on outcomes (maternal and perinatal mortality/morbidity).</p>	<p>Are essential emergency obstetric and newborn care functions available and performed? Are perinatal deaths audited and actions implemented? What facility/process factors predict better outcomes?</p>
<p><b>19. Provincial Office</b></p>	<p>HRH &amp; workforce distribution study Diagnose staffing shortages, maldistribution and training needs; propose retention strategies.</p>	<p>Where are the critical gaps (nurses, doctors, pharmacists, CHWs)? What are drivers of turnover and vacancy? Which incentive and training models improve retention in rural areas?</p>

<p><b>20. Provincial Office</b></p>	<p>Supply chain &amp; essential medicines study Quantify stock out frequency, causes and impact on service delivery; test short fixes.</p>	<p>How frequent are stockouts of tracer medicines and commodities? Are stockouts driven by provincial procurement, central distribution or facility management? Do stockouts correlate with increased referrals, out-of-pocket purchases or poorer outcomes?</p>
<p><b>21. Provincial Office</b></p>	<p>Evaluation of the Community Health Worker (CHW) integration and PHC outcomes Why: The department integrated 5,581 CHWs and is scaling PHC/NHI priorities – but the report notes sustainability challenges (supplies, maintenance) and gaps in PHC performance monitoring. Primary questions</p>	<p>What is the effect of CHW integration on access (household coverage), PHC utilisation, and key outcomes (immunisation, ART retention, early ANC attendance)? What implementation barriers affect CHW effectiveness (training, supervision, supplies, referral linkages)?</p>

<p><b>22. Provincial Office</b></p>	<p>Operational evaluation of neonatal high-care and maternal/newborn services (why neonatal unit was unused, and pathways to reduce MMR/NMR)          Why: The neonatal high-care unit at Witbank was established but under-utilised for years; yet the department reports improvements in some maternal/newborn indicators. Understanding the mismatch between capacity and use is urgent</p>	<p>Why are newly built/performed neonatal units under-utilised? (staffing, referral, training, equipment maintenance, governance)          Which facility-level interventions reduce neonatal and maternal deaths most cost-effectively?</p>
<p><b>23. Provincial Office</b></p>	<p>Evaluation of procurement, asset and financial control (irregular expenditure / ICT and QMS gaps)          Why: AG flagged material irregularities (QMS dashboard not installed; fictitious payments; suspected fraud) and internal audit found asset traceability and procurement weaknesses. Evidence is needed to design corrective controls.</p>	<p>What were the root causes of the material irregularities and control breakdowns?          Which internal controls (ICT governance, asset tagging, procurement checks) most reduce risk and improve value for money?</p>

<p><b>24. Provincial Office</b></p>	<p>Evaluation of Ideal Clinic sustainability and facility maintenance (infrastructure maintenance, supply replenishment)  <i>Why: While many PHC facilities attained Ideal Clinic status, the report notes sustainability is threatened by insufficient maintenance budgets and equipment/supply replenishment</i></p>	<p>What factors predict retention vs loss of Ideal Clinic status over 12–24 months?  <i>Does ring-fenced maintenance funding or private partnerships improve facility readiness and patient outcomes?</i></p>
<p><b>25. Provincial Office</b></p>	<p>Effectiveness of EMS &amp; Planned Patient Transport (PPTS) capacity and dispatch  <i>Why: Integration of PPTS into EMS is complete but staff shortages and lack of call-taking/dispatch modules cause overtime and service gaps; new MICUs awaited registration.</i></p>	<p>What is the current EMS response performance (call-to-dispatch, on-scene, transfer times) and how does functionality vary by district?  <i>What staffing and ICT investments yield the largest improvements in response times and patient outcomes?</i></p>

- *At the end of portfolio studies, convene an evidence-to-policy workshop with provincial leadership, implementers and donors to present consolidated findings and packaged recommendations (fast wins, medium-term reforms, resource reallocation options).*
- *Produce an executive “Health Evidence Pack” with prioritised reforms and budget implications.*
- *Each study produces a short 3-4 page policy brief aimed at HOD and the Premier’s office, plus a technical appendix*

Additionally, Research and evaluation proposals conceptualised and developed based on the information around both strategic priorities and main performance gaps extracted from the Mpumalanga Department of Health 2020-2025 Strategic Plan.

## 1. Strategic priorities (policy relevant)

**Strengthen primary health care (PHC) and community-based services** – improve access, referral linkages and PHC package coverage.

**Reduce maternal, neonatal and child mortality** – improve quality of care in maternity and child health services.

**Control communicable diseases (HIV, TB, malaria, vaccine-preventable diseases)** – increase testing, treatment, retention, and prevention.

**Address non-communicable diseases (NCDs) and mental health** – scale prevention, early detection and chronic care management.

**Health systems strengthening: HR, supply chain, infrastructure and financing** – ensure staff, medicines, equipment and functional facilities.

**Improve health information systems, monitoring and evaluation and evidence use** – better data quality, reporting timeliness and use of data for decision making.

**Emergency preparedness, environmental and occupational health** – strengthen readiness for epidemics, climate and disaster risks.

**Equity and access: reduce geographic and socio-economic disparities** – target rural and marginalized populations.

## 2. Areas requiring improvement (high-priority diagnostics)

These areas are identified as high-impact areas for research, evaluation and corrective action:

a) **PHC facility performance & referral systems** Weak PHC performance, poor continuity of care and breakdowns in referrals to higher levels.

b) **Maternal, neonatal and child health (MCH) quality** Gaps in emergency obstetric care, perinatal audits, neonatal resuscitation, and postnatal follow-up.

c) **HIV/TB cascade performance** Testing gaps, linkage to care, retention, viral suppression, TB case detection and treatment completion.

d) **NCD detection and chronic care** Low screening coverage (hypertension, diabetes), poor adherence support, weak follow-up.

e) **Supply chain and stock outs (medicines and consumables)** Frequent stock outs, delayed procurement and poor inventory visibility

f) **Human resources for health (HRH)** Staffing shortages, maldistribution (rural vs urban), skills gaps and high vacancy/ turnover.

g) **Health information systems and data quality** Late/incomplete reporting, inconsistent denominators, poor data use in management meetings.

h) **Facility infrastructure and maintenance** Nonfunctional equipment, water/electricity interruptions, inadequate IPC (infection prevention & control).

i) Quality assurance and clinical governance. Limited morbidity/mortality reviews, weak clinical supervision and limited adherence to protocols.

j) Equity of access (rural and vulnerable groups): Transport barriers, out-of-pocket costs and culturally inappropriate services.

### APPENDIX 3: RESEARCH UPTAKE PROCESS

Research adoption is significant for healthcare practice and policy development. By definition, it is the adoption of health research project activities by the local research committee with the aim of informing planning, healthcare practice, and policy development (Sigudla & Maritz, 2021). The following are steps to be followed to improve the translation of research evidence into healthcare practice and policy.

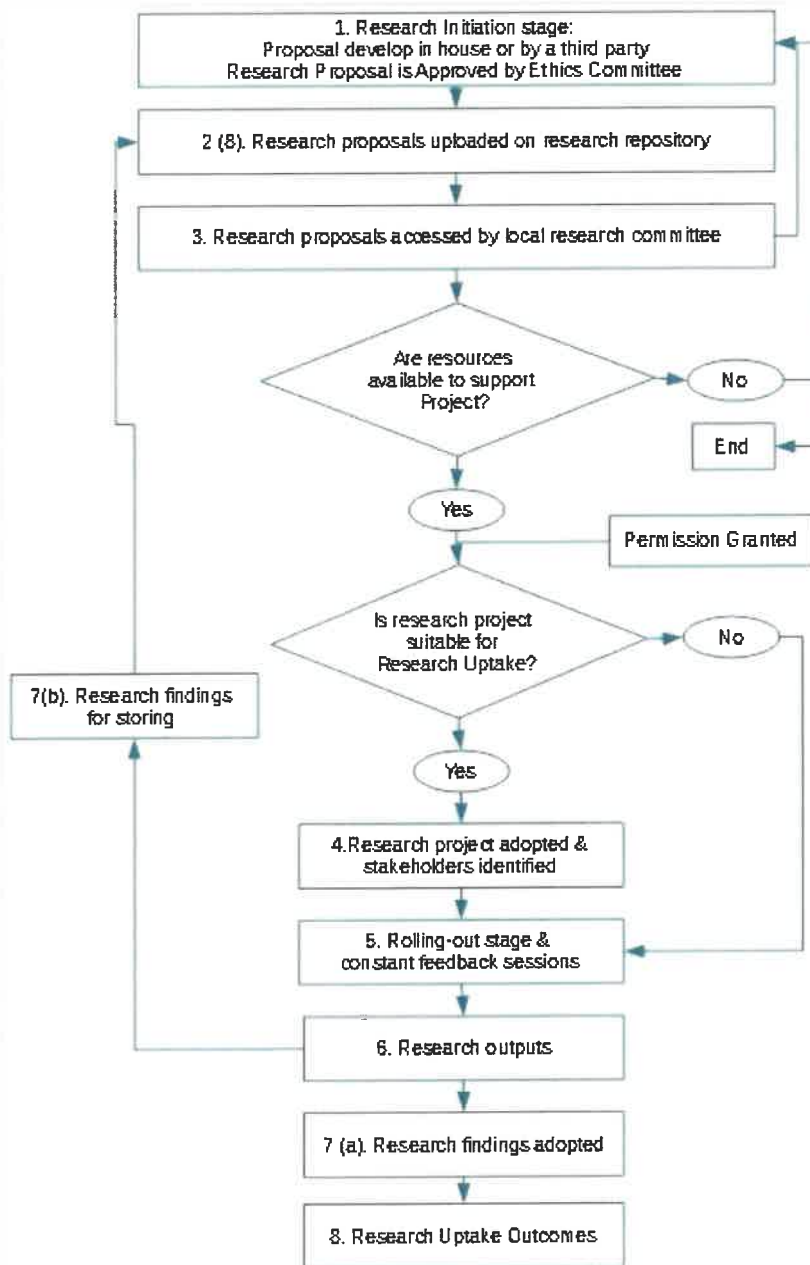


Figure 5: Logical framework for local research committees (Sigudla & Maritz, 2021)

## APPENDIX 4: MPUMALANGA RESEARCH APPROVAL/PERMISSION PROCESS

### Mpumalanga Research Permission Process

#### Step 1: Researcher complete LoS Form

The researcher complete a Letter of Support Form (LoS Form) providing details of the study and type of resources required from the sampled facilities.

#### Step 2: Researcher contact sampled facility/district

The researcher uses the completed form to initiate contact with the sampled facility/district where the study will be conducted. The relevant Senior Manager of the facility/district is expected to sign the completed LoS Form indicating if the study is supported or not supported. For example: if the study is conducted at one of the hospitals in Mpumalanga Province, the CEO of the Hospital should sign the form for the researcher. If the study is conducted at Ehlanzeni District, i.e Clinics and CHCs, the district manager must sign the form. The institution is entitled to request additional documents for clarity about the study.

#### Step 3: Researcher uploads supporting documents on the NHRD website

The researcher uploads the following documents on the departmental website for consideration by the provincial health research committee:

- A detailed proposal
- A valid ethics certificate
- A signed LoS Form
  - <http://nhrd.health.gov.za>
  - Log in, complete the form & upload all mentioned documents.

#### Step 4: MPHREC Feedback

The secretariat of Mpumalanga Provincial Health Research and Ethics Committee monitors applications weekly, interact with researchers through the NHRD website. Feedback is communicated within three weeks provided all documents are in order.

#### Step 4: Researcher's Feedback

Research feedback/final report must be uploaded on the NHRD website following completion of the study: <http://nhrd.health.gov.za>. You may be invited to present the findings in an annual feedback session.

#### Research Office Contact details:

No.3 Government Boulevard  
Indwe Building, 2<sup>nd</sup> Floor  
Riverside Park Ext. 2  
Mbombela, 1200

P O Box 11285  
Mbombela, 1200

Contact Number: 0137663766

## APPENDIX 5: FACILITY/DISTRICT LETTER OF SUPPORT



No.3, Government Boulevard, Fiverside Park, Ext. 2, Mbombela, 1200, Mpumalanga Province  
 Private Bag X11285, Mbombela, 1200, Mpumalanga Province  
 Tel: +27 (13) 766 3429, Fax: +27 (13) 766 3458

URho Letempho

Departement van Gesondheid

UmNyango WezeMaphilo

### Letter of Support (To be signed by relevant Senior Managers/Responsibility Managers)

1. Study Details	
1.1 Name of Applicant	
1.2 Contact Number:	(0) _____
1.3 Study Title:	_____
1.4 Data collection period to undertake the study:	Start: _____ End: _____
1.5 Provide summary of the study, study area, and how data will be collected (your response should <b>not</b> be more than the space provided:	

Please note that this letter is not an approval to undertake a study, but a support letter from identified facility/district i.e. the CEO/District Manager acknowledges to have been consulted on the study

2. Resources Required from Facility/Sub-district/Community				
2.1 Facility Staff Required to assist with the Study	Yes <input type="checkbox"/>			NO <input type="checkbox"/>
	<b>How many:</b> Nurses: <input type="text"/> Doctors: <input type="text"/> Space: <input type="text"/> Other, please specify: <input type="text"/> none			
2.2 Patients / Researchers' Records/Files	Yes <input type="checkbox"/>	Year: From: <input type="text"/> To: <input type="text"/>		NO <input type="checkbox"/>
2.3 Interviewing Patients/ participants at Facilities	Yes <input type="checkbox"/>			NO <input type="checkbox"/>
2.4 Interviewing Patients/ participants at Home	Yes <input type="checkbox"/>			NO <input type="checkbox"/>
2.5 Other, please specify:	<input type="text"/>			
3 Resource flow/benefits to the Provincial Department				
<b>3.1 The research is responsive to which National/Provincial/departmental priority/strategy/research agenda.</b>  <ul style="list-style-type: none"> <li>State your response:</li> </ul>				
3.2 Resource Flow (Are there benefits to Patients/community)	Yes <input type="checkbox"/>			NO <input type="checkbox"/>
	Please list: all potential remedial ideas emanated from research will be taken up for healthcare practice and policy			
3.3 Resource Flow (Are there benefits to Facility/District)	Yes <input type="checkbox"/>			NO <input type="checkbox"/>
	Please list: to create a linkage between all research stakeholders			
4 Availability of Required Clearance/s				
4.1 Ethical Clearance	Yes <input type="checkbox"/>	Pending <input type="checkbox"/>	NO <input type="checkbox"/>	
	Clearance Number: <input type="text"/>			
4.2 Clinical Trial	Yes <input type="checkbox"/>	Pending <input type="checkbox"/>	NO <input type="checkbox"/>	
	Clearance Number: <input type="text"/>			
4.3 Vaccine Trial	Yes <input type="checkbox"/>	Pending <input type="checkbox"/>	NO <input type="checkbox"/>	
	Clearance Number: <input type="text"/>			
4.4 Is conducted in a village led by tribal authority?	Yes <input type="checkbox"/>	Not Applicable <input type="checkbox"/>	NO <input type="checkbox"/>	
	Date tribal authority engaged: <input type="text"/>			

**5 Declaration**

**Declaration by Applicant:**

I Mr/Ms/Dr/Prof/Adv. \_\_\_\_\_ agree to submit/present the result of this study back to the CEO/Institution/District.

Estimated date of feedback: \_\_\_\_\_

**To be signed by a relevant CEO/District Manager/Programme Manager/Senior Manager in Mpumalanga Province**

**Supported / Not Supported**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Stamp

**A duly signed form can be uploaded on the nhrd website by the researcher or emailed to: [JerryS@mpuhealth.gov.za](mailto:JerryS@mpuhealth.gov.za) by the responsible Senior Manager when research is not supported**

**APPROVAL OF THE RESEARCH AGENDA**

**ADOPTED / NOT ADOPTED**

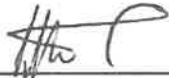


**PROF S MOKOENA  
CHAIRPERSON: MPHREC**

15/12/2025

**DATE**

**SUPPORTED / NOT SUPPORTED**



**DR LK NDHLOVU  
HEAD: HEALTH**

17/12/2025

**DATE**

**APPROVED / NOT APPROVED**



**HON SJ MANZINI (MPL)  
MEC: HEALTH**

25/12/2025

**DATE**

Effective date: 19/01/2026