UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

EVALUATION OF THE IMPLEMENTATION OUTCOMES OF THE FRAMEWORK AND STRATEGY FOR DISABILITY AND REHABILITATION FOR SOUTH AFRICA: AN EXPLANATORY MIXED- METHODS STUDY

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A Thesis submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Doctor of Philosophy Johannesburg, South Africa.

2 September 2025

DECLARATION

I, Naeema Ahmad Ramadan Hussein El Kout, declare that this thesis is my own, unaided work. It is being submitted for the Degree of Doctor of Philosophy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

I confirm lead authorship of the published articles included in this Thesis.

Naeema Ahmad Ramadan Hussein El Kout

2 September 2025

DEDICATION

I acknowledge that nothing is possible without the decree and help of God.

I am grateful for the support of my dear family in this journey.

PRESENTATIONS ARISING FROM THIS STUDY

1. **Hussein El Kout NAR**, Pilusa S, Benjamin-Damons N, Kagura J. *What policy implementation looks like: implementation of the framework and strategy for disability and rehabilitation in Gauteng, South Africa*, 2025. World Physiotherapy Congress, Japan, May 2025. Poster presentation.

2. **Hussein El Kout NAR**, Pilusa S, Benjamin-Damons N. *Document review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in South Africa*. World Physiotherapy Africa Region Congress, Cape Town, 2024. Podium presentation.

3. **Hussein El Kout NAR**, Benjamin-Damons N, Pilusa S. *Exploring Barriers and Facilitators to the Implementation of the Framework and Strategy for Disability and Rehabilitation in Gauteng, South Africa.* 7th Annual Africa Interdisciplinary Health Conference, Johannesburg, 2024. Podium presentation.

4. **Hussein El Kout NAR**, Benjamin-Damons N, Pilusa S. *Evaluation of the implementation of the FSDR in Gauteng: study protocol,* 2022. The IMASA Annual convention 2022. Podium presentation.

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2. **Hussein El Kout, NAR**., Pilusa, S., Benjamin-Damons, N., Kagura, J. (2025). Mapping the implementation process of the framework and strategy for disability and rehabilitation in Gauteng, South Africa. African Journal of Primary health and family medicine. [DOI not yet available].

3. **Hussein El Kout, NAR**., Benjamin-Damons, N., Pilusa, S. (2024). Document review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in South Africa. South African Journal of Physiotherapy. 29;80(1):2135. https://doi: 10.4102/sajp.v80i1.2135. [Conference abstract publication].

4. **Hussein El Kout, NAR**., Pilusa, S., Benjamin-Damons, N., and Kagura, J. (2025). Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study. Health Science Reports, 8(3), e70515. https://doi.org/10.1002/hsr2.70515

5. **Hussein El Kout, NAR**., Benjamin-Damons, N., and Pilusa, S. I. (2025). Document review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in Gauteng, South Africa. PloS one, 20(2), e0315778. https://doi.org/10.1371/journal.pone.0315778

6. **Hussein El Kout, NAR,** Pilusa, S., and Damons, N. (2023). Evaluation of the implementation outcomes of the framework and strategy for disability and rehabilitation for South Africa: a mixed-methods study protocol. *International Journal of Human and Health Sciences (IJHHS), 7*(4), 277-285. doi:http://dx.doi.org/10.31344/ijhhs.v7i4.587

ABSTRACT

Background

Disability remains a global challenge, affecting 15% of the population worldwide and 7.5% in South Africa. The increase in disability poses significant implications for the healthcare system, exacerbated by a quadruple burden of disease and systemic inequalities. To address these challenges, South Africa introduced the Framework and Strategy for Disability and Rehabilitation (FSDR) (2015–2020, extended to 2023) to align with international disability rights frameworks, such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The FSDR has not been evaluated to assess its implementation outcomes, limiting opportunities to inform future policy.

Aim

This study evaluated the implementation outcomes of the Framework and Strategy for Disability and Rehabilitation (FSDR) in Gauteng Province by assessing provincial processes, exploring stakeholder perceptions, and mapping influencing factors. This study aimed to develop evidence-based strategies to enhance the implementation of future disability and rehabilitation policies in South Africa.

Methods

The study employed an explanatory mixed-methods design that integrated quantitative and qualitative approaches. A document review analysed provincial reports on FSDR implementation, while semi-structured interviews and focus group discussions captured the experiences of key stakeholders, including rehabilitation professionals, policymakers, and community representatives. Data was analysed thematically and categorised using Proctor's Model, the Consolidated Framework for Implementation Research (CFIR), the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework and the ERIC Framework.

Key Findings

The evaluation revealed a mixed picture of the successes and challenges of implementing the FSDR. Key barriers include inadequate funding, limited rehabilitation resources, paucity of skilled personnel, and systemic inefficiencies in referral systems. Stakeholders also cited poor inter-sectoral collaboration and lack of standardised training as critical issues. However, the study also identified enabling factors, such as the involvement of disability advocacy organisations, the alignment of the FSDR with global disability rights goals, and the role of community-based rehabilitation initiatives. The study proposed implementation strategies to improve disability and rehabilitation policies, including optimising resource allocation, enhancing capacity-building for healthcare professionals,

and promoting inter-sectoral collaboration. It also emphasised the need for thorough monitoring and evaluation mechanisms to ensure effective implementation and track progress.

Conclusion

This study highlights the critical importance of evaluating health policy implementation to ensure its alignment with stakeholder needs and global standards. By addressing the barriers identified in FSDR implementation, South Africa can strengthen its commitment to inclusive healthcare and advance the rights and well-being of persons with disabilities.

Implications

The findings of this study contribute to the growing body of knowledge regarding the implementation of science and disability policy. Evidence-based recommendations offer a roadmap for policymakers to improve rehabilitation services and address systemic barriers to equitable healthcare. These strategies aim to uphold the rights of persons with disabilities, reduce health disparities, and enhance the integration of rehabilitation services into South Africa's health care system.

Keywords

Disability, Rehabilitation, Health Policy, Implementation Science, South Africa, Framework Evaluation, Disability Rights, Public Health Policy

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LIST OF ABBREVIATIONS

CBR	- Community-based Rehabilitation
CFACR	- Conceptual Framework for Adult Community Rehabilitation
CFIR	- Consolidated Framework for Implementation Research
COPD	- Chronic Obstructive Pulmonary Disease
CPD	- Continuing Professional Development
CRediT	- Contributor Roles Taxonomy
CRPD	- Convention on the Rights of Persons with Disabilities
DALYs	- Disability-Adjusted Life Years
DPO	- Disability persons organization
ECI	- Early childhood intervention
EPIS	- Exploration, Preparation, Implementation, and Sustainment
ERIC	- Expert Recommendations for Implementing Change-
FGD	- Focus Group Discussion
FRC	- Faculty of Health Sciences Research grants
FSDR	- Framework and Strategy for Disability and Rehabilitation
GCRO	- Gauteng City Region Observatory
GP	- Gauteng Province
HIV/AIDS	- Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
HPCSA	- Health Professions Council of South Africa
ICF	- International Classification of Functioning, Disability and Health
IJHHS	- International Journal of Human and Health Sciences
IMASA	- Islamic Medical Association of South Africa
INDS	- Integrated National Disability Strategy
IS	- Implementation Science
KZN	- Kwa-Zulu-Natal
M&E	- Monitoring and Evaluation
MDT	- Multi-disciplinary team
NCD	- Non-Communicable Diseases
NDOH	- National Department of Health
NDP	- The National Development Plan
NGAP	- New Generation of Academics Programme
NGO	- Non-Governmental Organizations
NHI	- National Health Insurance
NTDs	- Neglected Tropical Diseases
PEC	- Partnership, Engagement, and Collaboration
PHC	- Primary Health Care

PPPs - Public-Private Partnerships
PROMs - Patient-reported Outcome Measures
PWD - Persons with disabilities
RE-AIM - Reach, Effectiveness, Adoption, Implementation, and Maintenance
SASP - South African Society of Physiotherapy
SDG - Sustainable Development Goals
TB - Tuberculosis
UNCRPD - United Nations Convention on the Rights of Persons with Disabilities
UNCRPD - United Nation's Convention on the Rights of Persons with Disabilities
WHO - World Health Organization
WPRPD - White Paper on the Rights of Persons with Disabilities
YLDs - Years Lived with Disabilities

FORMAT OF THE THESIS

The thesis adheres to the integrated format specified in the Faculty of Health Sciences guide for PhD thesis at the University of Witwatersrand.

CHAPTER 1

The introduction chapter highlights the high prevalence of disability globally and in South Africa, its significant implications for healthcare service delivery, the critical role of rehabilitation in addressing health inequalities, and the importance of evaluating the implementation of the Framework and Strategy for Disability and Rehabilitation (FSDR) to inform future disability policies and practices. In this chapter, the gaps and problem statements are outlined. The aims and objectives of the study are also presented.

CHAPTER 2

The literature review chapter provides a comprehensive analysis of disability, rehabilitation, health policy, and disability rights in South Africa, examining key models, definitions, and the intersection with poverty while critically evaluating the Framework and Strategy for Disability and Rehabilitation (FSDR) and its role in advancing equitable community-based rehabilitation services amidst systemic challenges.

CHAPTER 3

This chapter presents the methodology of the study, comprising a paper published in the *International Journal of Human and Health Sciences,* which outlines the methodology for the entire PhD study.

CHAPTER 4

This chapter is presented as a published paper titled “Document Review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in Gauteng, South Africa.” This paper was published in *PLOS ONE*.

CHAPTER 5

This chapter presents a published paper titled “Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study “. This paper has been published in the journal titled, *Health Science Reports*.

CHAPTER 6

This chapter presents a paper accepted for publication titled “Perceptions of implementation process of the framework and strategy for disability and rehabilitation in Gauteng, South Africa”. This paper has been submitted to *the African Journal of Primary Health Care and Family Medicine* and has been accepted for publication. This article maps the process of the FSDR implementation in the Gauteng region.

CHAPTER 7

This chapter features a manuscript titled " Exploration of implementation strategies for the framework and strategy for disability and rehabilitation in South Africa.” This paper has been submitted to The Lancet Global Health journal and is currently under review.

CHAPTER 8

In this chapter, the study findings are discussed integrating all the papers in the previous chapters with current literature. The study’s strengths, limitations and implications are also discussed.

CHAPTER 9

This chapter presents the proposed implementation strategy model further expanding on the study’s contribution to the field and the entire thesis is concluded.

CHAPTER 1

1. BACKGROUND OF STUDY

1.1 INTRODUCTION

The prevalence of disability globally is a serious health challenge. Disability prevalence was estimated to be at 16% of the global population in 2023 (World Health Organization, 2023). A trend that is growing due to an increase in the aged population and rising chronic conditions (Daviaud et al., 2019). In South Africa, the prevalence of disability is at 5.5% of the population (Statistics South Africa, 2022). In South Africa, disability is often linked to the quadruple burden of disease, which is primarily managed through curative approaches without adequate consideration of its impact on functional ability (Carpenter, Nyirenda and Hanass-Hancock, 2022). The COVID-19 pandemic has significantly contributed to the increase in disability globally and in South Africa due to secondary complications associated with COVID-19, thus further increasing the burden of disability (Wyper et al., 2021). The high disability prevalence poses significant implications for healthcare service provision and a higher burden of chronic disease in an already resource-constrained South African healthcare system (Maart, 2015).

Disability is broader than the impairment an individual is experiencing or the inability to do functional activities (Leonardi et al., 2022; Dutra et al., 2016). Disability is an umbrella term that includes the interaction between impairments, activity limitations, and participation restrictions, influenced by personal and environmental factors in different contexts (World Health Organization, 2023). Therefore, disability should be understood as a dynamic and context-dependent phenomenon that goes beyond individual impairments, encompassing broader social and environmental factors that shape a person's ability to participate fully in society (Rehm and Shield, 2019).

Persons with disabilities (PWD) have greater health needs that are often unmet (McClintock et al., 2018). Some of the unmet needs experienced by PWD include inadequate access to rehabilitation services, limited availability of assistive devices, and barriers to inclusive healthcare (Vergunst et al., 2019). Unmet needs can lead to worsening disability, secondary complications, and an increased risk of death and rehospitalisation (Mutwali and Ross, 2019; Moodley and Ross, 2015). This has been further exacerbated by the COVID-19 pandemic owing to resource constraints (Wickenden et al., 2021).

A major unmet need globally and in South Affrica is access to rehabilitation (Wyper et al., 2021; Krahn, Walker and Correa-De-Araujo,2015). Rehabilitation is a comprehensive, multi-disciplinary set of interventions designed to enhance functionalities for all, minimise the

impact of disability and improve overall quality of life (World Rehabilitation Alliance, 2023). Rehabilitation supports individuals facing a broad spectrum of health challenges, not solely those with disabilities, by addressing their physical, cognitive, emotional, and social needs. Through holistic approaches, rehabilitation empowers people to actively engage in their communities (World Rehabilitation Alliance, 2023). Rehabilitation has come into the spotlight following the WHO's global call and support for Rehabilitation 2030, leading to an evolving definition of rehabilitation as the understanding of its role continues to improve (Philpott, McLaren, and Rule, 2020). Rehabilitation 2030 aims to ensure access to rehabilitation for all populations by 2030, addressing the vast disparities in global rehabilitation service provision (World Health Organization, 2017). Key action areas of this strategy include creating strong leadership and political support for rehabilitation, improving rehabilitation planning and implementation, and integrating rehabilitation into global health systems (World Health Organization, 2017).

Access to rehabilitation is limited in South Africa. Morris et al. (2021) highlighted the health system gaps related to rehabilitation services in the country. Some of the challenges affecting rehabilitation include inadequate funding, poor integration of rehabilitation into primary healthcare, and lack of policies that prioritise rehabilitation. In addition, rehabilitation is not prioritised, and there is a shortage of health workers and limited equipment (Louw et al., 2023; Tiwari, Ned, and Chikte, 2020). Other barriers to rehabilitation service delivery, as stated by Sherry (2014), include the lack of accessible and affordable transport, prolonged waiting times, and negative staff attitudes, which further limit access to healthcare for persons with disabilities. The multiple challenges facing rehabilitation care in South Africa will result in continued disparities in access to care, worsening health outcomes for persons with disabilities, and increased healthcare costs due to preventable complications and hospital readmissions (Booysens, 2022; Gysman, 2020).

Methods of addressing health inequalities and poor access to rehabilitation include public health policy interventions. Health policies are tools to ensure the actualisation of the rights of society, including persons with disabilities (Pho et al., 2021). South Africa developed the framework and strategy for disability and rehabilitation services (FSDR) (2015-2020) to align with the UNCRPD that was developed to promote the rights of persons with disabilities (Math et al., 2019). The FSDR is an intervention developed to guide rehabilitation service provision in South Africa and ensure access to rehabilitation for persons with disabilities (Maart et al., 2024). The FSDR expired in 2020; however, owing to the COVID-19 pandemic, it was extended until 2022. Despite expiring in 2022, the FSDR still remains relevant as it is currently the only guiding document and strategy for rehabilitation service provision in South Africa and is still being used to assess rehabilitation service provision performance. The FSDR aims to provide a comprehensive, integrated approach to improving disability and rehabilitation

services in South Africa, ensuring equitable access and enhancing the quality of care across the healthcare system (South African Department of Health, 2015). Studies exploring gaps in FSDR implementation and solutions are limited.

Implementation science plays a critical role in the policy landscape. Implementation science refers to the process of identifying barriers and facilitators for the uptake of interventions and the effectiveness of implementation (Bauer and Kirchner, 2020). An implementation science approach is necessary to identify what resources have been used, how they have been utilised, and what additional resources are required to improve the implementation of programs and policies in the future (Porter and Goldman, 2013). Although methods of implementing implementation science in relation to policy are complex, they remain integral to the success of future policy initiatives. Frameworks such as the Consolidated Framework for Implementation Research (CFIR), the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework, and the EPIS (Exploration, Preparation, Implementation, and Sustainment) framework are commonly used in implementation science (Nilsen and Bernhardsson, 2019).

The value of these frameworks lies in providing a structured approach to understanding and addressing barriers, facilitating the adoption of evidence-based practices, and ensuring the sustainability of interventions (Fernandez, Damschroder and Balasubramanian, 2022). Rehabilitation interventions can greatly benefit from implementation science by improving the integration, effectiveness, and long-term impact of rehabilitation policies and programs (Law and MacDermid, 2024). Studies that have used implementation frameworks such as the Proctor model, RE-AIM, EPIS, CFIR, and ERIC have found that these frameworks help identify barriers and facilitators for successful implementation, improve stakeholder engagement, and enhance the sustainability of rehabilitation interventions (Law and MacDermid, 2024; Juckett et al., 2020; Stone et al., 2018). These insights could be useful for improving rehabilitation services in South Africa by informing policy, guiding resource allocation, and optimising the integration of rehabilitation into the healthcare system.

1.2 PROBLEM STATEMENT

To address these challenges of access to rehabilitation care, and strengthen rehabilitation in South Africa, a health policy document, the Framework and Strategy for Disability and Rehabilitation (FSDR), was introduced in 2015 to guide the integration and expansion of rehabilitation services within the healthcare system (South African Department of Health, 2015). The FSDR was also developed in response to international pressure from South Africa ratifying the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in 2007. The FSDR timeline was initially 2015-2020 and was then extended to 2022 owing to the COVID-19 pandemic.

The FSDR is long overdue for implementation evaluation. Previous studies by Hussein El Kout, Pilusa, and Dlamini-Masuku (2022) and Maart, Mji, and Morris (2024) conducted a policy analysis of the FSDR and focused on aspects such as the actors, content, context, and barriers to the FSDR development process. These studies reported the factors influencing implementation and outcomes related to the FSDR in South Africa. The studies found that stakeholder dynamics, resource insufficiency, and a lack of comprehensive monitoring systems significantly impede the success of the FSDR in achieving its objectives (Maart et al., 2024; Hussein El Kout, Pilusa, and Masuku-Dlamini, 2022). The authors also identified persistent gaps in the leadership of implementation processes, training on policy execution and compliance, and a unified operational plan, which hindered the fulfilment of the objectives of the FSDR and should be addressed for effective future implementation (Hussein El Kout, Pilusa, and Masuku-Dlamini, 2022). Apart from these mentioned studies to the researcher's knowledge, there is no research exploring the perceptions of the implementation of the FSDR and there is no evidence of the evaluation of the implementation outcomes of the FSDR. The FSDR has lapsed and needs to be reviewed to understand how it was implemented, reveal flaws in the policy processes, identify factors that affected the implementation and generate a guideline to inform the implementation of future disability policy in South Africa.

1.3 AIM OF THE STUDY

To explore the experiences and perceptions of the FSDR implementation process and to evaluate the implementation outcomes of the FSDR for South Africa (2015-2020), extended to 2022, in the Gauteng province.

1.4 OBJECTIVES OF THE STUDY

1.4.1 To evaluate the paper-based provincial implementation of the framework and strategy for disability and rehabilitation for South Africa

1.4.2. To explore the perceptions of implementation outcomes and experiences of implementation of the FSDR in Gauteng among the stakeholders involved in the FSDR implementation.

1.4.3 To map the process of implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process.

1.4.4 To explore the factors influencing the implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process.

1.4.5 To map strategies to improve future implementation of the FSDR

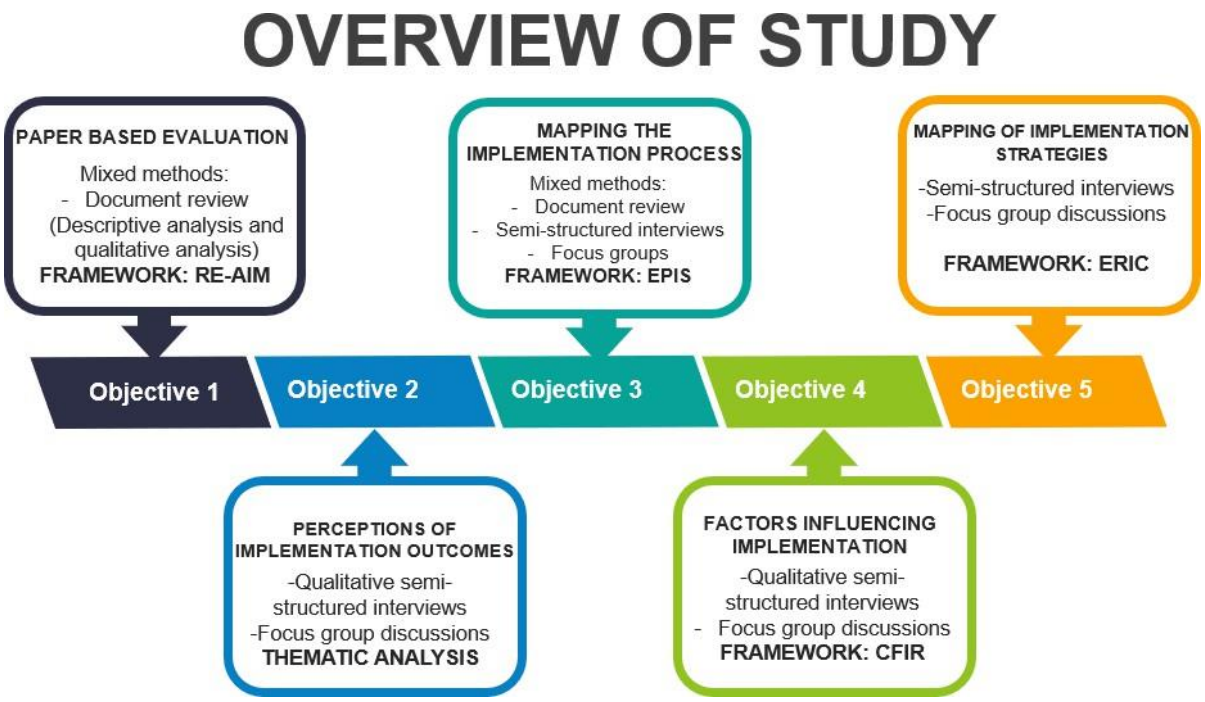

Figure 1.1: Overview of the Study

1.5 SIGNIFICANCE OF THE STUDY

Through an examination of the FSDR implementation process, this study elucidates the essential steps involved in its execution and the perceptions regarding its outcomes. The study is further substantiated by aligning with Sustainable Development Goal (SDG) 10, which focuses on reducing inequalities, as the failure to actualize disability rights leads to significant disparities for individuals with disabilities. The formulation of implementation strategies is imperative to provide actionable recommendations that will guide the future development and implementation of the FSDR, thereby ensuring more effective disability policy outcomes in South Africa. These implementation strategies are also required by the South African National Department of Health to enhance future implementation and disability policies within the country. In clinical practice, the findings of the current study may inform clinical decision-making and the implementation of policies to ensure that rehabilitation service provision meets high standards. Additionally, the study's findings may contribute to the advancement of implementation science in future rehabilitation services.

1.6 STUDY CONCEPTUAL FRAMEWORK

Miles, Huberman, and Saldana (2014) define a conceptual framework as a structured method for outlining the main objectives of a study, identifying key factors and variables, and illustrating their relationships, thereby guiding the research process in a systematic and focused manner (Gregory, 2020). The conceptual framework of this study was adapted from that of Proctor et al. (2009). Proctor et al.'s (2009) model highlights the importance of evaluating implementation outcomes, including acceptability, adoption, appropriateness, cost, feasibility, fidelity, penetration, and sustainability, to understand the success of

interventions. The utility of this model in implementation science research has been validated by numerous studies (Stevens et al., 2020; Rohweder et al., 2019; Legnick-Hall et al., 2022), making it highly relevant for examining rehabilitation policy implementation. Figure 1.2 illustrates the Proctor model with the central elements of this implementation research.

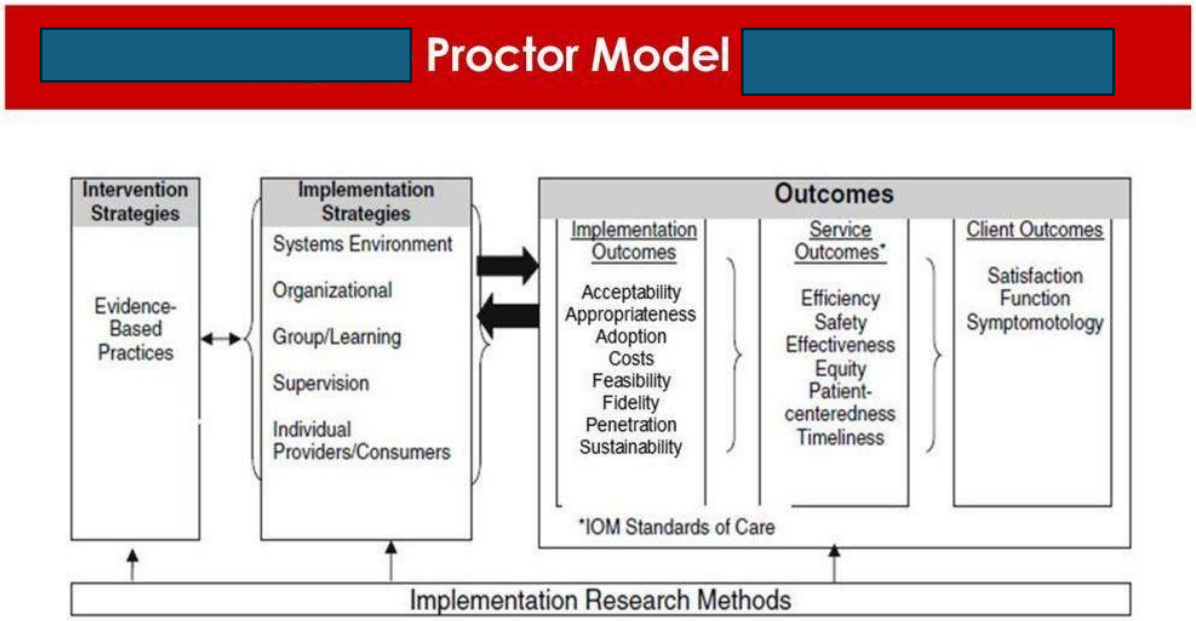

Figure 1.2: Proctor Model (2009) Showing the Types of Implementation Research Outcomes

The American Association of Public Health (2017) developed Proctor's (2011) implementation outcomes into a data collection map. For the purpose of this study, the perceptions of the following outcomes will be expanded on: penetration, adoption, acceptability, appropriateness, feasibility and sustainability. This is because the outcomes are the most appropriate for the FSDR in the South African context. The following table describes the operational definitions of the implementation outcomes according to Proctor et al.'s (2011) model:

Table 1.1: Operational Definitions of Implementation Outcomes

Implementation Outcome	Operational Definition
Penetration	This refers to the accessibility of the document; how many stakeholders did it reach
Adoption	This refers to the utilisation of the document in context
Acceptability	The understanding of stakeholders that the intervention or policy was agreeable to its content objectives
Appropriateness	The perception of stakeholders regarding the fit of the intervention to the context it is implemented in
Feasibility	This refers to how far the policy can be implemented in its context in a practical manner

Sustainability	This refers to the ability of the policy to be consistently and continuously implemented

Certain aspects of the above model were combined with FSDR to form the conceptual framework of this study. By applying Proctor's (2009) model, this study integrated the core principles of implementation science into the rehabilitation and policy context, providing a comprehensive approach to address challenges and enhance the effectiveness of the FSDR. Additionally, the FSDR's role in improving disability and rehabilitation services within South Africa aligns with key aspects of the Proctor model, such as improving the sustainability and penetration of rehabilitation services across the country. The application of this model to the FSDR will allow for a thorough examination of how these strategies and outcomes contribute to the policy's success or failure in real-world settings. This framework evaluates the implementation outcomes of the FSDR by integrating the Proctor Model (2011) with key FSDR elements. It assesses stakeholder perceptions across policy reach and uptake, stakeholder engagement and policy fit, and implementation feasibility and sustainability. These dimensions are linked to stakeholder engagement, governance and resource management, offering a structured approach to assessing effectiveness and identifying areas for improvement.

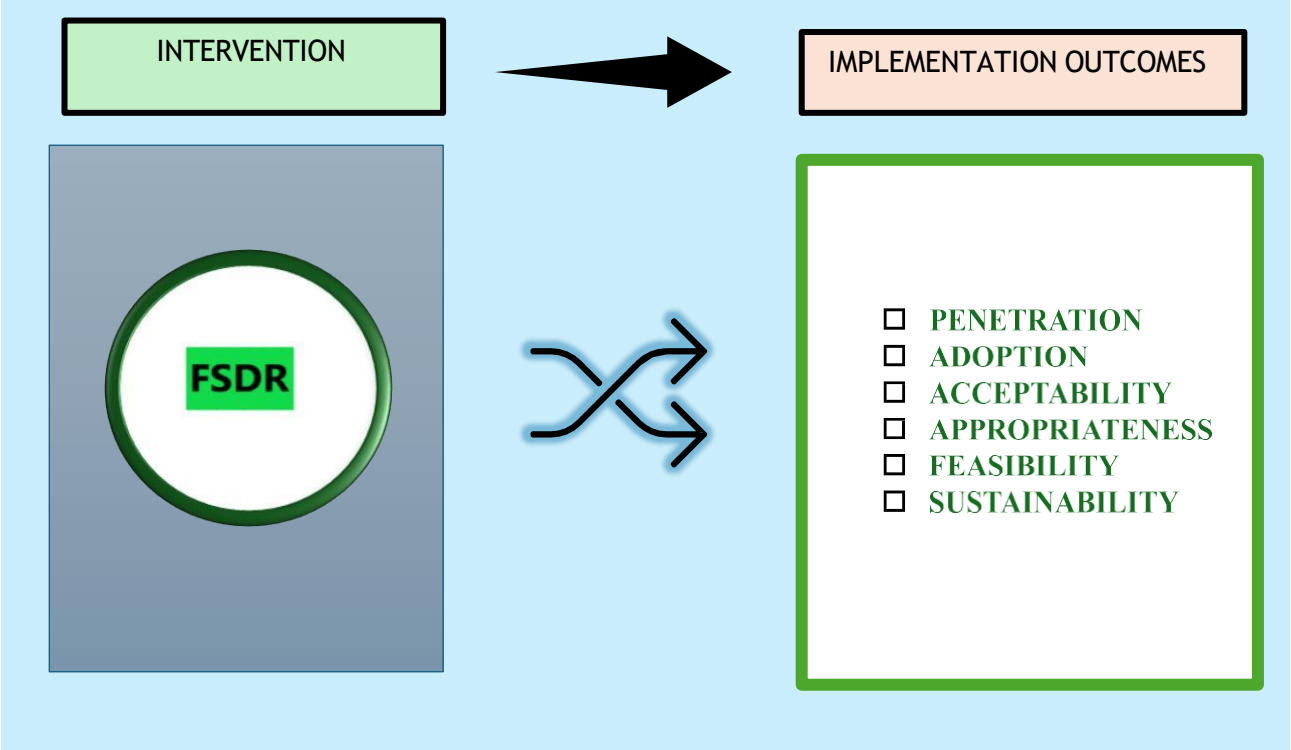

Figure 1.3: Conceptual Framework for this Study Adapted from the Proctor Model (2011)

1.7 CONCLUSION

This chapter has highlighted the significant burden of disability in South Africa and the critical role of public health policy, such as the Framework and Strategy for Disability and Rehabilitation (FSDR), in addressing health inequalities and promoting access to rehabilitation services. Evaluating the FSDR's implementation is essential to identify barriers and opportunities for improvement, thereby informing the development of future disability and rehabilitation policies. The next chapter will provide a comprehensive review of the literature on disability, rehabilitation, and health policy, with a particular focus on the South African context. It will explore key concepts, models, and frameworks, including global and local initiatives that shape the understanding of disability and guide policy and practice, setting the foundation for this study's methodology and analysis.

CHAPTER 2

2. LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides a comprehensive review of the existing literature relevant to the study's aim and objectives related to disability, rehabilitation, disability rights, and health policy, particularly within the South African context. The review explores various definitions and models of disability, the prevalence and causes of disability, the concept of rehabilitation, and the challenges associated with disability rights actualisation. It discusses health policy, its role in advocating for disability rights, and the Framework and Strategy for Disability and Rehabilitation (FSDR). The chapter concludes with an overview of implementation science and its relevance to this study.

The following Search engines such as PubMed, Science Direct, Google Scholar, and SCOPUS, were used to conduct the review. Key search terms included "disability," "access to health care," "health policy," and "disability strategy and framework for rehabilitation." Most articles reviewed were published between 2014 and 2024, while some older sources were included to establish theoretical frameworks and provide contextual insights.

2.2 DEFINING DISABILITY

2.2.1 Overview of Disability Definitions

Disability is a multifaceted concept with varying definitions depending on the context (McKinney and Swartz, 2022). Different models of disability offer distinct perspectives and focus areas for intervention, making it challenging to develop a one-size-fits-all approach. The various models of disability include the social, medical, biopsychosocial, and human rights models (Petasis, 2019). These models highlight the complexity of understanding disability and guide different approaches to care, advocacy, and policy.

The medical model views disability as a problem of the person directly caused by disease, trauma, or other health conditions (Amundson, 2022). It emphasises diagnosis, treatment, and rehabilitation. Critiques of this model argue that it often overlooks the social and environmental barriers faced by individuals (Hogan, 2019). While the social model describes disability as a socially created problem, emphasizing the societal barriers that restrict individuals (Lawson and Beckett, 2021). This model advocates for the removal of these barriers through social change and legislative action. The human rights model, which extends the principles of the social model, aims to ensure the realization of disability rights by asserting that disability does not impede the capacity for an individual's rights to be upheld (Lawson and Beckett, 2021).The biopsychosocial model integrates medical and social

models, considering the biological, psychological, and social aspects of disability (Taukeni, Mathwasa, and Ntshuntshe, 2023). The biopsychosocial view on disability integrates medical and social aspects going beyond impairments to include activity limitations and participation restrictions, highlighting the need for social inclusion, accessibility, and support systems (Wade and Halligan, 2017). This model provides a holistic view and supports interventions that address multiple aspects of an individual's life. Given the complexity of disability, a more holistic view of disability is deemed better because it acknowledges the interplay between physical, mental, and social factors, promoting a more inclusive and person-centred approach to care and support.

The World Health Organization (WHO) advocates for a more biopsychosocial model of health and disability (World Health Organization, 2023). The International Classification of Functioning, Disability and Health (ICF), developed by WHO in 2001, is a holistic framework that classifies health and disability based on body functions, activities, participation, and environmental factors, promoting a biopsychosocial approach to health assessment and inclusive policy development (World Health Organization, 2016). According to the ICF, disability is defined by the interaction between a health condition and contextual factors, which influence bodily functions and structures, activities, and participation in life (Mahdi et al., 2017). For this study, the operational definition of disability will align with the WHO's definition of disability (World Health Organization, 2023; Leonardi et al., 2022). This multidimensional approach facilitates a comprehensive understanding of disability in various contexts including South Africa (Leonardi et al., 2022).

In the South African context, definitions of disability must consider cultural, socio-economic, and legislative factors because these elements significantly influence how disability is perceived, experienced, and addressed within society (Swartz et al., 2011; McKenzie et al., 2020). Cultural perspectives shape how disability is understood and integrated into social norms, while socio-economic conditions can impact access to resources, healthcare, and opportunities for people with disabilities (Swartz et al., 2011). Additionally, the legislative framework determines the rights, protection, and support systems available, which play a critical role in the inclusion and empowerment of disabled individuals (McKenzie et al., 2020). Considering these factors, disability definitions can better reflect the unique challenges and experiences faced by individuals in South Africa, leading to more inclusive and effective policies and interventions, as discussed in the next section.

2.3 PREVALENCE OF DISABILITY

2.3.1 Disability Prevalence

Global

The Global Burden of Disease Study (2021) reported that, globally, Disability-Adjusted Life Years (DALYs) increased from 2.63 billion in 2010 to 2.88 billion in 2021. This rise is primarily attributed to population growth and aging. When adjusted for age and population size, the global all-cause DALY rate decreased by 14.2% between 2010 and 2019, from 39,352.9 to 33,763.6 per 100,000 population. However, this trend reversed during the COVID-19 pandemic, with age-standardized DALY rates increasing by 4.1% in 2020 and 7.2% in 2021, reaching 36,206.8 per 100,000 population in 2021 (Vos et al., 2021). In 2021, non-communicable diseases (NCDs) were the leading contributors to Disability-Adjusted Life Years (DALYs), accounting for 1.73 billion globally. Despite this increase in absolute numbers, the age-standardized DALY rate for NCDs decreased by 6.4% from 2010 to 2021, indicating improvements in managing these conditions relative to population size and age structure (Vos et al., 2021). These findings underscore the dynamic nature of global health challenges, highlighting the importance of addressing both mortality and morbidity to improve overall population health. Chronic illnesses significantly impact global health, with NCDs contributing to a growing burden in both high-income and low-income countries (World Health Organization, 2024). These global trends emphasize the critical need for accurate disability data and appropriate reporting systems, particularly in Africa, where gaps in disability statistics hinder effective policy development and service delivery (South African Medical Research Council, 2020).

Africa

Disability data are not readily available for Africa. In Africa, approximately 60-80 million individuals live with disabilities, accounting for 10% of the African population (Mkabile et al., 2021). Due to the disaggregation of disability-related data, it is estimated that this value could be closer to 20%, particularly in rural areas of Africa (Olusanya et al., 2022). Other studies show that the disability prevalence in Africa varies even more, with government estimates ranging from 2% to 5%, although research suggests that it could be as high as 20% to 22% due to factors such as conflict, displacement, and poor healthcare access (Sliwa et al., 2015; World Bank, 2023). Accurate data collection remains a challenge due to inconsistent disability definitions, limited resources, and poor implementation of inclusive policies (Kahonde and Mji, 2024). Communication barriers, conflict-affected populations, and nomadic communities further complicate survey efforts. Disabilities in Africa include physical, sensory, intellectual, and psychosocial impairments, but data disaggregation by age, gender, and location is often inadequate, making it difficult to tailor interventions (Ward, Hanass-Hancock and Amon, 2022). Women, older individuals, and rural populations experience higher disability rates, yet there are limited data on their needs (Prynn et al., 2021). In sub-Saharan Africa,

approximately 70 million children live with disabilities, but information on their conditions and access to care is scarce (Tiwari et al., 2022; Reiner and Hay, 2022). Without reliable data, policies, and support systems remain ineffective. Standardising disability definitions, investing in adequate data collection, and implementing inclusive policies are essential for improving disability services and outcomes across Africa (Opoku et al., 2021).

The health burden in Africa, as seen in Figure 5 below, measured in DALYs per 100,000 people, has evolved between 1990 and 2021. While respiratory infections and tuberculosis (TB) and maternal and neonatal conditions remained the leading causes of disease burden in both years, there have been notable shifts in the rankings of other conditions. Neglected tropical diseases (NTDs) and malaria remained a significant contributor, ranking third in 2021, up from fifth in 1990. A major change observed is the increasing burden of non-communicable diseases (NCDs) such as cardiovascular diseases, which moved from 7th place in 1990 to 4th place in 2021, and mental disorders, which rose from 14th place to 8th place. Additionally, the impact of other COVID-19 outcomes emerged as a new burden, ranking 9th in 2021. While some conditions, such as nutritional deficiencies, dropped in rank from 8th in 1990 to 16th in 2021, others, including digestive diseases and musculoskeletal disorders, maintained similar rankings. Injuries, encompassing self-harm, violence, and transport-related incidents, have experienced a slight decline in rank but continue to be of considerable significance. Injuries, including self-harm and violence and transport injuries, slightly declined in rank but remain significant. This shift highlights the growing impact of NCDs alongside persistent infectious diseases, emphasizing the need for integrated health interventions addressing both communicable and non-communicable conditions in Africa.

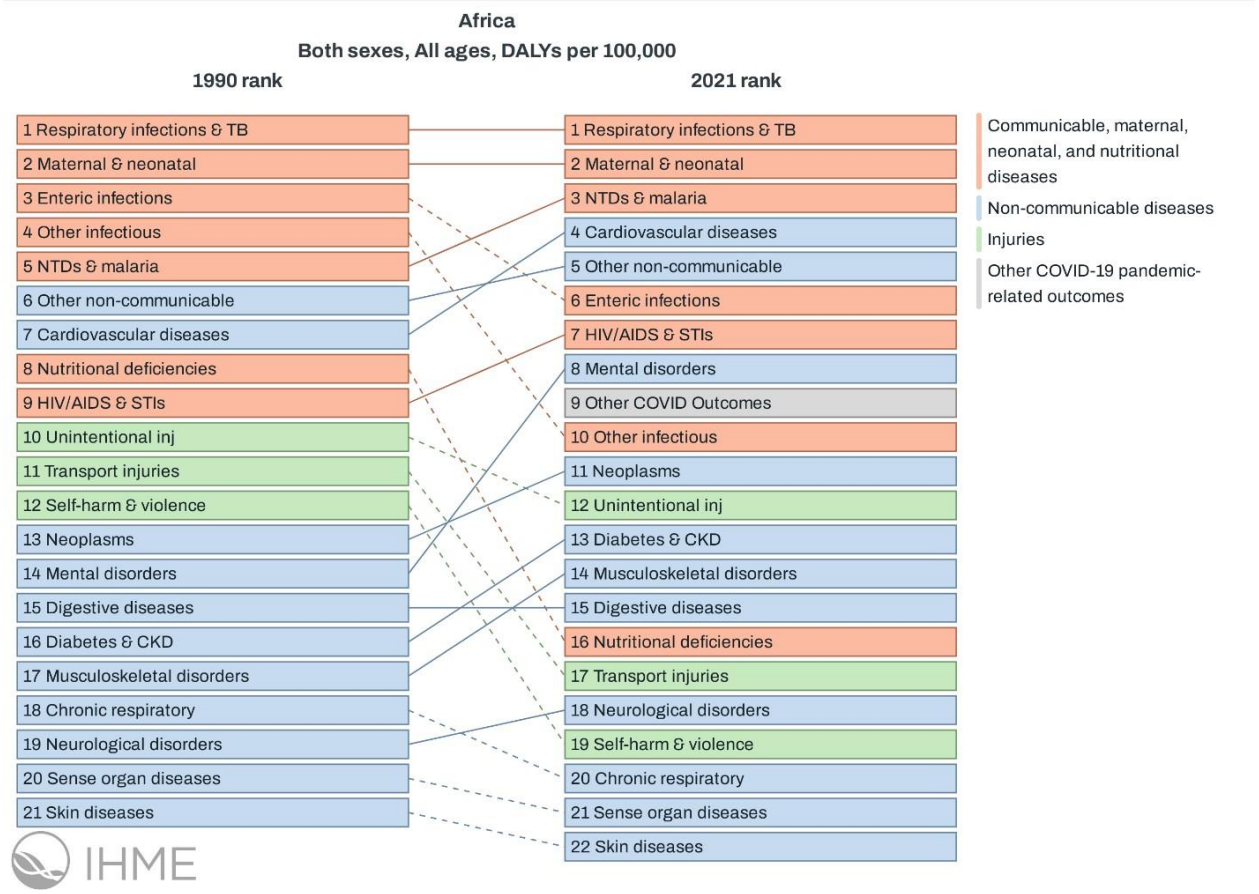

Figure 2.1: Health Burden in Africa Comparing 1990 and 2021 (Source: Global Burden of Disease Study 1990 and 2021, Institute for Health Metrics and Evaluation, accessed 16/02/2025)

South Africa

The burden of disability is high in South Africa. Over the years, the rate of Years Lived with Disability (YLDs) per 100,000 people in South Africa has been increasing (Vos et al., 2021). In 1995, the YLD rate in South Africa was approximately 10,400 per 100,000, and by 2020, it had risen to around 12,600 per 100,000 (Carpenter, Nyirenda and Hanass-Hancock, 2022). In Gauteng, the most populated province, the YLD rate was about 11,200 per 100,000 in 1995 and increased to over 13,000 per 100,000 by 2020. This trend shows that Gauteng and South Africa's YLD rates converged before sharply increasing, surpassing 13,000 per 100,000. Meanwhile, the global rate remained significantly lower, showing a steady increase with a sharper rise after 2015. This suggests that disability burdens have increased more rapidly in South Africa and specifically Gauteng than in the global average, emphasizing the need for targeted interventions and improved healthcare policies (Vos et al., 2021).

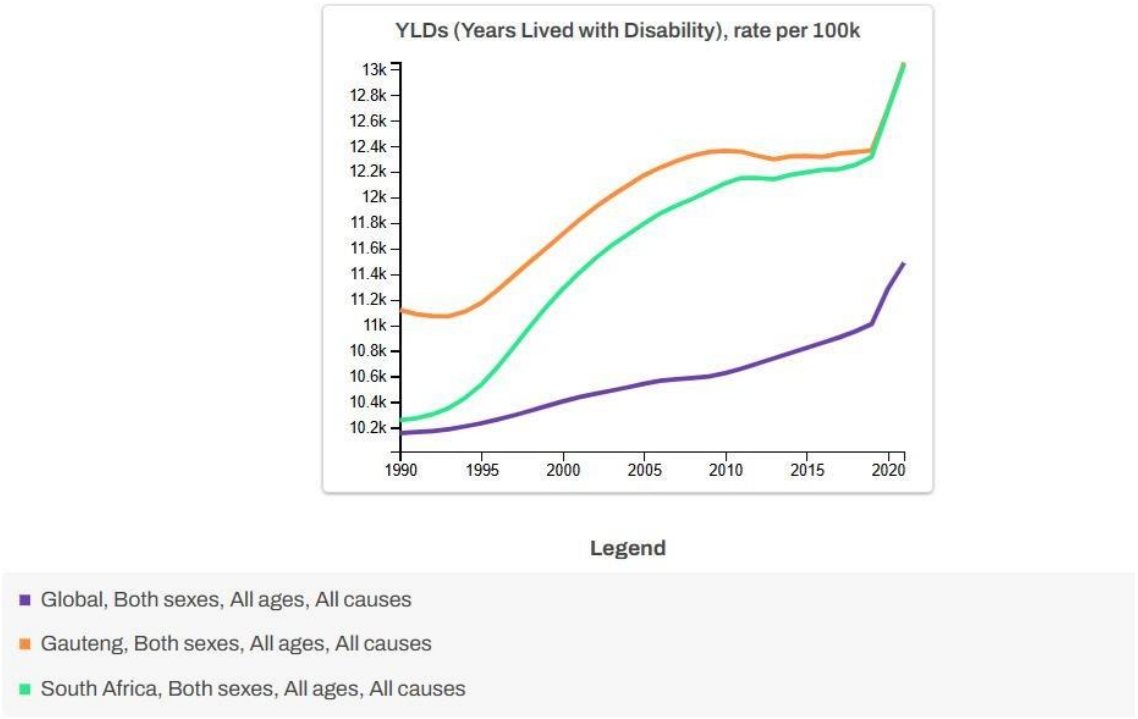

Figure 2.2: Years Lived with Disability Comparison between Globally, South Africa and Gauteng (Source: Global Burden of Disease Study, 2021, https://vizhub.healthdata.org/gbd_results/)

In South Africa, the prevalence of disability is significant; however, it is reported to be declining (Parry, 2022). In the 2016 Census, the disability prevalence was reported to be 7.5% of the population (Statistics South Africa, 2016). The 2022 census report had a disability prevalence of 5.5% in South Africa, with a prevalence of severe disability of 3.4% (Statistics South Africa, 2022). It is crucial to recognize that the census primarily addresses physical disabilities, not including learning and mental disabilities; consequently, a significant number

of individuals with disabilities may be overlooked. However, it is important to note that the census only focuses on physical disabilities, such as learning and mental disabilities; therefore, many persons with disabilities could be missed. While a decline in prevalence has been reported, it is important to note the underreporting of disabilities as a whole in South Africa, with many missed cases, particularly in rural areas (Amosun et al., 2019). Additionally, the decline in the prevalence of disability could be due to stigma associated with disability, which prevents self-reporting, and a lack of a clear definition of disability (Pillay, Duncan and de Vries, 2021). Moreover, the tools used to measure disability vary in definition, criteria, and data collection, leading to underreporting (Dube and Mont, 2021). Inconsistencies among census data, healthcare records, and social grant assessments cause gaps in disability prevalence estimates, affecting policy planning, resource allocation, and service delivery (Vanderschuren and Nnene, 2021).

The South African context presents unique challenges and opportunities to understand the prevalence of disabilities. National surveys, such as the General Household Survey and Community Survey, provide valuable data on disability prevalence and distribution across different provinces and demographic groups (Salinas-Rodríguez et al., 2020). These surveys reveal disparities in disability prevalence, highlighting the impact of socio-economic factors, access to healthcare, and environmental conditions on the experiences of people with disabilities. More recently, data collected by the Gauteng City Region Observatory (GCRO) highlighted the lack of data collected related to disability despite the number of resources invested in collecting other general household data (Akokuwebe et al., 2023). Assessing disability in this manner underestimates the extent of disability in South Africa and the significant contribution of non-communicable diseases to the increase in disability, beyond the current quadruple burden of disease. Measuring disability in this way underestimates the burden of disability in South Africa and the significant role that non-communicable diseases play in increasing disability beyond our current quadruple burden of disease (Charumbira, Berner and Louw, 2022). This situation highlights critical gaps in disability data in South Africa, which must be addressed to better understand the causes and impacts of disability. It is essential to explore the underlying causes of disability, particularly the role of non-communicable diseases and other socioeconomic factors in exacerbating disability rates.

2.4 CAUSES OF DISABILITY

2.4.1 Global

The global burden of disability is driven by various factors, including chronic conditions such as low back pain, diabetes, cardiovascular diseases, mental health disorders, injuries, and infectious diseases (Krahn, 2021). Non-communicable diseases (NCDs) are among the leading contributors to disability worldwide, with musculoskeletal conditions, particularly low

back pain, ranking as the top cause of years lived with disability (Vos et al., 2020). In addition, conditions such as stroke, depression, and chronic respiratory diseases significantly contribute to the global disability burden, underscoring the need for holistic and integrated healthcare approaches (GBD 2019 Diseases and Injuries Collaborators, 2020). The global impact of COVID-19 and its long-term consequences have yet to be fully understood. Lastly, the global impact on COVID-19 and the long-term impact has not been fully realised (Lebrasseur et al., 2021).

Beyond these direct causes, socioeconomic factors also play a crucial role in shaping the prevalence and impact of disabilities. Poverty, limited healthcare access, and inadequate rehabilitation services contribute to poorer health outcomes and higher disability rates in disadvantaged communities (Ataguba, Akazili and McIntyre, 2011). The interplay between these factors underscores the need for a more detailed analysis, supported by case studies and data, to better inform policy and intervention strategies (Trani et al., 2021). Given that chronic conditions and injuries are not managed holistically in many settings, the burden of disability is expected to rise unless comprehensive, multi-sectoral interventions are implemented.

Africa

Disability in Africa is driven by both communicable and non-communicable diseases (NCDs). In 2021, the top ten conditions contributing to Disability-Adjusted Life Years (DALYs) in Africa were lower respiratory infections, neonatal disorders, malaria, diarrheal diseases, HIV/AIDS, ischemic heart disease, stroke, tuberculosis, meningitis, and congenital anomalies (Liu et al., 2024). While communicable diseases such as lower respiratory infections, neonatal disorders, and malaria continue to dominate, NCDs like ischemic heart disease and stroke are rising in prominence (Peer, Baatiema and Kengne, 2021). Notably, ischemic heart disease has become a significant contributor to the disease burden in the region. Additionally, the emergence of COVID-19 has further impacted health outcomes, underscoring the pandemic's effect on existing health challenges. Current evidence also indicates a rise in multimorbidity in Africa, which will further worsen disability outcomes (ref)

Disability due to chronic conditions is underestimated. Regarding Years Lived with Disability (YLDs), NCDs are prominent contributors, with conditions such as depressive disorders, anxiety disorders, and diabetes mellitus among the leading causes, reflecting the substantial impact of mental health issues and chronic diseases on the population (Amu et al., 2024). The increasing burden of NCDs signals an urgent need for healthcare systems in Africa to adapt by integrating services that address both infectious and non-communicable diseases,

as well as mental health support (World Health Organization, 2021; Pan American Health Organization, 2021).

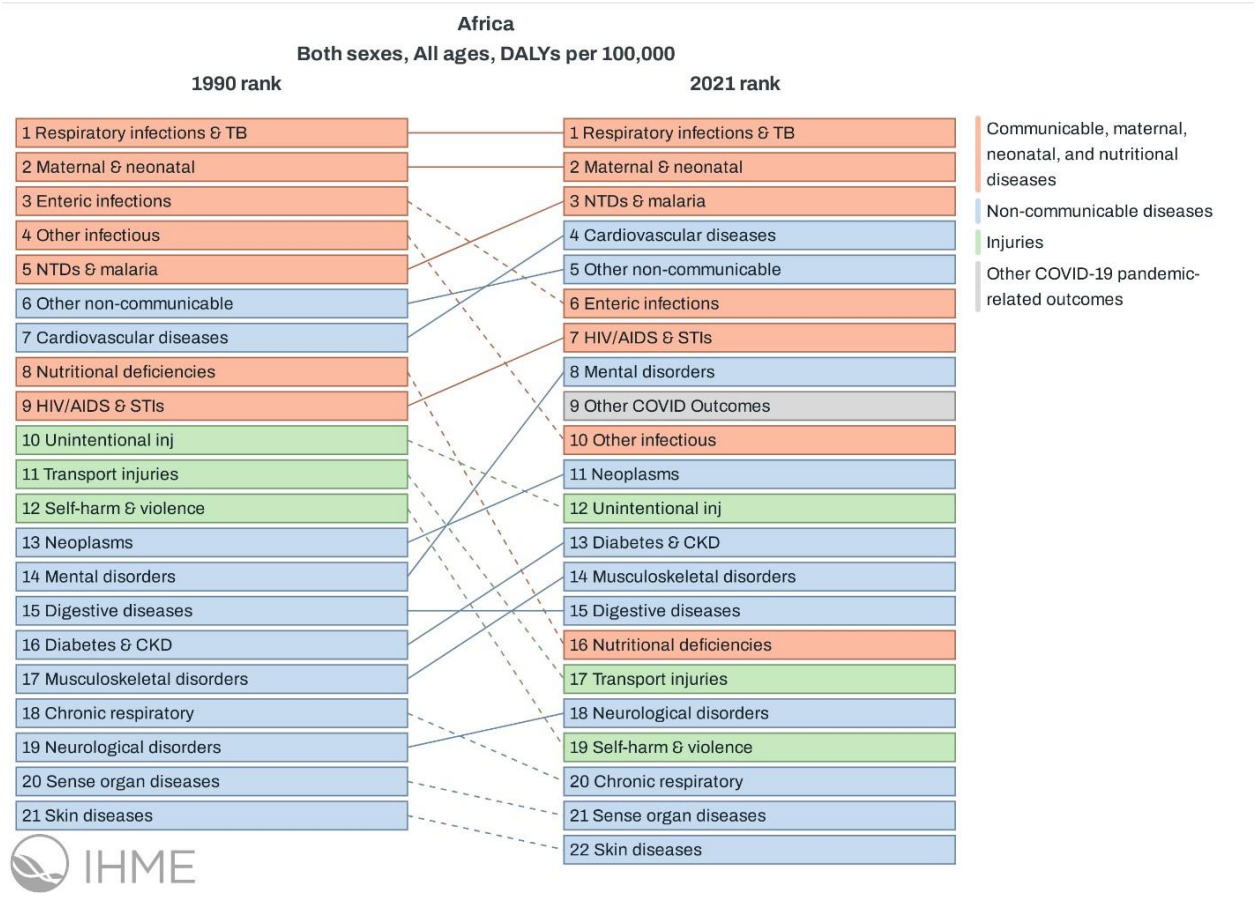

Figure 2.3: Health Burden in Africa Comparing 1990 and 2021 (Source: Global Burden of Disease Study 1990 and 2021, Institute for Health Metrics and Evaluation, accessed 16/02/2025)

South Africa

Disability in South Africa is linked to the quadruple burden of diseases. The primary contributing factors encompass non-communicable diseases such as cardiovascular diseases, cancer, respiratory diseases, and diabetes; infectious diseases including tuberculosis, HIV/AIDS, and malaria; maternal and neonatal disorders; and injuries resulting from road accidents, violence, and occupational hazards (see figure 4).The main attributing conditions include non-communicable diseases such as cardiovascular diseases, cancer, respiratory diseases, and diabetes; infectious diseases such as tuberculosis, HIV/AIDS, and malaria; maternal and neonatal disorders; and injuries from road accidents, violence, and occupational hazards (see figure 4) (Global Burden of Disease Study, 2021). Mental health conditions, including depression, are often overlooked contributors to disability and affect individuals' daily functioning (Pillay, Duncan, and de Vries, 2021). Given this diverse range of contributing factors, addressing disabilities in South Africa requires a comprehensive

approach that includes disease prevention, improved healthcare access, and mental health support.

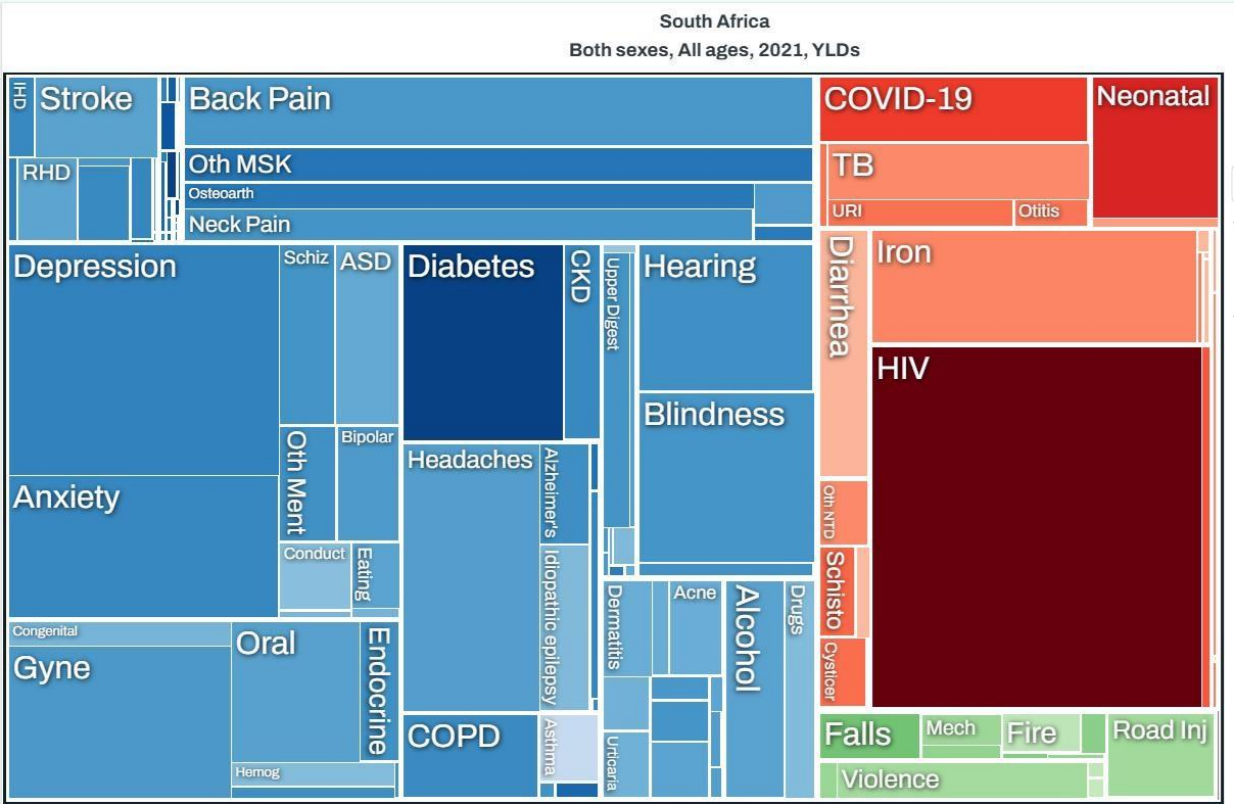

Figure 2.4: Years Lived with Disability in South Africa with Attributable causes of Disability (Global Burden of Disease Study, 2021, source: https://vizhub.healthdata.org/gbd-compare/)

The top five causes of disability in South Africa, based on years lived with disability (YLDs), include HIV/AIDS, chronic respiratory diseases, Type 2 diabetes, Stroke, and musculoskeletal disorders (Louw et al., 2021). HIV/AIDS remains a leading cause of disability due to its long-term effects on physical and cognitive function, particularly when complicated by tuberculosis (TB) (Myezwa et al date; Louw et al., 2021). HIV and antiretrovirals are associated with impairments such as muscle weakness, chronic fatigue and reduced cardiovascular endurance. However, long term care into functional fallout is neglected. Other chronic conditions that contribute to disability include chronic respiratory diseases like asthma and chronic obstructive pulmonary disease (COPD) (Momtazmanesh et al., 2023). These conditions are often exacerbated by environmental factors such as air pollution and smoking. Type 2 diabetes has seen an increasing burden, affecting mobility and quality of life through complications like neuropathy and cardiovascular diseases (Ahmad et al., 2022). Hearing loss, particularly due to age-related degeneration and TB treatments, has also emerged as a major contributor to disability. Lastly, musculoskeletal disorders, including low

back pain and arthritis, significantly impact individuals' ability to work and perform daily activities (Ernstzen and Louw, 2024; Louw et al., 2021).

While the quadruple burden of disease plays an important role in contributing to disability in South Africa, the increasing role of non-communicable diseases (NCDs) as the leading cause must not go unnoticed (Samodien, 2021). NCDs, including cardiovascular diseases, diabetes, chronic respiratory diseases, cancer, and mental health disorders, have surpassed infectious diseases as primary contributors to disability and mortality in South Africa (Bradshaw et al., 2021). Samodien et al. (2021) characterize non-communicable diseases (NCDs) as a significant cause of both cognitive and physical disabilities, primarily linked to the overconsumption or underconsumption of food, resulting in malnutrition. This condition is indicative of poor socio-economic circumstances. Samodien et al. (2021) describe NCDs as a catastrophic cause of primarily learning and physical disability, mainly associated with over- or underconsumption of food leading to malnutrition, which reflects poor socio-economic conditions.

Despite the increase in non-communicable diseases (NCDs), other significant contributors to disability in South Africa persist. Road traffic accidents constitute a major cause, frequently resulting in long-term physical impairments. This underscores the urgent need for enhanced road safety measures and improved emergency response systems. Despite the rise in NCDs, other significant contributors to disability in South Africa remain. Road traffic accidents are a major cause, often resulting in long-term physical impairments and emphasizing the urgent need for improved road safety measures and emergency response systems (Mkabile and Swartz, 2020). Violence, particularly gender-based violence, is another key factor, as survivors frequently experience both physical and psychological disabilities, requiring comprehensive medical and psychosocial support (Van der Heijden, Abrahams and Harries, 2019). Other causes of disability include genetic factors, birth defects, accidents, infectious diseases such as tuberculosis, as well as the impact of poverty and inadequate healthcare services (Mathye and Eksteen, 2016).

Recent interdisciplinary research has commenced an examination of the intersectionality of disability, gender, and violence, uncovering intricate vulnerabilities that necessitate specialized interventions. Interdisciplinary research has begun to explore the intersection of disability, gender, and violence, revealing complex vulnerabilities that demand targeted interventions (Van der Heijden, Harries and Abrahams, 2020). Considering that chronic conditions are not being managed comprehensively, and preventive measures remain insufficient, the burden of disability is anticipated to continue escalating. Given that chronic conditions are not being managed holistically and prevention efforts remain inadequate, the

burden of disability is expected to continue increasing. Without integrated healthcare strategies that include early detection, treatment, rehabilitation, and long-term management, South Africa is likely to face a growing population of people with disabilities, further straining the healthcare system and deepening existing inequalities. Addressing these challenges requires a multi-sectoral approach that prioritizes prevention, access to quality care, and social support systems to improve health outcomes and reduce the disability burden.

Social Determinants of disability

In South Africa, multiple social determinants contribute to disability, with poverty being one of the most significant factors. The national poverty line is set at R1,558 per person per month, with a large portion of the population living below this threshold (Omotoso and Koch, 2018). High unemployment rates, which stood at 32.1% in 2023, further exacerbated economic hardship, disproportionately affecting persons with disabilities who already face barriers to employment and education (Amosun, Jelsma and Maart, 2019). Limited access to quality healthcare, rehabilitation, and assistive devices in low-income communities increases the risk of preventable disabilities and worsens existing conditions (Froehlich- Grobe et al., 2021).

The inadequacy of accessible infrastructure and resources further constrains opportunities for social and economic participation, thereby perpetuating a cycle of poverty and exclusion for individuals with disabilities. The lack of accessible infrastructure and resources further limits opportunities for social and economic participation, trapping individuals with disabilities into a cycle of poverty and exclusion (Swartz et al., 2011). Despite legislation aimed at promoting equality, its implementation remains inconsistent, with a shortage of trained professionals in disability care and rehabilitation (Walton and Engelbrecht, 2022). Additionally, disability management in South Africa remains underdeveloped, lacking comprehensive systems that address both prevention and long-term support for persons with disabilities (McKenzie et al., 2020). Addressing these systemic barriers requires targeted policies to improve employment opportunities, strengthen rehabilitation services, and promote inclusive social and economic environments. Adequate rehabilitation services play a crucial role in mitigating these challenges. Other causes of disability include genetic factors, birth defects, accidents, infectious diseases such as tuberculosis, as well as the impact of poverty and inadequate healthcare services (Mathye and Eksteen, 2016). Additionally, social determinants, such as malnutrition, limited access to quality education, and environmental factors, contribute to the prevalence and severity of disability in the country (Lala et al., 2022).

There is a well-documented link between poverty and disability, with research highlighting how these two factors cyclically reinforce each other (Sherry, 2014). Poverty contributes to

disability by limiting access to healthcare, rehabilitation, and assistive devices, thereby increasing the risk of preventable disabilities (Schneider and Suich, 2021). Poor living conditions, malnutrition, and higher exposure to accidents, violence, and diseases further increase this risk (Bundy et al., 2020). Disability often leads to economic hardship due to increased medical expenses, reduced employment opportunities, and barriers to education, further entrenching individuals in poverty (Sherry, 2024). In South Africa, this intersection is particularly evident in rural and informal settlements, where access to services and economic opportunities is severely limited. While the social grants system, including disability grants, provides financial relief, it is often insufficient to lift individuals out of poverty. Although the grant is not designed to eradicate poverty, it serves as a crucial support mechanism to alleviate suffering associated with economic hardship (Van der Berg, Siebrits and Lekezwa, 2010).

In addition, limited access to healthcare and rehabilitation in marginalised communities exacerbates disability prevalence, as untreated conditions worsen over time (Plagerson, 2023). Addressing this issue requires inclusive policies that improve access to education, employment, and healthcare for people with disabilities. However, case studies of successful community-based interventions that break this cycle are lacking in the literature, making it difficult to identify and replicate effective strategies (Morris et al., 2021). Public health interventions aimed at reducing risk factors for non-communicable diseases (NCDs), accidents, and violence are essential for lowering disability rates and improving the overall quality of life (Sherry, 2014). A holistic understanding of disability, including physical impairments, activity limitations, and participation restrictions within specific environmental and social contexts, is necessary to break the cycle of poverty and disability (Hall and Visagie, 2022).

2.5 DISABILITY MANAGEMENT

Rehabilitation: Definition and Benefits of Rehabilitation

Rehabilitation is deemed necessary to achieve the sustainable development goal number 3 of good health and wellbeing. The World Health Organization defines rehabilitation as a set of interventions designed to optimise functioning and reduce disability (World Health Organization, 2024). Rehabilitation enables individuals with disabilities to achieve and maintain their best possible physical, sensory, intellectual, psychological, and social functional levels (French et al., 2022). Rehabilitation is the process of helping individuals with disabilities regain and maintain their highest possible level of physical, sensory, intellectual, psychological, and social function (World Health Organization [WHO], 2017). It involves medical, therapeutic, and assistive interventions designed to improve independence and overall quality of life (Bickenbach, Sabariego and Stucki, 2021). Prioritising rehabilitation is

essential for promoting inclusivity, boosting productivity, and upholding the dignity of people with disabilities, making it a vital part of any well-rounded healthcare system (WHO, 2017).

Rehabilitation benefits can be seen at an individual's level, household and at a systems level. The benefits of rehabilitation include better mobility, improved mental well-being, increased participation in daily and social activities, reduced reliance on caregivers, and enhanced overall health outcomes (Gandolfi et al., 2021; Silvers, 2022). By addressing impairments and functional limitations, rehabilitation empowers individuals to live fulfilling lives while also easing the long-term strain on healthcare systems (Cieza et al., 2021). Rehabilitation helps individuals with disabilities regain and maintain their best possible level of function through medical, therapeutic, and assistive support (Bickenbach, Sabariego and Stucki, 2021). It improves mobility, mental well-being, independence, and overall quality of life while reducing reliance on caregivers and easing pressure on healthcare systems (Silvers, 2022). Essential rehabilitation services such as physiotherapy, occupational therapy, and speech and audiology therapy enable individuals to adapt to their circumstances, facilitating greater participation in community life, education, and employment (An et al., 2024). Prioritising rehabilitation is key to promoting inclusivity, boosting productivity, and ensuring dignity for people with disabilities.

Beyond personal benefits, rehabilitation alleviates the burden on families, caregivers, and healthcare providers by promoting self-sufficiency. Early and sustained rehabilitation is also economically advantageous, as it prevents secondary health complications, reduces hospital readmissions, and enhances overall productivity by enabling people with disabilities to contribute to society (Naess et al., 2020). Naess et al. (2020) further highlight, through a systematic review, that early rehabilitation interventions effectively lower healthcare costs by reducing secondary complications. Sherry (2014) reinforces this by emphasises that rehabilitation plays a crucial role in the primary, secondary, and tertiary prevention of disease and disability. Strengthening access to comprehensive rehabilitation services is therefore essential to fostering inclusion, reducing disability-related inequalities, and ensuring that all individuals, regardless of their abilities, have the opportunity to can lead fulfilling lives (Morris et al., 2021).

The Demand for Rehabilitation

The demand for rehabilitation services has significantly increased over the years. an estimated 2.41 billion people globally need rehabilitation due to their illness or injury, representing at least one in every three individuals (Cieza et al., 2021). This demand has grown by 63% from 1990 to 2019, highlighting the urgent need to prioritize and integrate rehabilitation into health systems, particularly at the primary care level (Cieza et al., 2021).

An increasingly aging population, a rise in non-communicable diseases (NCDs) such as diabetes, cardiovascular conditions, and cancer, as well as a growing number of injuries related disabilities have been key drivers of this increasing rehabilitation demand (Heine, Derman and Hanekom, 2022; Cieza et al., 2021). Additionally, advancements in healthcare have led to higher survival rates for people with chronic illnesses and disabilities, further increasing the need for rehabilitation services (Heine, Derman and Hanekom, 2022). Recognising the rising demand for rehabilitation, the World Health Organization (WHO) introduced the Rehabilitation 2030 agenda to strengthen rehabilitation services globally, ensuring they are accessible, affordable, and integrated into health systems (WHO, 2017).

Rehabilitation 2030 Agenda

The Rehabilitation 2030 agenda aim to improve access to quality rehabilitation by promoting stronger policies, workforce development, research, and increased funding within health systems (Seijas, Kiekens and Gimigliano, 2023). The Rehabilitation 2030 agenda highlights rehabilitation as a key part of universal health coverage and calls for collaboration between governments, stakeholders, and healthcare professionals to integrate rehabilitation at all levels of care (Cieza, 2022). However, studies assessing progress toward achieving the global 2030 rehabilitation goals remain scarce in South Africa, as noted by Louw et al., (2021). The lack of research makes it difficult to track progress and identify gaps, highlighting the urgent need for more studies to ensure rehabilitation services can meet the growing demand effectively.

Rehabilitation Challenges in South Africa

Disability and rehabilitation in South Africa form a complex landscape influenced by social, economic, and policy challenges (Morris et al., 2021) In South Africa, the demand for rehabilitation services is projected to remain high. Louw et al. (2021) conducted a trend analysis from 1990 to 2017, along with a five-year forecast, and found a significant increase in the need for rehabilitation due to the rising prevalence of chronic health conditions and multimorbidity. Their study highlighted that the years lived with disability (YLD) have almost doubled over this period to 17% from 2017 to 2022. Despite this growing burden, rehabilitation services remain under-prioritised within the South African healthcare system. Morris et al. (2019) identified several health system challenges affecting rehabilitation, including inadequate policies, limited workforce capacity, and insufficient funding. They suggested strategies to strengthen rehabilitation, such as integrating rehabilitation into primary healthcare, developing comprehensive policies, and investing in workforce training and infrastructure. Implementing these strategies is crucial to addressing unmet rehabilitation needs and improving health outcomes in South Africa.

Despite its importance, rehabilitation in South Africa remains complex and under-prioritised (Morris et al., 2021). A situational analysis by Louw et al. (2023) found that rehabilitation services often operate independently of the national health system, leading to challenges such as poor integration at different levels of care. Furthermore, Morris et al. (2021) examined health system challenges in South Africa and concluded that the lack of investment in rehabilitation has been counterproductive to achieving the goals of community-based rehabilitation (CBR) and improving overall population health outcomes. CBR programs in South Africa aim to empower individuals with disabilities and their families by actively involving them in the planning and implementation of rehabilitation activities (Blose et al., 2024). These programs, which rely on community health workers and volunteers, offer a cost-effective and sustainable model for rehabilitation. Successful CBR initiatives, such as those implemented in the Manguzi District of KwaZulu-Natal and Limpopo, demonstrate the potential of this approach in enhancing access to rehabilitation and improving the quality of life for people with disabilities (Blose et al., 2024).

There is an urgent need to strengthen rehabilitation services in South Africa. A national situational analysis on rehabilitation in the country found significant challenges in leadership and governance, as well as a lack of health information systems at the national level (Louw et al., 2023). The study highlighted that rehabilitation services are often fragmented, with no clear national strategy to guide implementation and oversight. This lack of coordinated leadership results in inconsistent service delivery and hinders the integration of rehabilitation into the broader healthcare system (Morris et al., 2021). Additionally, the absence of comprehensive health information systems makes it difficult to collect accurate data on rehabilitation needs and outcomes, preventing effective planning and resource allocation. The analysis also revealed a serious shortage of rehabilitation professionals, including physiotherapists, occupational therapists, and speech-language therapists, particularly in rural and underserved areas. This workforce gap severely limits access to essential rehabilitation services (Tiwari et al., 2022).

Access to rehabilitation in South Africa is further restricted by several factors. Geographic disparities mean that individuals in remote areas often have to must travel long distances to reach rehabilitation centres, which adds financial strain and logistical challenges (Louw et al., 2023). The limited number of public rehabilitation facilities also results in long waiting times, discouraging many from seeking the care they need (Chetty, Cobbing and Chetty, 2025). Socioeconomic barriers, such as transport costs and lost income due to time spent accessing services, disproportionately affect disadvantaged communities, worsening health inequalities (Bezuidenhout et al., 2023). Thus, there is an urgent need for policies that support and strengthen rehabilitation service provision. Developing and implementing a national

rehabilitation strategy would ensure cohesive leadership, improve data collection through integrated health information systems, and address workforce shortages by investing in the training and retention of rehabilitation professionals (Maart et al., 2024). Such measures are critical to improving the accessibility and quality of rehabilitation services across South Africa (Zandam et al., 2024). Access to rehabilitation services remains a critical issue for people with disabilities in South Africa. Therefore, it is integral to understand the barriers to access and the strategies outlined in the FSDR to address these barriers. Further research is required to showcase successful interventions and programs that have improved access to rehabilitation services which can in turn, provide valuable insights into effective strategies and best practices (Philpott, McLaren and Rule, 2020).

Rehabilitation services remain underfunded and are focused to urban areas, leaving rural and marginalised communities with limited access. Additionally, societal stigmatization and inadequate implementation of disability rights laws contribute to the barriers faced by persons with disabilities (Magaqa, Ariana and Polack, 2021). There is a growing recognition of the need for a more integrated and community-based approach to rehabilitation that prioritizes prevention, early intervention, and the empowerment of individuals with disabilities (Lalu, Ozegya and Yakubu, 2022). The study by Lalu, Ozegya and Yakubu (2022), conducted in Nigeria. Strengthening policy implementation, increasing funding, and improving accessibility are important steps toward ensuring that the rights and needs of persons with disabilities are met in the South African context (Kout et al., 2022).

Rehabilitation Service Delivery Models

Various rehabilitation models and frameworks provide different perspectives on service delivery, contributing to a comprehensive understanding of rehabilitation (Wade, 2020). In South Africa, rehabilitation services are delivered through multiple models, including hospital-based rehabilitation, home-based rehabilitation, and community-based rehabilitation (CBR). Each of these approaches plays a crucial role in supporting individuals with disabilities, but challenges such as resource limitations, accessibility, and integration into the broader healthcare system remain.

Hospital-Based Rehabilitation

Hospital-based rehabilitation takes place within tertiary and district hospitals, where specialised healthcare professionals provide intensive rehabilitation services for individuals recovering from acute conditions, surgeries, injuries, or chronic illnesses. While this model offers structured, multidisciplinary interventions, it faces several challenges, including overburdened healthcare facilities, long waiting times, and geographical barriers for individuals living in rural areas (Myezwa et al., 2019). Additionally, the limited number of

rehabilitation beds and professional to patient ratio results in inadequate follow-up, leading to and poorer long-term outcomes (Mgobozi and Mahomed, 2021).

Home Based Rehabilitation

Home-based rehabilitation is an alternative approach designed to extend rehabilitation services to individuals in their own homes, particularly those who face mobility challenges or lack access to hospital facilities (Fisher et al., 2021). This model is especially beneficial for people with severe disabilities, those who reside in remote areas, or individuals requiring long-term care. Home-based rehabilitation improves accessibility and continuity of care, allowing individuals to receive treatment in familiar environments (Maseko et al., 2020). Nevertheless, obstacles such as a shortage of skilled rehabilitation professionals, inadequate transportation for healthcare workers, and safety concerns when entering communities, along with irregular follow-up services, hinder its effectiveness. However, challenges such as an insufficient number of trained rehabilitation professionals, lack of transport for healthcare workers, and inconsistent follow-up services affect its effectiveness. Informal caregivers, often family members, bear a significant burden without adequate training or support (Arntz et al., 2023).

Community Based Rehabilitation

Community-Based Rehabilitation (CBR) is a critical model for delivering rehabilitation services in resource-limited settings. CBR focuses on empowering individuals with disabilities, improving access to rehabilitation, and promoting social inclusion through locally driven programmes (Lalu, Ozegya and Yakubu, 2022). It operates across five key areas: health, education, livelihood, social participation, and empowerment (Amaliyah and Mulyati, 2020). In South Africa, CBR is widely used to bridge gaps in formal rehabilitation services, particularly in rural and underserved communities (Williams et al., 2020). CBR is often delivered by community health workers and volunteers, making it a cost-effective and sustainable approach. Nonetheless, the implementation encounters challenges such as a shortage of government funding, inadequate professional oversight, and weak integration with established healthcare systems. However, implementation faces obstacles, including lack of government funding, insufficient professional supervision, and poor integration with formal healthcare systems (Agudelo-Hernández, Giraldo-Álvarez and Marulanda-López, 2024). Strengthening CBR programmes requires increased investment, structured training for community health workers, and better coordination with primary healthcare services (Jamaluddin et al., 2021).

Primary Health Care and Rehabilitation

The integration of rehabilitation services into primary health care (PHC) is essential for ensuring early intervention and continuity of care. In addition, rehab 2030 has emphasised integration of rehab at a primary health care level, Rehabilitation at the PHC level provides access to essential rehabilitation services closer to communities, reducing the dependency on hospital-based rehabilitation and addressing inequities in access to care (Maseko et al., 2020). Despite policy frameworks advocating for the decentralisation of rehabilitation services, rehabilitation remains poorly integrated into PHC facilities (Maseko et al., 2024; Sherry et al., 2024). Studies highlight the shortage of trained rehabilitation professionals, lack of rehabilitation-specific funding, and weak referral pathways between PHC and specialist rehabilitation centres (Myezwa et al., 2019). Strengthening PHC rehabilitation requires improving rehabilitation training for PHC workers, increasing investment in assistive devices, and ensuring collaboration between different levels of care (Shahabi et al., 2022).

In light of South Africa's socio-economic diversity and limited resources, rehabilitation should be understood as a holistic, multidisciplinary strategy aimed at enhancing the quality of life for people with disabilities through medical, psychological, and social interventions. Given South Africa's socio-economic diversity and resource constraints, rehabilitation must be defined as a comprehensive, multidisciplinary approach that improves the quality of life for individuals with disabilities through medical, psychological, and social interventions. Rehabilitation services should be adaptable to both urban and rural settings, incorporating formal healthcare systems, home-based care, and community-driven approaches. This definition aligns with national policies and international rehabilitation frameworks, ensuring that rehabilitation services address the diverse needs of South Africa’s population (Philpott, McLaren and Rule, 2020).

2.6 HEALTH POLICY

Health policy plays a critical role in achieving the United Nation’s Sustainable Development Goals (SDGs), particularly those related to health, well-being, and equality (Salvo et al., 2023). A key foundation of this study is to explore how health policies can support the achievement of the Sustainable Development Goals (SDGs), with a particular focus on the inclusion of disability in the SDG overall agenda (Hashemi, Kuper, and Wickenden, 2017). Health policy plays a crucial role in promoting disability rights by ensuring access to healthcare and rehabilitation services, protecting against discrimination, and supporting inclusive practices (Goldberg, 2023). The international focus on disability-inclusive development, underscored by the United Nations' Sustainable Development Goals (SDGs), particularly Goal 10 (Reduced Inequalities), emphasises the critical need for inclusive policies

and systems (Panda and Kaur, 2024). It is integral to understand how health policies can be leveraged to overcome barriers to rights actualisation in South Africa and other countries.

The Rights of Persons with Disabilities

The United Nations adopted the Convention on the Rights of Persons with Disabilities (CRPD) in 2006 to safeguard the rights of persons with disabilities (PWDs), a treaty that South Africa ratified in 2007 (Chibaya et al., 2022). This international agreement seeks to promote, protect, and ensure that PWDs fully enjoy their human rights and freedoms while acknowledging their inherent dignity (Capri, 2022). To protect the rights of persons with disabilities (PWDs), the United Nations adopted the Convention on the Rights of Persons with Disabilities (CRPD) in 2006, which South Africa ratified in 2007 (Chibaya et al., 2022). This international treaty aims to promote, protect, and ensure that PWDs enjoy their full human rights and freedoms while recognising their dignity (Capri, 2022).

In South Africa, the Constitution guarantees the rights of PWDs and prohibits discrimination based on disability (Magidimisha-Chipungu, 2024). Additionally, the country has implemented policies such as the Integrated National Disability Strategy (INDS) and the White Paper on the Rights of Persons with Disabilities (WPRPD) to guide the inclusion and empowerment of PWDs (Petersen, 2021). Despite these frameworks, significant challenges persist in translating policy into practice, leading to unmet needs among PWDs.

There is still a significant gap between policy and implementation, leaving many PWDs with unmet needs. Salie et al. (2024) explored the experiences of adults with cerebral palsy in urban South Africa, highlighting serious gaps in healthcare and social support services. Similarly, Vergunst et al. (2019) identified a major gap between the need for and access to healthcare services for PWDs in rural areas. Hussey, MacLachlan, and Mji (2017) identified several barriers to implementing the health and rehabilitation articles of the CRPD in South Africa, including attitudinal barriers like stigma, political and financial constraints, health system inadequacies, and physical and communication obstacles. Hussey et al. (2016) identified barriers to enforcing the CRPD's health and rehabilitation articles, such as a lack of funding, inadequate training for healthcare workers, and weak intersectoral collaboration. Additionally, Maart (2015) found that rehabilitation services remain limited in under-resourced areas of the Western Cape, making it clear that targeted solutions are needed to improve service delivery. These findings emphasise the urgent need for strong policies that not only recognise the rights of PWDs but also ensure they are properly implemented, monitored, and regularly reviewed to address ongoing inequalities.

South Africa has introduced various policies to support PWDs, but there are still major challenges in their implementation. Health policy refers to decisions, plans, and actions undertaken to achieve specific healthcare goals within a society. It encompasses a wide range of issues, including healthcare delivery, financing, regulation, and public health initiatives (Nkosi, 2020). For this study, health policy is defined as a set of decisions and actions aimed at achieving specific health outcomes, including the promotion of health equity, and the protection of health rights. This definition should be contextualized within the South African healthcare landscape, highlighting its relevance to disability and rehabilitation (Morris et al., 2021). The operational definition of health policy guided the analysis of the implementation reports. In South Africa, health policies must address the diverse needs of the population, including people with disabilities. This definition aids in evaluating the effectiveness of current policies and identifying areas for improvement (Nkosi et al., 2020). Health policy can be a powerful tool for advocacy, promoting the rights and well-being of people with disabilities. By influencing policy decisions and implementation, advocacy efforts can ensure that disability issues are prioritized in national and international health agendas. Globally and in South Africa, successful advocacy campaigns have shown their impact on health policy in South Africa and beyond (Sherry, 2014).

South Africa's healthcare system has made strides in addressing disability through frameworks like the National Rehabilitation Policy and the Framework and Strategy for Disability and Rehabilitation, which aim to promote inclusion and access to rehabilitation services (South African National Department of Health, 2015). The FSDR outlines rehabilitation service delivery at all levels of care, with the aim of improving accessibility to rehabilitative care for persons with disabilities (Hussein El Kout, Benjmain-Damons and Pilusa, 2025). These policies emphasize the need for integrated and person-centred care, addressing both medical and social determinants of health. Successful implementation of these policies requires collaboration between government agencies, non-governmental organizations, and communities. Anecdotal evidence of case studies of innovative health policy initiatives, such as the integration of disability services into primary healthcare, provide valuable lessons for enhancing rights actualisation, however more published data is required on this (McIntyre et al., 2021).

The FSDR has not been thoroughly reviewed, nor implemented thus it is crucial that its implementation is explored to understand the current level of implementation and its associated challenges (Maart et al., 2024). However, a policy analysis of the FSDR by Hussein El Kout, Pilusa and Dlamini-Masuku (2022), found that a lack of leadership, poor staff attitudes and insufficient resources from the onset of the FSDR’s development process, resulted in a lack of achievement of the FSDR’s objectives.

Furthermore, South Africa is in the process of introducing the National Health Insurance (NHI). The NHI aims to incorporate the principles of universal health care, which seeks to ensure equitable access to high quality healthcare for all individuals in South Africa regardless of their socio-economic situation (Whyle and Olivier, 2023). In the South African context, health policy is shaped by the country's commitment to achieving universal health coverage and addressing health disparities (Bust, Whyle and Olivier, 2023). The National Development Plan (NDP) and the NHI are key policy documents that outline the government's vision for an inclusive and equitable healthcare system. These policies aim to address the social determinants of health and promote the integration of disability services into the broader health system. Despite this, challenges persist with the integration of rehabilitation into universal health systems (McIntyre et al., 2021). These challenges include the lack of budget allocation for rehabilitation resulting in poor resource distribution as well as the lack of governance in rehabilitation to advocate for rehabilitation representation in priority health programmes, need to be addressed (Keller, 2024). The available policies guiding rehabilitation and disability are the National Rehabilitation Policy and the FSDR. The National Rehabilitation Policy emphasises the provision of equitable, accessible, and integrated rehabilitation services as a basic human right (Louw et al., 2023). Similarly, the FSDR highlights the importance of strengthening community-based rehabilitation, improving access to assistive devices, and fostering multi-sectoral collaboration. However, these policies often face challenges in implementation (Iravani et al., 2021). These include inadequate funding, lack of political will, insufficient data on disability to inform evidence- based interventions and deeply entrenched cultural attitudes that perpetuate stigma and discrimination (Morris et al., 2021). Addressing these barriers requires a concerted effort to bridge the divide between policy intentions and practical outcomes, ensuring the realisation of disability rights as a cornerstone of inclusive development (Conradie, Berner and Louw, 2022).

2.6.1 **Rehabilitation and Disability Policy**

A comprehensive overview of the evolution of disability and health policies globally and in South Africa provides the necessary context for understanding the FSDR. It is necessary to uncover key milestones, such as the adoption of the United Nations Convention on the Rights of Persons with Disabilities (CRPD), the development of the WPRPD, and the establishment of the NHI in the lead up to the FSDR (Hussey, MacLachlan and Mji, 2017). Global policy developments, such as the CRPD, have significantly influenced disability rights and health policies worldwide. South Africa ratified the UNCRPD in 2006, which mandated it to have a policy for disability and rehabilitation, which was only initiated in 2014 when the FSDR was developed (Kout, Pilusa and Dlamini-Masuku, 2022).

In South Africa, the WPRPD and the NHI represent major strides towards inclusive and equitable healthcare. These policies reflect the country's commitment to the principles of the CRPD and aim to address the health disparities faced by people with disabilities. An analysis of these policies' development and implementation will provide valuable insights into the factors that have shaped the FSDR (Mahomed and Stein, 2017).

Many policies and legislation related to disability and rehabilitation evolved in South Africa as the understanding of disability evolved. In 1992, the establishment of the South African Disability Right's Charter (1992) showed the power of collaboration with disability persons organisations in recognising disability as a human rights issue and shifting to the justice perspective. Following this, transformation efforts began in 1997, with The White Paper on the Transformation of the Health System in South Africa (1997), which sought to establish a somewhat unified health system that would breach inequalities despite the country's limited resources, with minimal mention of rehabilitation at the time (Philpott, Mclaren and Rule, 2020). In this same year, the Integrated National Disability Strategy (1997) was published and promised to pave the way for policies related to disability in South Africa to meet the high demands of unmet needs of persons with disability. Following this, the National Rehabilitation policy was adopted in 2000, showing a clear understanding of community-based rehabilitation as the underlying philosophy of the policy. South Africa then ratified the United Nations Convention on the Rights of Persons with Disabilities (2007), showing a commitment to disability inclusive care (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022).

In 2015, South Africa's National Disability Policy was adopted. This policy provided guidelines for integrating disability into social services, aiming to promote inclusion, social justice, and improve the well-being of vulnerable and marginalised people with disabilities in South Africa. The South African White Paper on the Rights of Persons with Disabilities (WPRPD) (approved by Cabinet in 2015), takes a similar approach to the International Classification of Functioning, Disability, and Health (ICF), acknowledging the impact of systemic barriers and discrimination (Philpott and Muthukrishna, 2019). Around the same time, in 2014, the FSDR was developed which sought to improve access to rehabilitation care by ensuring service delivery across all levels of care with a focus on primary health care (South African National Department of Health, 2015).

More recently, South Africa's White Paper on National Health Insurance (NHI) acknowledges rehabilitation as part of the continuum of care especially related to disability at primary health care levels, but no clear guidelines for implementing this are provided (Philpott, Mclaren and Rule, 2020). Other South African legislation, such as the Employment Equity Act and the Promotion of Equality and Prevention of Unfair Discrimination Act, further contextualises

disability within the country's socio-political landscape, reinforcing the need for equality and non-discrimination (Walton and Engelbrecht, 2022).

The adaptation of the social model and human rights model of disability, coupled with South Africa's legislation and policy documents present a significant shift towards the biopsychosocial model of disability. This reflects a political will to adopt the biopsychosocial model's principles, which focus on removing barriers and ensuring the inclusion of persons with disabilities in all areas of society (Lawson and Beckett, 2021). In South Africa, the previous dominance of the medical model in healthcare delivery has been challenged by advocates calling for more inclusive, human rights-based approaches (Amundson, 2022). South Africa's approach to disability is shaped by a combination of cultural, socio-economic, and legislative factors, which work together to form a more inclusive and rights-based framework for addressing the needs of persons with disabilities. These evolving definitions and policies reflect the country's commitment to improving the lives of individuals with disabilities.

In South Africa, health policies such as the NHI and the National Rehabilitation Policy are aligned with the SDGs' goal three of ensuring healthy lives and promoting well-being for all (Hashemi, Kuper and Wickenden, 2017). These policies aim to reduce health disparities and ensure that people with disabilities have access to comprehensive healthcare services. Case studies of successful policy interventions that have contributed to the SDGs can provide examples of best practices and lessons learned. It spans beyond the SDG focused on health, but also related to reduced inequalities (Moodley, 2021).

2.6.2 Framework and Strategy for Disability and Rehabilitation (FSDR)

Overview of the FSDR

The FSDR is a strategic document aimed at guiding the implementation of disability and rehabilitation services in South Africa. The section below provides an overview of the FSDR, including its goals, principles, and key components. The FSDR aims to promote a rights-based approach to disability and rehabilitation, ensuring that services are accessible, inclusive, and integrated into the broader health system (Kout, Pilusa and Dlamini-Masuku, 2022). Maart et al., (2024), explored the value of rehabilitation from the perspective of rehabilitation service providers and found that their perceptions on policies such as the FSDR, was that it is necessary to look at outcomes instead of efficacy of the policy interventions.

Content of the FSDR

The FSDR outlines specific strategies and actions to achieve its goals, including the development of rehabilitation services, capacity building for service providers, and the

integration of disability services into primary healthcare. The FSDR has a major focus on community-based rehabilitation and the integration of community-based health workers to reduce the load on rehabilitation professionals (Tiwari, Ned and Chikte, 2020). A study by Kout, Pilusa and Dlamini-Masuku, (2022), provides a detailed analysis of the FSDR's content, highlighting its strengths and potential areas for improvement. The study showed that while the FSDR was intended to impact all levels of healthcare, reactions from stakeholders were mixed. Some stakeholders found it helpful for organizing and motivating strategic planning and improving awareness of rehabilitation processes. Conversely, others criticized it for lacking the authority of a full policy, being too vague, and containing contradictions that hindered its practical implementation.

Context of the FSDR

The FSDR was developed in response to the challenges faced by people with disabilities in accessing rehabilitation services in South Africa. This section will discuss the context in which the FSDR was developed, including the socio-economic and political factors that influenced its creation. A study by Tiwari, Ned and Chilte (2020) highlight the need for policies such as the FSDR to reduce inequalities in rehabilitation service provision in different contexts within the country, in this case, between provinces due to the different policy landscapes of each province in SA. Understanding the context of the FSDR is essential for evaluating its relevance and effectiveness (Kout, Pilusa and Dlamini-Masuku, 2022).

Actors of the FSDR

The implementation of the FSDR involves various actors, including government agencies, non-governmental organizations, healthcare providers, and community groups. This section will identify the key actors involved in the FSDR and discuss their roles and responsibilities. Collaboration and coordination among these actors are critical for the successful implementation of the FSDR (Trafford, 2023). Philpott, Mclaren and Rule (2020) further highlighted that the FSDR task team appointed to develop the FSDR included a range of stakeholders including, disability persons organisations and rehabilitation civil society organisations.

Processes of the FSDR

The processes involved in the implementation of the FSDR include planning, coordination, monitoring, and evaluation. This section will provide a detailed analysis of these processes, highlighting best practices and potential challenges. Effective implementation processes are essential for achieving the goals of the FSDR and ensuring that services are delivered efficiently and equitably (Philpott, McLaren and Rule, 2020). Conradi, Berner and Louw., (2022) describe the Rehabilitation Workforce Capacity in the Public Sector of Three Rural

Provinces in South Africa and describe how the disaggregation of disability-related data can affect policy processes by limiting capacity to implement.

The ideal policy process is a dynamic and integrated cycle, guided by systems thinking and complexity concepts (Jackson, 2019). It begins with problem identification, where issues are recognized and defined, often influenced by external pressures (Gregory, 2020). Next, agenda setting ensures the identified issue gains traction by communicating its urgency and aligning stakeholders. In the policy formulation stage, potential solutions are developed, incorporating feedback and control mechanisms to facilitate informed decision-making (Gregory, 2020). Decision-making involves selecting a policy option, which can shape future policy direction (Johnson and Geldner, 2019).

The policy implementation phase converts resources and engagement into actions, requiring adaptive management to navigate fluctuating conditions (Johnson and Geldner, 2019). While Johnson and Geldner (2019) make compelling points on the implementation process, it must be noted that this paper focuses on policy in the context of agriculture and environmental interventions, although the principles of policy can be applied in this study of health care. Monitoring and evaluation assess the policy's impact and interactions with the environment.

Finally, feedback and learning allow the system to adapt and improve future policy cycles based on past experiences (Waylen et al., 2019). This process, characterised by continuous feedback and adaptation, enhances governance through responsiveness and effective decision-making (Waylen et al., 2019). While including evidence from Waylen et al., (2019), the present author is mindful that this study was published in the European region, where contextual differences and reduced resources in the Global South may prove challenging to follow these policy processes.

2.7 METHODOLOGICAL CONSIDERATIONS

Implementation science provides valuable frameworks to bridge the gap between policy and practice. For instance, the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework highlights the importance of considering context when implementing policies (Crable et al., 2022). Likewise, determinant frameworks help identify key factors that influence implementation outcomes, assisting in the design of more effective strategies (Nilsen and Bernhardsson, 2019). Despite their potential, these frameworks have not been properly applied in the rehabilitation sector. Villalobos Dintrans et al. (2019) reviewed various implementation science frameworks and noted that they have not been widely used in global health, particularly in rehabilitation. This lack of focus on implementation strategies means that many rehabilitation policies fail to translate into meaningful change.

Crable et al. (2022) argue that implementation science often neglects the role of policy, which results in a lack of sustainable, system-wide reform. This is a critical issue for rehabilitation, where strong policies are essential for securing funding, improving service integration, and ensuring consistency in care.

It is also crucial to evaluate both rehabilitation and implementation outcomes. Rehabilitation outcomes measure how well interventions improve patient function and quality of life, while implementation outcomes assess how effectively these interventions are integrated into healthcare systems (Proctor et al., 2011). Briggs et al. (2020) conducted a systematic review using the Consolidated Framework for Implementation Research (CFIR) to examine factors influencing the use of patient-reported outcome measures (PROMs) in outpatient rehabilitation. Their study highlights the importance of implementation strategies in ensuring that PROMs are widely adopted and sustained, allowing for better patient-centred care.

2.8 IMPLEMENTATION SCIENCE (IS)

2.8.1 Overview of Implementation Science

Implementation science is the study of methods to promote the uptake of research findings into routine practice. It involves understanding and addressing the factors that influence the implementation of interventions and policies. This section will provide an overview of implementation science, its importance, and its relevance to the study of disability and rehabilitation (Olswang and Prelock, 2015).

2.8.2 Implementation Science Frameworks

Various frameworks guide the study and practice of implementation science. The following section will provide an overview of key implementation science frameworks, including their components and applications. Understanding these frameworks is essential for designing and evaluating implementation strategies (Olswang and Prelock, 2015).

Effective rehabilitation outcomes depend not only on the quality of interventions but also on how well they are implemented within healthcare systems. Implementation frameworks provide structured approaches to ensure that rehabilitation services are accessible, sustainable, and impactful. The Proctor Model provides a comprehensive framework for evaluating implementation outcomes, including acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability (Smolkowski et al., 2019). Additionally, The Consolidated Framework for Implementation Research (CFIR) is a widely used framework that identifies factors influencing implementation at multiple levels, including the intervention, inner setting, outer setting, individuals involved, and the

implementation process (Main et al., 2016). The Exploration, Preparation, Implementation, and Sustainment (EPIS) Framework provides a phased approach to implementation, highlighting the key activities and considerations at each stage (Sanetti and Luh, 2019). Health interventions are specific actions or strategies designed to improve health outcomes. This section will provide an overview of different types of health interventions relevant to disability and rehabilitation, including preventive, curative, and rehabilitative interventions. Understanding the range of health interventions is essential for designing comprehensive and effective implementation strategies (Ogden and Fixsen, 2015). By applying these implementation frameworks, rehabilitation services can be better integrated into healthcare systems, leading to improved patient outcomes and long-term sustainability.

2.9 OVERVIEW OF STUDY METHODOLOGY

2.9.1 Mixed Methods

Mixed methods research integrates quantitative and qualitative methodologies to offer a comprehensive understanding of research questions. This section will examine the application of mixed methods in the field of disability and rehabilitation, emphasizing the strengths and challenges associated with this approach (Waltz et al., 2014).

2.9.2 Quantitative Descriptive Statistics

Quantitative descriptive statistics involve the use of numerical data to describe and analyse patterns and trends. This section will discuss the use of quantitative descriptive statistics in the study of disability and rehabilitation, including the types of data collected and the methods of analysis (Waltz et al., 2014).

2.9.3 Document Review

A review of relevant policy documents and reports constitutes a document review in the broader policy landscape (Rabin and Brownson, 2017). These include national and international policy documents, government reports, academic articles, NGO publications, and implementation reports, as is the case in the current study. A document review guide is developed to guide the analysis process, including objectives, criteria for inclusion, and a data extraction form, as was the case in this study (Rabin and Brownson, 2017).

Inductive and deductive thematic analysis may be used to highlight relevant text and assign labels representing key concepts and themes (Tenny, 2017). To ensure credibility and reliability, the findings are validated through triangulation, member checking, and peer review (Natow, 2020). By following this systematic process, the document review provides valuable qualitative data to inform the study on disability, rehabilitation, and health policy in South Africa and justifies the choice of this methodology for the first phase of this study (Natow, 2020).

2.9.4 Qualitative Semi-Structured Interviews

Qualitative semi-structured interviews involve the use of open-ended questions to gather in-depth information from participants. This section will discuss the use of qualitative semi-structured interviews in the study of disability and rehabilitation, including the types of participants interviewed and the methods of analysis (Natow, 2020).

2.9.5 Focus Group Discussions

Focus group discussions involve the use of group interviews to gather information and insights from participants. This section will discuss the use of focus group discussions in the study of disability and rehabilitation, including the types of participants involved and the methods of analysis (Natow, 2020).

2.10 THE IMPORTANCE OF REHABILITATION OUTCOMES

In general, health outcomes are the results of healthcare interventions and policies. This section will discuss different types of health outcomes relevant to disability and rehabilitation, including functional outcomes, quality of life, and health equity. Measuring and evaluating health outcomes is critical for assessing the effectiveness of interventions and policies (Rabin and Brownson, 2017). Implementation outcomes are the results of the implementation process, including factors such as acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability (Kirchner et al., 2016). In contrast, determinants of implementation are the factors that influence the implementation process, including individual, organizational, and contextual factors. It is integral to explore the different types of determinants and their impact on the implementation of disability and rehabilitation interventions and policies (Kirchner et al., 2016).

Implementation Strategies

Implementation strategies are specific actions or approaches used to promote the uptake of interventions and policies. In the context of the current study, implementation strategies encompass the specific actions and approaches used to ensure the effective uptake and application of the FSDR. These strategies include several key components as described below.

Resource allocation involves strategic budgeting to allocate funds specifically for disability and rehabilitation services, ensuring that adequate resources are available. It also includes infrastructure development, investing in the necessary facilities and equipment required for effective rehabilitation services (Rabin and Brownson, 2017). Training and capacity building focus on professional development by providing training programs for healthcare professionals on the FSDR's guidelines and best practices. This is complemented by

organising workshops and seminars to enhance knowledge and skills related to the new framework. Stakeholder engagement is critical, involving inter-sectoral collaboration to facilitate cooperation between health, social services, and education sectors for integrated rehabilitation services. Community involvement is also essential, engaging with community organizations and advocates to build support and ensure that the FSDR addresses local needs (Kirchner et al., 2016).

Other implementation strategies include policy integration ensures that the FSDR complements and integrates with existing health policies and frameworks. Policy advocacy is also important, promoting the FSDR within government and policy-making bodies to secure endorsement and support (Rabin and Brownson, 2017). Monitoring and evaluation involve establishing metrics to assess the effectiveness of the FSDR implementation and conducting regular reviews to measure progress, identify challenges, and make necessary adjustments. Public awareness and communication strategies include information dissemination through various media to inform the public and healthcare providers about the FSDR's objectives and benefits. Feedback mechanisms are also implemented to allow stakeholders and the public to provide input on the FSDR's implementation and effectiveness (Kirchner et al., 2016).

Additionally, action plans involve developing detailed plans outlining the steps for rolling out the FSDR across different levels of care and regions, with clear timelines set for the implementation of various components. These strategies aim to address barriers and challenges identified during the FSDR's development and ensure its successful integration into South Africa's healthcare system. This also contributes to informing future disability and rehabilitation policy in South Africa and beyond (Kirchner et al., 2016).

Evaluating the implementation process involves assessing the factors that influence implementation, and the outcomes achieved. Evaluating the implementation process of the Framework and Strategy for Disability and Rehabilitation (FSDR) involves a detailed assessment of both the factors influencing the implementation and the outcomes achieved. This evaluation begins with an examination of critical factors such as resource availability, including financial and human resources, to determine if budgets and personnel are adequate for effective implementation. The effectiveness of training programs and their impact on healthcare professionals' skills and performance is also assessed. The success of stakeholder engagement is evaluated, focusing on the effectiveness of inter-sectoral collaboration and community involvement in addressing local needs.

Policy integration is another key aspect, with an evaluation of how well the FSDR aligns with existing health policies and the success of advocacy efforts in securing support from government and policymakers. Monitoring and evaluation systems are reviewed to ensure

that metrics are appropriately developed and utilised, and that feedback mechanisms are effective in incorporating stakeholder and public input for continuous improvement (Odum et al., 2014).

Outcomes achieved through the implementation are also assessed. This includes measuring improvements in access to and quality of disability and rehabilitation services, evaluating the efficiency and coordination of service provision, and analysing resource utilisation for equitable delivery. The impact on stakeholders, including healthcare professionals and patients, is reviewed to determine changes in working conditions, service satisfaction, and overall community health outcomes. Additionally, the alignment of implementation with strategic goals and the ability to adapt to challenges and changes in the healthcare environment are examined. Through this comprehensive evaluation, stakeholders can identify strengths and weaknesses in the implementation process, make necessary improvements, and ensure that the FSDR meets its objectives effectively (Kirchner et al., 2016).

2.11 CONCLUSION OF LITERATURE REVIEW

This chapter has provided a comprehensive review of the existing literature relevant to the study of disability, rehabilitation, disability rights, and health policy, particularly within the South African context. The review has explored various definitions and models of disability, the prevalence and causes of disability, the concept of rehabilitation, and the challenges associated with disability rights actualisation. It has also discussed health policy, its role in advocating for disability rights, and the Framework and Strategy for Disability and Rehabilitation (FSDR). Finally, the chapter has provided an overview of implementation science and its relevance to this study. The next chapter comprises of the protocol for this thesis in the form of a published article, which details the overall methodology for this mixed-methods study.

CHAPTER 3

3. PUBLISHED ARTICLE 1: STUDY PROTOCOL AND METHODOLOGY

3.1 PUBLICATION DETAILS

This chapter is presented as a publication outlining the study protocol and details the three phases of a mixed-methods study. This article presents a protocol for evaluating the implementation outcomes of the Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa, which expired in 2022. Using a mixed-methods approach, the study employed document reviews, semi-structured interviews, and focus group discussions with stakeholders in Gauteng Province. Guided by implementation science frameworks, such as Proctor's model and CFIR, it explores outcomes such as acceptability, adoption, and feasibility, aiming to identify barriers, facilitators, and strategies for future policy implementation. The study is poised to enhance disability and rehabilitation services, improve healthcare access, and inform disability policies in South Africa. The protocol was published in *The International Journal of Human and Health Sciences*, an open-access journal that specialises in scientific research protocols. Details regarding the publication are provided in Table 3.1.

Table 3.1: Publication Specifics of the Study Protocol

Title of publication	**Evaluation of the implementation outcomes of the framework and strategy for disability and rehabilitation for South Africa: a mixed-methods study protocol**
Authors	Naeema AR Hussein El Kout; Sonti Pilusa; Natalie Benjamin-Damons
Journal name	International Journal of Human and Health Sciences
ISSN	2523-692X
Impact factor	1.0
Year	2023
Volume	7
DOI number	http://dx.doi.org/10.31344/ijhhs.v7i4.587

3.2 AUTHOR CONTRIBUTIONS

The authors' contributions are outlined in Table 3.2, utilising the Contributor Roles Taxonomy (CRediT) framework (Allen, O'Connell, and Kiermer, 2019), with the definitions of the roles provided in Appendix 1.

Table 3.2: Author contributions based on CRediT taxonomy.

Contributor Role	Description	Authors
Conceptualisation	Development of the study concept and methodology.	Naeema AR Hussein El Kout; Sonti Pilusa
Methodology	Design of the study methods, including selection of mixed methods approach and tools.	Naeema AR Hussein El Kout; Sonti Pilusa
Formal Analysis	Conducting data analysis and interpretation.	Naeema AR Hussein El Kout; Natalie Benjamin-Damons
Investigation	Execution of data collection and related tasks.	Naeema AR Hussein El Kout
Writing – Original Draft	Drafting the original manuscript of the study protocol.	Naeema AR Hussein El Kout
Writing – Review and Editing	Reviewing and revising the manuscript critically for intellectual content.	Sonti Pilusa; Natalie Benjamin-Damons
Supervision	Oversight and guidance throughout the study protocol development.	Sonti Pilusa; Natalie Benjamin-Damons
Funding Acquisition	Securing financial support for the study.	Naeema AR Hussein El Kout

3.3 COPYRIGHT AND PERMISSIONS

3.4. ASSOCIATED DOCUMENTATION

Due to the journal requirements, the documentation related to this study could not be included as appendices in the publication but are provided in this thesis as follows:

- Appendix 2: Ethical clearance certificate
- Appendix 3: Letter of permission from the hospital
- Appendix 4: Letter of permission from the research site

3.5 PUBLISHED ARTICLE

Evaluation of the Implementation Outcomes of the Framework and Strategy for Disability and Rehabilitation for South Africa: A Mixed-Methods Study Protocol

Review article:

Evaluation of the implementation outcomes of the framework and strategy for disability and rehabilitation for South Africa: a mixed-methods study protocol

Naeema AR Hussein El Kout[1], Sonti Pilusa[2], Natalie Benjamin-Damons[3]

Abstract

Background: The prevalence of disability is increasing. The rights of persons with disabilities have not been upheld and health policy is a tool to actualise these rights. The Framework and Strategy for Disability and Rehabilitation (FSDR) for South Africa (2015-2022) has expired but the implementation process has not been evaluated to inform future disability policy implementation. ***Objectives***: To evaluate the perceptions of the implementation of the FSDR to develop implementation strategies. ***Method***: An explanatory mixed methods study comprising of a document review, semi-structured interviews and focus group discussions with stakeholders involved in the implementation process of the FSDR in Gauteng province, will be employed. The document review and interview transcript analysis will utilise initially inductive thematic analysis (Alhojailen), followed by deductive analysis using established implementation science frameworks. Data will be triangulated from semi-structured interviews and focus group discussions to develop implementation strategies for future disability policy. ***Clinical implications***: This study will contribute to the field of policy analysis, as well as improving the implementation of future disability policy in South Africa to protect the rights of persons with disabilities. The study findings may also be used as a tool for advocacy to improve rehabilitation service provision in South Africa.

Keywords: Policy analysis, disability, implementation research, rehabilitation, access to health care

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Introduction

The prevalence of disability globally and in South Africa is significantly high at 15 percent and 7,5 percent, respectively [31]. This poses significant implications for healthcare service provision and a higher burden of disease in an already resource-constrained South African healthcare system [27]. The current COVID-19 pandemic has significantly contributed to the increase in due to secondary complications thus further increasing the burden of disease [32]. The burden of disease associated with a disability is significant. This is linked to poor socioeconomic conditions resulting in health inequalities [32].

Disability according to the international classification of function includes physical and mental related impairments, activity limitations, and participation restrictions and the interaction between these factors in different contexts [19]. This holistic understanding of disability views it as functional limitations because of contextual factors which include environmental and personal constraints [14].

Persons with disabilities have greater health needs that have been unmet, and this has been further exacerbated by the COVID-19 pandemic due to resource constraints [17]. A major need in this is access to rehabilitation [17,32]. The definition of

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rehabilitation is evolving as the understanding of it has improved in light of the World Health Organisation Rehabilitation 2030 initiative [25]. Rehabilitation 2030 aims to ensure access to rehabilitation for all populations by 2030 due to the vast disparities in rehabilitation service provision globally [4] . In South Africa, access to rehabilitation is limited due to poor rehabilitation resource allocation, a paucity of rehabilitation workers and limited equipment [29]. This study further highlights numerous barriers to access to health care for persons with disabilities such as the lack of accessible and affordable transport, prolonged waiting times at clinics and negative staff attitudes [29].

Methods of addressing health inequalities and poor access to rehabilitation include the utilisation of public health policy as a tool to ensure the actualisation of the rights of persons with disabilities [26]. Globally, the United Nations Convention on the rights of persons with disabilities (UNCRPD) was developed to promote the rights of persons with disabilities [20] . To align with the UNCRPD, South Africa developed the framework and strategy for disability and rehabilitation services (FSDR) (2015-2020). This framework was developed to guide and define rehabilitation service provision in South Africa and aims to ensure access to rehabilitation for person with disability. The policy expired in 2020, however, due to the COVID-19 pandemic, it was extended until 2022. The FSDR is due to be evaluated however there is no evidence of the evaluation of the implementation outcomes of the FSDR. The FSDR has lapsed and its implementation outcomes need to evaluated. Thus the aim of this study, over five phases is to develop implementation strategies for the FSDR [18].

The National Department of Health (NDOH) of SA will run a two-phased process comprising of one, a national-paper-based evaluation which will be reported by the provincial rehabilitation manager, however, there is no intention from the NDOH to conduct a document review of these reports. The second step of the NDOH's plan is to do ground level evaluation of the implementation of the FSDR in three out of nine provinces due to resource constraints. This leaves the most populous region of SA, namely Gauteng, excluded from the process. To evaluate the implementation outcomes of and develop implementation strategies for the framework and strategy for disability and rehabilitation for South Africa (2015-2020) in the Gauteng province, the following objectives will be used:

- To evaluate the paper-based provincial implementation of the framework and strategy for disability and rehabilitation for South Africa
- To explore the perceptions of implementation outcomes and experiences of implementation of the FSDR in Gauteng among the stakeholders involved in the FSDR implementation.
- To map the process of implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process
- To explore the factors influencing the implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process
- To map strategies to improve future implementation of the FSDR

Study justification

Our study rationale is to identify implementation strategies for the FSDR from policy implementers in Gauteng. Numerous factors affect public health policy implementation in SA and it is integral to identify these to establish what interventions are required. The development of implementation strategies for the FSDR is necessary to inform future policy in SA.

Conceptual framework

This study's conceptual framework is adapted from Proctor et al. (2011) model[24] and incorporates determinants (barriers and facilitators), where the FSDR is and the implementation strategies [6,7]. The model[24] describes the importance of implementation outcomes to evaluate the implementation of interventions [15]. These outcomes include acceptability, adoption, appropriateness, costs, feasibility, fidelity, penetration, and sustainability [5]. The use of this model in research related to implementation science has been supported by numerous studies [30] . The figure below outlines the core of this implementation research.

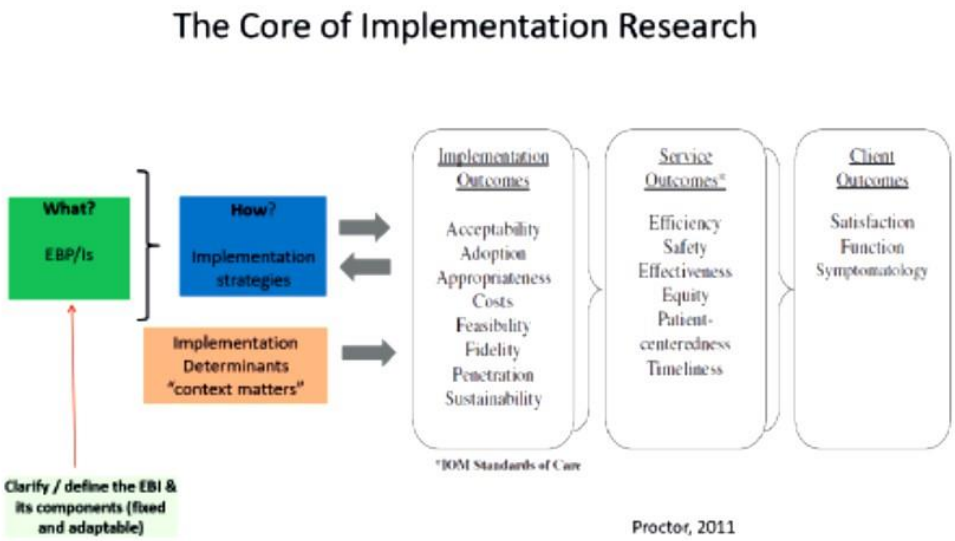

Figure 1: Conceptual framework with the Proctor Model [24]

For the purpose of this study, the perceptions of the following outcomes will be expanded on: penetration, adoption, acceptability, appropriateness, feasibility and sustainability. This is due to being the most appropriate for the FSDR in the South African context. The following table describes the operational definitions of the implementation outcomes as per the Proctor model[24]:

IMPLEMENTATION OUTCOME	OPERATIONAL DEFINITION
Penetration	This refers to the accessibility of the document; how many stakeholders did it reach
Adoption	This refers to the utilisation of the document in context
Acceptability	The understanding of stakeholders that the intervention or policy was agreeable to its content objectives
Appropriateness	The perception of stakeholders regarding the fit of the intervention to the context it is implemented in
Feasibility	This refers to how far the policy can be implemented in its context in a practical manner
Sustainability	This refers to the ability of the policy to be consistently and continuously implemented

Methods

This is an explanatory mixed-methods study design. The quantitative component is a cross sectional descriptive study. The qualitative component comprises of a document review, semi-structured interviews, and focus group discussions [10]. The objectives of the study will be achieved through framework analysis using appropriate implementation science frameworks as described below [11]. The study also includes the development of implementation strategies based on the information from the descriptive statistics, the document review, semi-structured interviews and focus group discussions [23].

Participants will be from the five districts in Gauteng namely, City of Johannesburg, Ekhuruleni, West Rand, Sedibeng and Tswane districts. Gauteng is a populous region with a densely concentrated population of approximately 15 million individuals, being twenty five percent of the total population. Thus, it is important to have representation of participants who were involved in the implementation of the FSDR across all five districts.

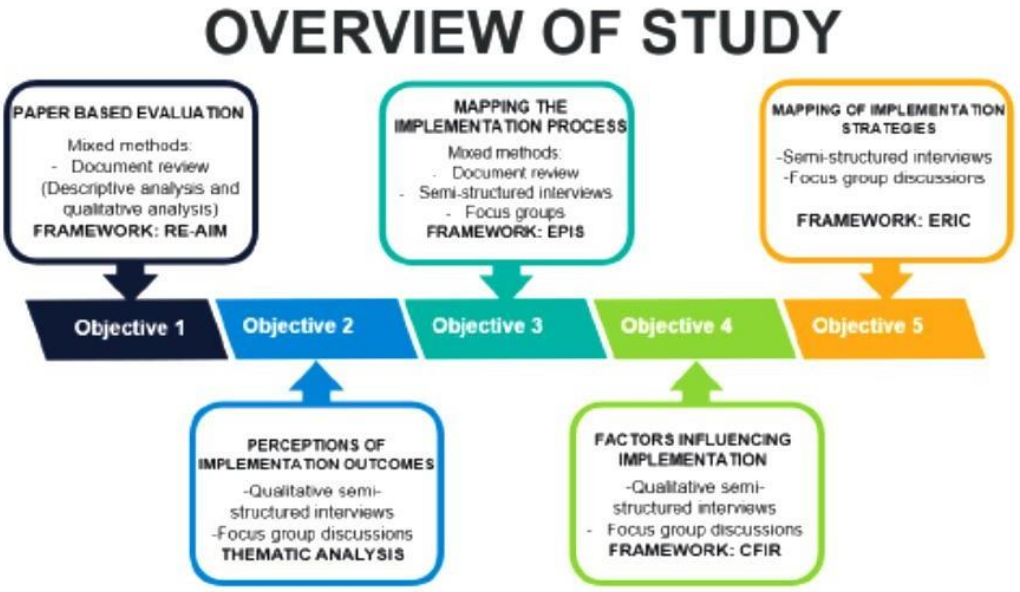

Figure 2: Schematic Outline of our study

Study outline

Our study outline comprises of numerous methodologies to achieve its objectives. This is shown in the figure below:

Study Phases:

PHASE 1: Document review of NDOH paper-based evaluation:

Each province has been allocated an outlined framework to report the implementation of the FSDR in each province. This study has been given access to the paper-based evaluation results in order to conduct a document review of the paper-based evaluation. This will be conducted using a document review guide utilising the indicators from the FSDR. The document review and analysis of interview transcripts will be analysed using a qualitative data software namely, MAXQDA [22]. This study will utilise a combination of inductive and deductive thematic analysis to achieve its objectives [9]. This is seen in the figure below:

PHASE 2: Exploration of the perceptions of implementation amongst stakeholders of the implementation process of the FSDR in Gauteng:

Figure 3: Re-AIM framework

This study will be reviewing the perceptions of the implementation process of the FSDR in the Gauteng province, amongst implementation stakeholders. This will be done utilising the Proctor model [24] of implementation outcomes with the selected outcomes namely the penetration, adoption, acceptability, appropriateness, feasibility and sustainability. This is due to the outcomes being the most appropriate for the FSDR in the South African context. In conjunction, the CFIR framework will be used to identify barriers and facilitators to implementation. The interviews will be conducted

until data saturation is reached [28]. The interviews will be conducted in a hybrid approach (online on Microsoft Teams and face to face) depending on participants availability. The interviews will be audio recorded and transcripts will be developed verbatim based on the recordings. interviews will be done using a semi-structured interview guide [1]. The focus group discussions will be conducted at the national rehabilitation forum and the Gauteng rehabilitation meetings. The focus group discussions will be conducted face to face where possible, alternatively the full focus group discussion will be conducted online depending on participant availability. A focus group discussion schedule will be utilised to guide the process .

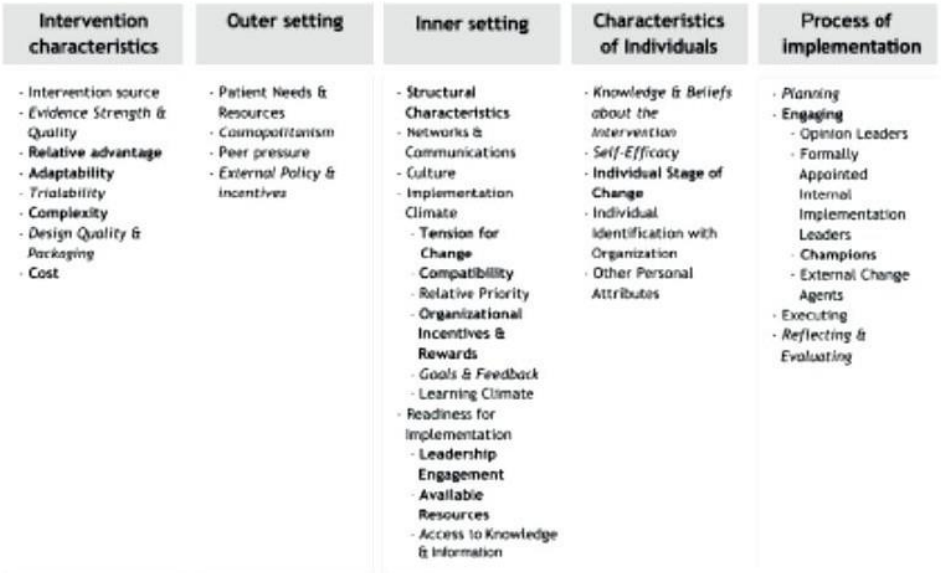

Figure 3: CFIR framework showing the five domains

PHASE 3: Implementation strategies

The strategies will be developed from the data analysis of the document review in phase one and semi-structured interviews and focus group discussions in phase two of the study [21]. The strategies will be presented to the stakeholders from phase two, in the form of focus group discussions for review. Recommendations from stakeholders involved in the implementation process, and experts in the field, will be combined to finalise the strategies. In order to analyse data to map implementation strategies of the process of the implementation of the FSDR; the Expert Recommendations for Implementing Change (ERIC) framework and concept mapping will be utilised to deductively analyse the transcripts and map implementation strategies. This is shown below:

2.2 Study Participants

2.2.1 Recruitment of study participants

The following participants, involved in the FSDR implementation, will be approached for participation in the semi-structured interviews and focus group discussions:

- National Rehabilitation Manager and provincial rehabilitation managers
- Disability persons organisations
- Clinical rehabilitation therapists
- Rehabilitation professionals organisations
- Academics

2.2.2 Sample Selection

This study will utilise a combination of purposive sampling [3] and snowball sampling to ensure a rich sample population [12]. Participants will be

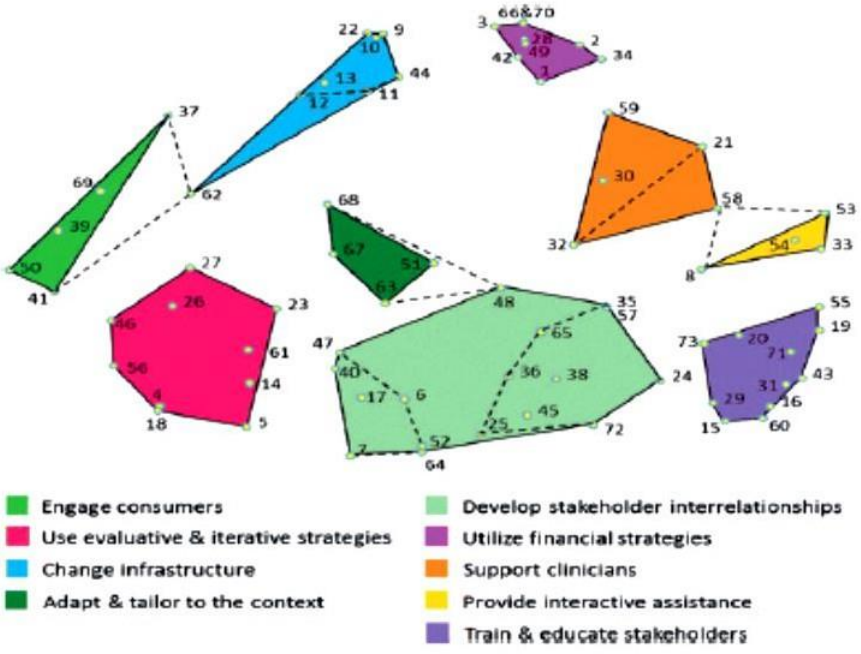

Figure 5: The ERIC framework

purposively selected if they meet the above inclusion criteria. These will be namely, primary participants. Other participants will be selected through snowball sampling upon referral from the primary participants.

Trustworthiness and ethical considerations

The trustworthiness of qualitative research should be established by ensuring the credibility, transferability, dependability, and confirmability of the research process [8]. Further factors which we considered are reflexivity and positionality of the author [8]. Credibility will be established through member checking to ensure transcripts reflect the reality of responses [13]. To ensure transferability and confirmability, we will provide detailed descriptions of the methodologies employed [16]. For dependability, an audit trail will be used to document all steps taken from inception to completion. To establish reflexivity and positionality, a reflective journal will be used by the principle investigator.

The study will be conducted in been conducted in accordance with the ethical standards laid down in the '1964 Declaration of Helsinki' which was revised in the year 2000. Permission from the Human Research Ethics Medical Committee of the University of the Witwatersrand has been obtained, ethical clearance number (M220364). The study has been registered on the National Health Research Database, and permission has been obtained from the Gauteng provincial and district departments of health. Written informed consent for the interview as well as a separate written informed consent sheet for the audio recording, will be obtained from all participants. Participants will participate willingly and have adequate information on the study prior to completing the consent form.

Limitations

Due to the nature of qualitative research, this study cannot be generalised, however it may be transferable in different contexts employing the same methodologies.

Abbreviations

FSDR	Framework and strategy for disability and rehabilitation
SA	South Africa
M &E	Monitoring and Evaluation
NDOH	National Department of Health
GDOH	Gauteng Department of Health
WHO	World Health Organisation
UNCRPD	United Nations Convention on the Rights of Persons with Disability
LMICs	Low-and-middle-income countries
DPO	Disability Persons Organisation

Source of funds:_There was no funding required for this study to be conducted_

Conflict of Interest: All authors of this submitted manuscript confirm that there are no actual or potential conflicts of interest including any financial, personal or other relationships with other people or organizations within two years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

Ethical clearance: As this is a review article, no ethical clearance was required.

Authors's contribution:

Data gathering and idea owner of this study: Naeema A.R. Hussein El Kout

Study design: Naeema A.R. Hussein El Kout, Sonti Pilusa and Natalie Benjamin-Damons

Data gathering: Naeema A.R. Hussein El Kout

Writing and submitting manuscript: Naeema A.R. Hussein El Kout, Sonti Pilusa and Natalie Benjamin-Damons

Editing and approval of final draft: Naeema A.R. Hussein El Kout, Sonti Pilusa and Natalie Benjamin-Damons

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CHAPTER 4

4. PUBLISHED ARTICLE 2:

TITILE: Document Review of the Paper-Based Implementation of the Framework and Strategy for Disability and Rehabilitation in Gauteng, South Africa

4.1 PUBLICATION DETAILS

This chapter is presented as a published article. The article evaluates the implementation of South Africa's Framework and Strategy for Disability and Rehabilitation (FSDR) through provincial reports. Findings show that while physical accessibility and training were reported, barriers such as inadequate resources, lack of training, and absence of monitoring hindered full implementation, affecting reach and adoption. The manuscript was published in *PLOS ONE*, an open-access journal that provides a platform for high-quality scientific research. The article was peer-reviewed and published in 2025. Details about the publication are provided in Table 4.1.

Table 4.1: Publication Specifics of the Study Protocol

Title of publication	**Document review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in Gauteng, South Africa**
Authors	Naeema AR Hussein El Kout; Natalie Benjamin-Damons; Sonti Imogene Pilusa
Journal name	PLOS ONE
ISSN	1932-6203
Impact factor	2.9
Year	2025
Volume	20 (2)
DOI number	https://doi.org/10.1371/journal.pone.0315778

4.2 AUTHOR CONTRIBUTIONS

The authors' contributions are outlined in Table 3.2, utilizing the Contributor Roles Taxonomy (CRediT) framework (Allen, O'Connell, and Kiermer, 2019), with definitions of the roles provided in Appendix 1.

Table 4.2: Author Contributions based on CRediT Taxonomy

Contributor Role	Description	Authors
Conceptualisation	Development of the study concept and methodology.	Naeema AR Hussein El Kout; Sonti Pilusa
Methodology	Design of the study methods, including selection of mixed methods approach and tools.	Naeema AR Hussein El Kout; Sonti Pilusa
Formal Analysis	Conducting data analysis and interpretation.	Naeema AR Hussein El Kout
Investigation	Execution of data collection and related tasks.	Naeema AR Hussein El Kout
Writing – Original Draft	Drafting the original manuscript of the study protocol.	Naeema AR Hussein El Kout
Writing – Review & Editing	Reviewing and revising the manuscript critically for intellectual content.	Sonti Pilusa; Natalie Benjamin-Damons
Supervision	Oversight and guidance throughout the study protocol development.	Sonti Pilusa; Natalie Benjamin-Damons
Funding Acquisition	Securing financial support for the study.	Naeema AR Hussein El Kout

4.3 COPYRIGHT AND PERMISSIONS

4.4 ASSOCIATED DOCUMENTATION

Due to the journal's submission requirements, the documentation related to this study could not be included as appendices in the publication but are provided in this thesis as follows:

- Appendix 2: Ethical clearance certificate
- Appendix 3: Letter of permission from the hospital
- Appendix 4: Letter of permission from the research site

4.5 PUBLISHED ARTICLE

Document review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in Gauteng, South Africa, PLOS ONE.

PLOS ONE

RESEARCH ARTICLE

Document review of the paper-based implementation of the Framework and strategy for disability and rehabilitation in Gauteng, South Africa

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Data availability statement: Data cannot be shared publicly because the data contains potentially identifying participant information. Data are available from the principle investigator for researchers who meet the criteria for access to confidential data. Data requests may be sent to the Human Research Ethics Committee (HREC-Medical) of the University

Abstract

Background

The prevalence of disability is on the rise globally and in South Africa, with a high number of unmet needs and poor actualisation of the health rights of persons with disabilities. A tool to realise these rights is health policy, such as the framework and strategy for disability and rehabilitation (2015-2022)(FSDR). There are limited data on the implementation outcomes of the FSDR.

Objective

To review the implementation of the FSDR according to the paper-based provincial reports.

Methods

The study conducted a document review and utilised a concurrent mixed-method design, combining qualitative and quantitative data extracted from paper-based evaluation templates developed by the South African National Department of Health (NDoH). The qualitative analysis involved thematic coding using the RE-AIM framework to examine the FSDR's implementation across eight provinces, while quantitative data, such as frequencies and percentages, provided supplementary insights.

Results

The quantitative results revealed that 87% of the reports from provinces reported physical accessibility to the FSDR, and 62% of provinces received training on the implementation of the FSDR. Only two out of eight provinces have conducted monitoring and evaluation since implementing the FSDR in 2015. Qualitative findings revealed

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Competing interests: The authors have declared that no competing interests exist.

poor reach and adoption of the FSDR owing to a lack of implementation training for end users. The lack of indicators resulted in poor maintenance of the FSDR, as well as the lack of human resources and equipment which resulted in the reduced efficacy of the FSDR.

Conclusion

The FSDR has not achieved its full level of implementation due to numerous barriers, such as lack of resources, human capacity, and training on implementation.

Introduction

Globally, 16 percent of the world's population lives with disabilities, with an expected exponential increase by 2050 [1]. Among this high global prevalence, 80% of global disability cases occur in developing countries [2]. The prevalence of disability in Africa ranges from 5 percent to 20% across different countries, and is attributed to poor access to health care, conflict and forced displacement [3,4]. In South Africa, the disaggregation of disability-related data has led to potentially unaccounted cases [5]. Despite this, it is estimated that the national disability prevalence is 7.5%, which is attributed to infectious diseases, non-communicable diseases, trauma, and delayed initiation of health interventions [6,7] The increase in disability has increased the need for rehabilitation [6,7,8].

South Africa has the Integrated National Disability Strategy (INDS) of 1997 which paved the way for the Framework and Strategy for Disability and Rehabilitation (FSDR) (2015–2022). The INDS plays a crucial role in shaping disability policy in South Africa, and any analysis must consider its impact and context. While the FSDR is a significant recent policy, the INDS provides foundational principles and strategies that continue to influence current policies [9]. The FSDR was developed by the National Department of Health (NDOH) in South Africa (SA) for 2015–2020 [10]. The FSDR aims to guide and improve access to rehabilitation services for persons with disabilities in South Africa [11]. With the COVID-19 pandemic in the early months of 2020, the FSDR will be extended until 2022. Upon the conclusion of the FSDR, the National Department of Health (NDOH) had been tasked with evaluating the implementation of the FSDR within each province of South Africa. Few studies have reviewed the FSDR. A study by colleagues [22] reviewed the FSDR by means of a policy analysis and revealed that there are numerous gaps in the development process of the FSDR, such as a lack of end-user engagement and reduced budget allowance for policy development. However, no study has evaluated the implementation of the FSDR in Gauteng Province at the ground level.

Disability extends beyond social and biological constructs of restricted functionality [13]. Disability is the outcome of the relationship between environmental and personal factors, and a health condition which subsequently affects the way an individual can participate in daily life [14,15]. In the global and South African contexts, the health needs and rights of persons with disabilities have not been upheld because of the lack of data availability, policy inclusion, and poor end-user engagement [16]. A mechanism to realise these rights is the adequate development and implementation of public health policies [17]. Global efforts were made by the United Nations to protect the rights of persons living with disabilities through the development of the United Nations Convention on the Rights of Persons with Disabilities, to which South Africa is a signatory [18,19]. This subsequently mandated South Africa to have appropriate disability policies in place, such as the Framework and Strategy for Disability and Rehabilitation (FSDR) [20].

The importance of reviewing policy is that it identifies gaps in the processes and provides recommendations for future policies. The FSDR policy analysis conducted by colleagues [12] recommended an evaluation focused on the implementation of the FSDR in the Gauteng Province. With the current rise in the prevalence of disability globally and in South Africa, there is an increasing realisation that the rights of persons with disabilities have not been actualised [20]. The right to access health care, such as rehabilitation services, can be actualised through the adequate implementation of a disability-related public health policy. The FSDR expired in 2022, and its implementation has not yet been evaluated [21]. This lack of evaluation can result in future disability policies that repeat previous mistakes and do not address gaps in service delivery and health outcomes [21].

Methodology

Study design

The study employed a document review methodology with a predominantly qualitative focus, supplemented by limited quantitative data. Thus a concurrent mixed-method design was used, where qualitative and quantitative data were extracted from documents for separate analysis and then integrated. The quantitative component was a cross-sectional descriptive study using descriptive statistics, while the qualitative component was a descriptive qualitative study that involved evaluating qualitative responses from paper-based implementation reports. This study is part of a bigger study [22].

The South African National Department of Health (NDOH) developed a paper-based evaluation template which was completed by rehabilitation managers in their respective provinces. The template explored the physical accessibility of the FSDR document, the extent of training on FSDR implementation within each province, and the level of monitoring and evaluation undertaken throughout the FSDR's lifespan. The FSDR aims to define and guide rehabilitation service provision from a primary healthcare level through to a specialised hospital, to improve access to healthcare for persons with disabilities [21].

Study setting

The study setting in this case refer to the geographic locations from which the data originated. These include the 8 provinces of South Africa that reported on the FSDR was implementation. This includes Gauteng, Mpumalanga, Northwest, Eastern Cape, Western Cape, Northern Cape, Kwa-Zulu Natal and Limpopo but data has been anonymysed by allocating provinces a number in the results section. The study did not directly engage with individuals but rather analysed reports collected by the National Department of Health (NDoH) from these provinces. The settings are described as the administrative and operational contexts of the provincial health departments where the FSDR implementation occurred.

Data collection and analysis

The study employed a paper-based evaluation methodology, focusing on data collected from the nine provinces of South Africa through standardised templates developed by the National Department of Health (NDoH). These templates were designed to capture information on the accessibility, training, and monitoring and evaluation (M&E) of the Framework and Strategy for Disability and Rehabilitation (FSDR).

Each province completed the evaluation template, which was then submitted to the NDoH. The researcher obtained these completed reports from the NDoH rehabilitation directorate following formal permission granted via email. Once approved, the reports were sent to the researcher for analysis. Data access and analysis occurred between 7 September 2022 and 31

March 2023. The researcher played no role in the design of the templates or the data collection process but focused solely on analysing the reports provided by the NDoH. The study was conducted across the nine provinces, with data collected from their respective health departments.

The paper-based implementation provincial reports of the FSDR comprised questions on the accessibility of the FSDR in terms of electronic access, access to the FSDR on the NDOH website, and access to hard copies. The report also explored the level of training that was performed on the FSDR, as well as the level of monitoring and evaluation (M&E) that was performed within each province.

Quantitative data, though limited, were extracted as numerical references (e.g., frequencies and percentages). These data provided supplementary insights into specific aspects of the document's implementation or outcomes.

Qualitative analysis. Thematic analysis was conducted to identify recurring themes, subthemes, and patterns. The qualitative data were coded using MAXQDA version 2020.0 to ensure rigor and consistency. The data were analysed deductively using the RE-AIM framework. The deductive thematic analysis, guided by the RE-AIM framework, systematically coded and interpreted qualitative data using MAXQDA software. The researcher familiarised themselves with the data, coded it according to the framework's categories—Reach, Effectiveness, Adoption, Implementation, and Maintenance—and developed initial codes into broader themes. These themes were refined and organized into a coherent narrative, providing insights into the experiences and challenges of FSDR implementation across South Africa's provinces.

Quantitative analysis. Descriptive statistics were applied to the extracted quantitative data, such as reporting frequencies or proportions of specific occurrences.Given the limited nature of the quantitative information, these results were integrated with the qualitative findings to provide a more holistic interpretation. Although primarily qualitative, the study employed an embedded mixed-methods design, wherein limited quantitative data were used to complement and enrich the qualitative findings. This integration allowed for a nuanced understanding of the document's implementation and outcomes.

Conceptual framework

The underlying conceptual framework for this study resulted in the data being analysed deductively according to the RE-AIM (Glascow, 2009) [22] framework, which has been shown to be an effective tool for evaluating the implementation of a policy from an implementation-sciences perspective [25]. This framework is illustrated in the figure below. Operational definitions were derived for this data analysis to ensure relevance to the FSDR implementation evaluation. The operational definitions are listed in Table 1.

Trustworthiness

Critics sometimes question trustworthiness in qualitative research; however, researchers have proposed strategies to ensure trustworthiness[23]. These strategies are credibility, confirmability and transaferability [23]. The credibility of this study was ensured through collaborative coding by the principal investigator and co-authors, whereby the final data analysis was reviewed to obtain a consensus on the final themes and subthemes. Additionally, an independent reviewer assessed the data analysis to confirm that the consensus obtained reflected the reality of the study. To ensure confirmability, this study ensured an in-depth description of the methodologies used and the use of the co-coders. Additionally, the final data analysis was reviewed by the NDOH to confirm the study findings. Moreover, transferability was ensured through the use of detailed descriptive methodologies used in this study.

Table 1. Operational definitions of the RE-AIM framework.

Re-AIM Component	Operational definition
Reach	The extent to which the FSDR implementation affected the end users (e.g., ground level clinicians, persons with disabilities etc). The end users of the FSDR were categorized as direct, indirect or intended.
Efficacy	The degree of effectiveness of the FSDR. This refers to how appropriate the FSDR was in achieving its main objective. i.e., to what extent has the FSDR increased access to rehabilitative health care for persons with disabilities
Adoption	This refers to the level of acceptance of the FSDR by it's implementers, e.g.,: the number of collaborations formed as a result of the FSDR
Implementation	The degree to which the FSDR strategic plan and indicators were achieved.
Maintenance	The level at which the FSDR targets and objectives are sustainably implemented and continuously monitored and evaluated.

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Ethical considerations

Ethical clearance was obtained from the Human Ethics Research Committee of the University of Witwatersrand (M220364), and permission was obtained from the National and Gauteng Department of Health through an online application on the National Health Research Database (GP_202202_059). The data in the reports were fully anonymised before the researcher accessed them and the ethics committee waived the requirement for informed consent.

Findings

Eight out of nine provinces provided reports on the implementation of the FSDR in their contexts resulting in an 89% response rate. A few provinces highlighted that the Covid-19 pandemic negatively impacted the implementation of the FSDR, thus resulting in low levels of implementation. Some provinces provided more information than others, and some provinces provided values that others did not which is reflected in the graphics below. The findings highlight the uneven implementation of FSDR across different provinces in South Africa, with significant variations in access, training, and monitoring & evaluation. Most provinces received hard copies of the FSDR, but online access was limited, and training on its implementation was inconsistent, with staff shortages impacting service delivery. The absence of comprehensive monitoring and evaluation systems across most provinces and a lack of standardized training hindered effective implementation, with only one province actively reporting on M&E findings.

Physical accessibility to the FSDR

The physical accessibility to the FSDR document was determined by responses from provinces on whether or not they received hard copies of the FSDR and or accessed it online. This is seen in Fig 1 below.

Training on FSDR implementation

The paper based report explored whether or not provinces conducted training on FSDR implementation. The responses to this are seen in Fig 2 below:

Of the 62.5% of provinces that conducted training on FSDR implementation, only 3 provinces provided quantified data on the number of rehabilitation professionals trained on the implementation of the FSDR. This is seen in Fig 3 below.

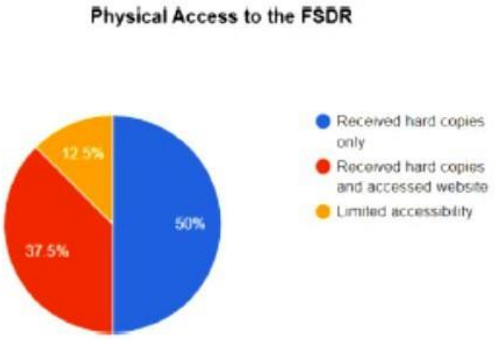

Fig 1. Percentage of provincial facilities with physical access to Functional Screening and Disability Rehabilitation (FSDR) services across eight provinces.

https://doi.org/10.1371/journal.pone.0315778.g001

Fig 2. Provincial training status on FSDR implementation across eight provinces, indicating whether training was conducted or not.

https://doi.org/10.1371/journal.pone.0315778.g002

M&E of FSDR implementation

The implementation report sought to understand if the FSDR implementation was monitored and evaluated in each province. Fig 4 below shows the number of provinces that conducted M&E of the FSDR implementation.

Workforce for FSDR implementation

Provinces reported on how many therapists were available to support the implementation of the FSDR. These values are seen in Fig 5 below:

In addition to provinces providing information on the number of rehabilitation professionals available to support FSDR implementation, provinces also provided information on the lack of staff at primary health care (PHC) levels which is primarily where the FSDR implementation was focused at. This is seen in Fig 6 below.

The second section of the FSDR report on implementation from each province focuses on the eight goals and the correlating objectives outlined in the FSDR. Responses to the realisation of these goals were categorised into main themes. An overview of the provincial reports using the RE-AIM framework is shown in Table 2.

Provinces have employed diverse training strategies, ranging from centralized workshops to decentralized training through district staff.

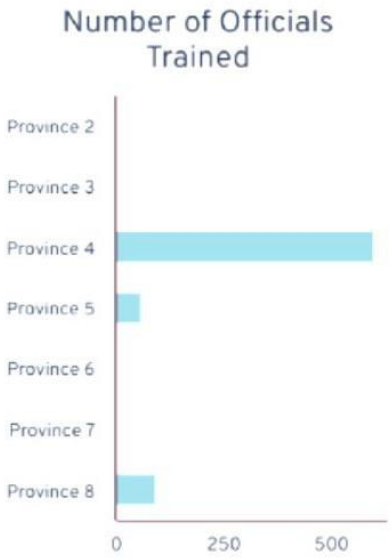

Fig 3. Number of rehabilitation professionals trained on FSDR implementation in three provinces that provided data.

https://doi.org/10.1371/journal.pone.0315778.g003

Reach

A major factor of reach relates to the level of training which was conducted throughout each province on the FSDR. Some provinces provided numerical values for the number of individuals trained, whereas others provided insight into who the trainers were and which rehabilitation professionals were trained. An example of this is seen in the Eastern Cape, with 600 officials being trained, followed by the Northwest province, with 93 officials being trained, and Mpumalanga, with 60 officials being trained. The other provinces that did not provide numerical values still provided insight into the fact that some training was conducted by the NDOH on provincial rehabilitation managers. In turn, provincial rehabilitation managers trained profession-specific district rehabilitation coordinators, including physiotherapy (PT), Occupational Therapy (OT), speech therapy (ST), Audiology, Medical Orthotics, prosthetics, and podiatry. Another noteworthy point was the inclusion of community service physiotherapists during their annual induction sessions. Table two above showcases the experiences of rehabilitation providers in the FSDR implementation with one province stating that "The province was oriented and supported the implementation of the Framework in 2015. There was however many changes in Management structures within the province. There was no carry over between these structures." This shows that despite efforts to train end users, the lack of carryover internally affected implementation outcomes.

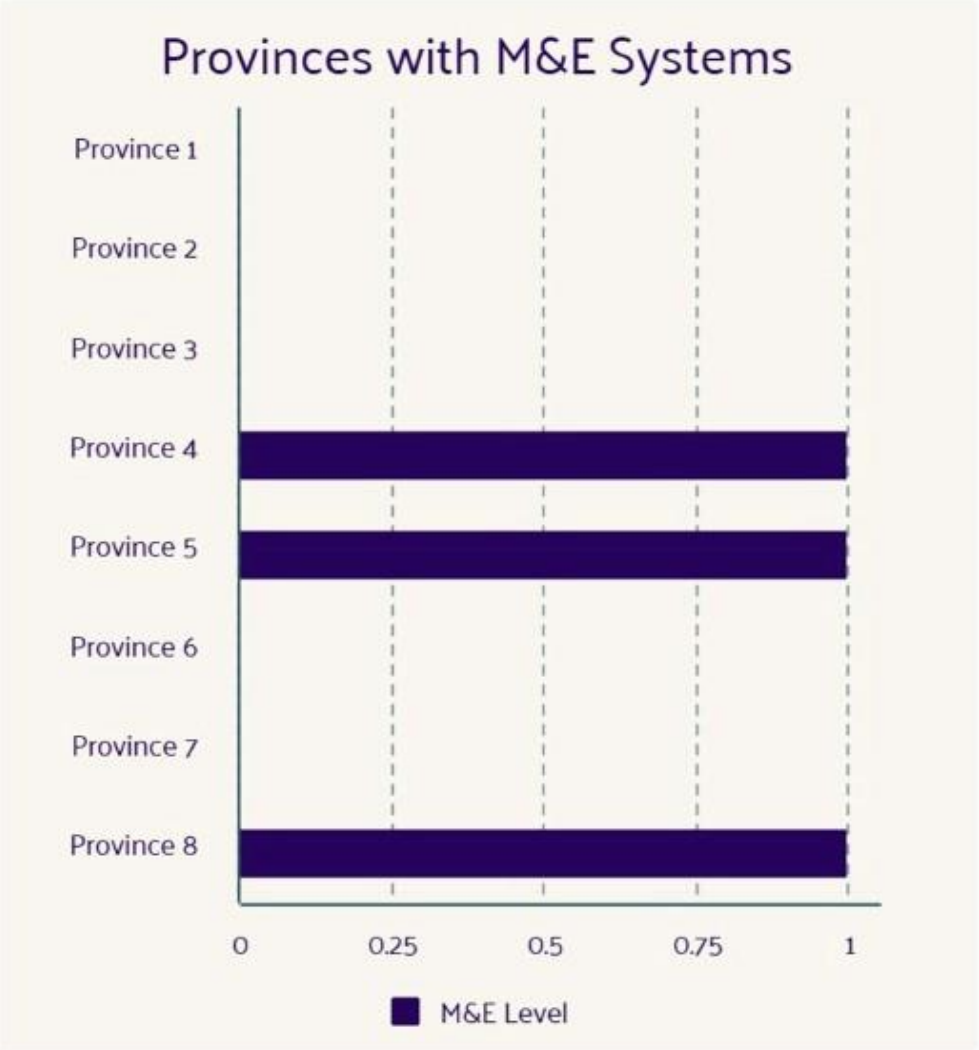

Fig 4. Monitoring and evaluation (M&E) reporting status for FSDR implementation across eight provinces.

https://doi.org/10.1371/journal.pone.0315778.g004

Additionally, FSDR's reach is defined by the level of physical accessibility to the document itself. This refers to the extent to which an actual document is reached. The majority of the provinces stated that they received hard copies of the FSDR from the NDOH, whereas others accessed the FSDR electronically through the NDOH website. Most of the provinces utilised electronic copies of the FSDR, as it was more accessible.

Moreover, the reach of the FSDR spoke to the number of intended, direct, and indirect individuals affected by the FSDR implementation. The FSDR was intended to target rehabilitation managers and therapists, and this was achieved directly. The FSDR also indirectly affected

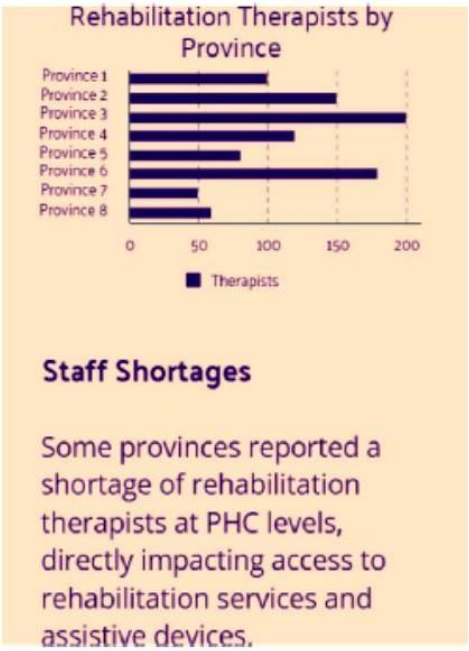

Fig 5. Availability of rehabilitation professionals to support FSDR implementation across eight provinces.

https://doi.org/10.1371/journal.pone.0315778.g005

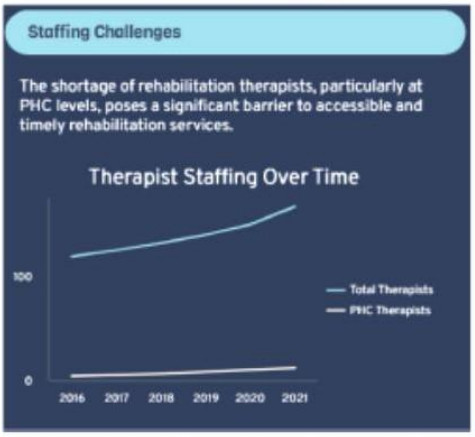

Fig 6. Proportional distribution of rehabilitation staff at Primary Health Care (PHC) levels relative to all available rehabilitation professionals.

https://doi.org/10.1371/journal.pone.0315778.g006

the improvement in rehabilitation access for communities that may have been isolated prior to FSDR implementation. The extent to which indirect and unintended individuals were affected was unclear from the paper-based evaluation, as further investigation is required.

Table 2. Overview of findings according to the Re-Aim Glasgow (2009) framework.

Framework component	Subtheme	Document quote
Reach	FSDR implementation training	*"Orientation for Therapeutic and Rehabilitation professionals to the FSDR was done with the involvement of NDoH Disability, Rehabilitation and Older Persons Manager in 2017"* [1]
	Lack of orientation	*"There were no orientation and support that took place."* [7]
	Lack of handover	*"The province was orientated and supported to implement the Framework during 2015. There was however many changes in Management structures within the province. There was no carry over between these structures."* [2]
Efficacy	Inclusive priority programmes	*"(Priority) Programmes were all orientated on the need to include disability and rehabilitation on their plans. But this process is done continuously by the districts."* [5] *"KZN has achieved 50% of priority programmes that reflect disability and rehabilitation services in operational plans."* [6]
	Accessibility	*"Annual reviews of accessibility standards are conducted, and adjustments/improvements as needed."* [3] *"The Province participate(d) in scheduled clinical awareness workshops that are conducted by facilities and provide information on disability matters."* [5]
	Establishment of referral pathways	*"The successful implementation of the existing referral pathway for cerebral palsy and other related cases."* [6]
Adoption	Intersectoral collaboration	*"Mental Health services are inclusive of persons with disabilities and programmatic planning is specifically inclusive on persons with intellectual disabilities which is evidenced in activities such as the Right to Education intersectoral task team."* [3] *"Rehabilitation services reflects in the EC Department of Health APP,ECDOH operational plan,MEC priorities,District health services plan and legal services (medico-legal strategy)plan. "*[4]
	Screening across levels of care	*"Developmental screening occurs at household, PHC clinic and hospital outpatient department."* [6]
Implementation	Resource limitations	*"lack of rehabilitation coordinators at district level affected the rollout of FSDR training and provision of appropriate support at facility level."* [8]
	Stratified implementation	*"In [Province 6], the disability and rehabilitation collaboration with different stakeholders including provincial, district and local government spheres as well as disability sector and civil society through the provincial disability forum which is housed in the office of the premier."*[6]
Maintenance	Disability-related data aggregation	*"lack of disaggregation of disability-related data in departmental monitoring tools."* [8]
	Lack of M&E tools	*"no M&E tool was received from NDoH but as [Province 1], a Rehab Strategy (although unsigned) which encompassed the FSDR goals was developed (to monitor) implementation."* [1]

https://doi.org/10.1371/journal.pone.0315778.t002

Efficacy

The efficacy of the FSDR refers to the extent to which the FSDR increases access to rehabilitative healthcare for persons with disabilities. More ground-level investigations are required to understand the level of accessibility. The provinces described that their facilities were already physically accessible and that they reviewed and aligned them to national accessibility standards. Some provinces conducted accessibility audits, but no clear outcome was provided, as these are still being conducted. In addition, the provinces have developed guidelines to improve the issue rates of assistive devices. This was seen by one province that stated that they have "*…achieved 50% of priority programmes that reflect disability and rehabilitation services in operational plans.*" This was a positive result of the FSDR implementation in the province.

Adoption

This refers to the level of acceptance of the FSDR by its implementers, for example, the number of collaborations formed as a result of the FSDR. This primarily speaks to Goal 3 which seeks to foster intersectoral collaboration. The majority of the provinces developed intersectoral and interprofessional relationships to improve access to rehabilitation for persons with disabilities. A clear example of this is the numerous partnerships with local communities and non-profit organisations which facilitated accessibility. Additionally, an example of this is in the Northwest province, where the provincial department of health was working with the Department of Women, Youth, and Persons with Disabilities. Mpumalanga also established relationships with the Office on the Status of Disabled People. In some provinces, the hosting of provincial disability forums has facilitated collaboration.

Implementation

The implementation of the FSDR spoke to its effectiveness in achieving its targets, objectives, and indicators. The framework defined in the FSDR and utilised in the actual paper-based evaluation template described eight main goals with correlating objectives. These goals sought to integrate rehabilitation into priority health programmes, develop effective rehabilitation referral pathways, foster inter-sectoral collaboration, implement accessibility standards, increase the awareness levels of disability, improve the M & E of disability services, improve human resources for rehabilitation services, and improve access to assistive devices.

The exact extent to which these were achieved varied between provinces owing to the different ways in which the provinces responded. One province, Limpopo, responded with quantitative values regarding each goal and its objectives by defining the responses based on the number of facilities and individuals targeted. In most cases, the realisation of all goals was halted due to the Covid-19 Pandemic.

Maintenance

The level at which the FSDR targets and objectives are being sustainably implemented and continuously monitored and evaluated. Most provinces did not monitor or evaluate the FSDR. Some provinces stated that they did not have a tool for M&E, whereas others did not state why they had not conducted M & E. In some instances, the provinces quantified their M & E by providing amounts for their wheelchair issue rate of 78%.

The above section provides an overview of FSDR implementation in relation to the RE-AIM framework. The next section discusses the barriers and facilitators experienced by the provinces during the implementation of FSDR.

Discussion

This study aimed to review the reports on the implementation provided by each province. To our knowledge, this is the only study to review these reports and provide a bird's eye overview of FSDR implementation across different provinces. The National Department of Health reviewed eight provincial reports [24].

The success of any health policy depends on how well equipped implementers are at ground level. From the results, it was difficult to quantify the level of reach to ascertain how far the FSDR went and whom it actually reached. There was a fair degree of physical accessibility to the FSDR among management and coordinators, but it is unknown how many clinicians at the ground level had access to implement the FSDR. A study [24] argued that it is highly necessary for ground-level end users (in this case, clinicians and managers), to be involved in the implementation of a policy from the inception of implementation. In the case

of FSDR, a top-down approach was used which may have hindered further implementation. In contrast, another study [25] explained that a top-down approach may not necessarily be a negative factor in disability policy implementation, provided that it allows end users to openly engage in their experience of implementation.

Efficacy

The FSDR sought to increase accessibility for people with disabilities by increasing the physical and geographical accessibility of the services provided. Interestingly, provinces reported that their facilities were already accessible, and all that was required for FSDR implementation was the alignment of services to the policy. It may arguable as to how these provinces perceived "accessible" considering the heterogeneity of rehabilitation facilities across South Africa. A study [26] justifies that policy implementation is not only reliant on the efficacy of the policy and its content but also on the self-efficacy of the implementer. This was also explored by an author [27], who showcased a participatory action-based project which highlights how policy implementers can be powerful in influencing policy and progress of efficacy of implementation when they are adequately equipped for implementation and willing to implement. However, we acknowledge the need for further quantified evidence to establish whether the FSDR achieved optimal efficacy through its implementation.

Adoption

The adoption of any policy requires a certain degree of acceptance of the policy content among the implementers [27,28]. A major output for the adoption of the FSDR was the development of intersectoral collaboration which some provinces reported to be able to achieve. Again, the extent to which they achieved this is unknown. Authors [29] describe how adoption of policy improves when there is implementation support. However, it should be noted that this study was conducted in a European context and may not accommodate contextual differences in South Africa; therefore, the findings cannot be generalized.

Implementation

Implementation science is emerging in the field of rehabilitation, and the ability of policies to be adequately implemented according to the policy contents requires further exploration [30]. While the responses were fairly general and not quantified, differences were noted in the ways in which provinces implemented the FSDR. Examples of these differences are seen where one province implemented the FSDR by developing and implementing additional internal policies, such as the Gauteng Disability Policy and Roadshow [30]. Another province explained their implementation by conducting accessibility audits to ensure that rehabilitation facilities were physically accessible to persons with disabilities. There may be numerous reasons for the heterogeneity of implementation across provinces, including the understanding of accessibility in each province coupled with each province operationalizing the FSDR according to their contexts. This highlights the need for a disability policy that can adapt to different environments. Moreover, these differences showcase flaws in the training of end users in the policy implementation process, as standardized implementation measures may have resulted in similar implementation outcomes across the country.

These differences speak to the findings of a study [31], that compared the findings of policy implementation in South Africa and Kenya and found that the biggest factor affecting implementation was the differences in governance of health services at different levels, as is the case of rehabilitation management at the national, provincial, and district levels during the FSDR

implementation. As such, we propose adequate, standardized training on implementation within each of the rehabilitation governing structures of each province, coupled with standardized monitoring and evaluation tools to assess the same outcomes.

Maintenance

Monitoring and evaluating policy implementation efforts are among the most crucial aspects for ensuring successful policy implementation [32]. In our study, provinces reported that a lack of available M&E indicators resulted in no M&E activities being conducted in some provinces. The authors [32] explain that this is often an oversight in many policies due to the absence of monitoring tools to continuously evaluate progress on implementation. This finding also shows a flaw in the development of the FSDR: no M&E tool was developed at the development stage alongside the formulation of the policy content, which affected the implementation of the FSDR. This finding is supported by other authors [33,34,35], who emphasized the need for monitoring tools to be developed at the early stages of policy development, highlighting the need for these tools and indicators to be based on a participatory approach to ensure that end users are included in the tool design.

Strengths

This study is the first to evaluate the implementation of the FSDR based on the provincial implementation report, providing a broad overview of the FSDR implementation. The inclusion of end users and NDOH in the study design provided a participatory research approach to ensure that the study understood the research question and matched the research methods accordingly.

Study limitations

The data used in this study were retrospective data collected by the National Department of Health which may pose a risk of low-quality data and responses. Additionally, the reports reviewed only account for the experience of implementation at provincial management levels and not at ground level which may not be a true reflection of FSDR implementation among end users.

Recommendations

According to the study findings, further investigation is required at the ground level to assess the implementation of the FSDR amount by end users to understand their experiences and perceptions. Further efforts should be made to quantify the implementation of the FSDR to inform future policies. Moreover, the barriers identified in this study, such as resource limitations, should be addressed through capacity-building initiatives.

Conclusion

The FSDR has not achieved its full level of implementation owing to multiple barriers, such as poor implementation training, lack of resources, and human capacity. Facilitators, such as intersectoral collaboration, should be leveraged to improve disability policies to realise equitable access to rehabilitation services for people with disabilities.

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Conceptualization: Naeema Ahmad Ramadan Hussein El Kout, Natalie Benjamin-Damons, Sonti Imogene Pilusa.

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CHAPTER 5

5. PUBLISHED ARTICLE 3

TITLE: Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study

5.1 INTRODUCTION TO MANUSCRIPT TWO: UNDERSTANDING BARRIERS AND FACILITATORS TO DISABILITY AND REHABILITATION POLICY IMPLEMENTATION IN GAUTENG, SOUTH AFRICA: A QUALITATIVE CFIR - INFORMED STUDY

This chapter is presented as a manuscript which has been published in Health Sciences Reports. This article examines barriers and facilitators to implementing South Africa's disability and rehabilitation framework in Gauteng. It identifies challenges like resource constraints and socio-cultural attitudes, while highlighting facilitators such as inter-sectoral collaboration and community engagement. Findings aim to inform policy improvements and enhance services. The publication details are provided in Table 5.1.

Table 5.1: **Publication Specifics**

Title of publication	**Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study**
Authors	Naeema AR Hussein El Kout; Sonti Pilusa; Natalie Benjamin-Damons
Journal name	Health Science Reports
ISSN	TBC
Impact factor	2.4 (2024)
Year	2025
Volume	8, issue 3
DOI number	https://doi.org/10.1002/hsr2.70515

5.2 AUTHOR CONTRIBUTIONS

'The authors' contributions are outlined in Table 5.2, utilising the Contributor Roles Taxonomy (CRediT) framework (Allen, O'Connell, and Kiermer, 2019), with the definitions of the roles provided in Appendix 1.

Table 5.2: Author Contributions based on CRediT Taxonomy

Contributor Role	Description	Authors
Conceptualisation	Development of the study concept and methodology.	Naeema AR Hussein El Kout; Sonti Pilusa
Methodology	Design of the study methods, including selection of mixed methods approach and tools.	Naeema AR Hussein El Kout
Formal Analysis	Conducting data analysis and interpretation.	Naeema AR Hussein El Kout
Investigation	Execution of data collection and related tasks.	Naeema AR Hussein El Kout
Writing – Original Draft	Drafting the original manuscript of the study protocol.	Naeema AR Hussein El Kout
Writing – Review and Editing	Reviewing and revising the manuscript critically for intellectual content.	Naeema AR Hussein El Kout, Sonti Pilusa; Natalie Benjamin-Damons
Supervision	Oversight and guidance throughout the study protocol development.	Sonti Pilusa; Natalie Benjamin-Damons
Funding Acquisition	Securing financial support for the study.	Naeema AR Hussein El Kout

5.3 COPYRIGHT AND PERMISSIONS

5.4 ASSOCIATED DOCUMENTATION

Owing to journal requirements, the documentation related to this study could not be included as appendices in the publication. However, this thesis provides the following documentation:

- **Appendix 2**: Ethical clearance certificate
- **Appendix 3**: Letter of permission from the hospital
- **Appendix 4**: Letter of permission from the research site

5.5 PUBLISHED ARTICLE

The published article titled "**Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study**" explores the multifaceted factors influencing the implementation of disability and rehabilitation frameworks in Gauteng.

PUBLISHED ARTICLE 2

TITLED: Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study

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Understanding Barriers and Facilitators to Disability and Rehabilitation Policy Implementation in Gauteng, South Africa: A Qualitative CFIR-Informed Study

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ABSTRACT

Background: The effective implementation of disability and rehabilitation frameworks is essential for the full participation and social integration of individuals with disabilities. In Gauteng, South Africa, significant challenges persist in the execution of the Framework and Strategy for Disability and Rehabilitation (FSDR). This study aimed to explore the barriers and facilitators to the implementation of the FSDR in Gauteng.

Methods: We employed qualitative research methods, including semi-structured interviews and focus group discussions with stakeholders involved in the implementation process, from management to end users. Data were triangulated with a review of paper-based implementation reports from rehabilitation managers. The interview, focus group, and document review data were analyzed using inductive thematic analysis with MAXQDA qualitative data analysis software.

Results: Barriers to implementation included resource constraints, organizational inefficiencies, and socio-cultural attitudes toward disability. Facilitators identified included inter-sectoral collaboration, community engagement, and alignment of policies with international guidelines. Using the Consolidated Framework for Implementation Research (CFIR), barriers and facilitators were mapped to domains such as intervention characteristics, outer and inner setting factors, characteristics of individuals, and the implementation process. Key challenges included insufficient awareness and training among healthcare professionals, limited resources, safety concerns, and inconsistent policy implementation. Facilitators such as inter-sectoral collaboration, policy development, provincial training, and advocacy by persons with disabilities were crucial for overcoming these challenges.

Conclusion: This study provides valuable insights into the contextual factors influencing disability and rehabilitation policy implementation in Gauteng. By addressing identified barriers and leveraging facilitators, evidence-based strategies can strengthen rehabilitation services, promote social inclusion, and enhance the rights of individuals with disabilities in South Africa and globally.

1 | Introduction

Global discussions on disability and rehabilitation increasingly emphasize a rights-based approach, prioritizing inclusive policies to promote the full participation and integration of individuals with disabilities [1]. However, translating these frameworks into practice remains challenging, particularly in middle-income countries like South Africa, where systemic and resource constraints persist [2].

South Africa's health system reflects stark inequalities, divided into under-resourced public and well-funded private sectors.

The public sector serves the majority of the population, exacerbating disparities in access to care [3]. To address these inequities, the government is implementing the National Health Insurance (NHI) scheme, which aims to achieve universal health coverage (UHC) by pooling resources to deliver quality healthcare based on need, irrespective of socioeconomic status [4].

Disability is a significant public health issue in South Africa due to high prevalence rates linked to injuries, chronic diseases, and congenital conditions. The [5] estimates that about 15% of the global population lives with some form of disability, a statistic mirrored in South Africa. In response, the government has developed comprehensive policy frameworks, including the White Paper on the Rights of Persons with Disabilities (WPRPD) and the Framework and Strategy for Disability and Rehabilitation (FSDR), to support individuals with disabilities and promote their inclusion [6].

The FSDR serves as a national guideline for providing comprehensive rehabilitation services, improving access to care, and fostering social inclusion. Its objectives include integrating rehabilitation across healthcare levels, enhancing service accessibility, training healthcare providers, advancing community-based rehabilitation (CBR), and strengthening policies to protect disability rights [7]. While progress has been made, particularly in integrating services into primary healthcare and expanding CBR programs, implementation faces ongoing challenges such as resource limitations, infrastructure gaps, and insufficient trained personnel. Efforts to address these barriers include increased funding, policy reforms, and collaboration with NGOs and international organizations [8, 9].

Gauteng province, South Africa's economic hub, exemplifies these challenges within a diverse and urbanized context. With its large population and significant disparities in healthcare access, Gauteng provides a critical setting for examining the barriers and facilitators of disability and rehabilitation policy implementation. Understanding these dynamics is essential for refining policies and improving service delivery to enhance the quality of life for individuals with disabilities.

This study, guided by the Consolidated Framework for Implementation Research (CFIR), mapped the barriers and facilitators of FSDR implementation to domains such as intervention characteristics, contextual factors, individual roles, and the implementation process [10]. By identifying how these factors influence policy execution, the study contributes to the growing literature on disability and rehabilitation implementation science, particularly in resource-constrained settings. The findings aim to inform evidence-based policy recommendations and intervention strategies, strengthening disability and rehabilitation services in South Africa and beyond. The CFIR framework is shown in Figure 1 below.

2 | Study Aim

The study aimed to explore factors influencing the implementation of the FSDR in Gauteng, South Africa, based on stakeholder experiences.

2.1 | Methodology

This study was conducted through the South African National Department of Health and the Gauteng Provincial Department of Health, focusing on the five districts of Gauteng: City of Johannesburg, Ekurhuleni, West Rand, Sedibeng, and

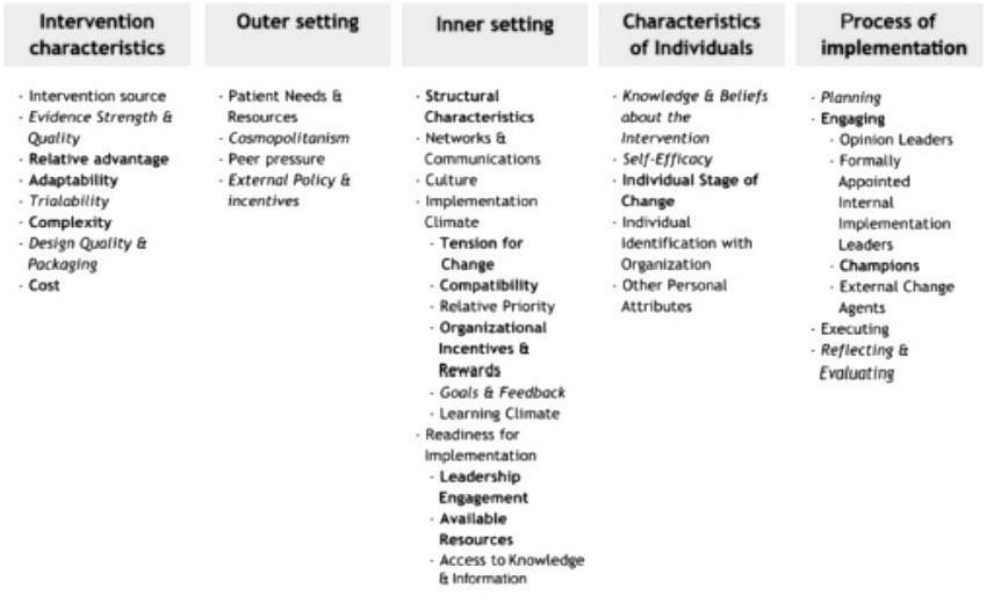

FIGURE 1 | CFIR (2009) framework showing the five domains.

Tshwane. Gauteng, home to approximately 15 million people, constitutes 25% of the national population.

2.2 | Study Design

A descriptive qualitative study design was employed, using semi-structured interviews and focus group discussions to gather insights from key stakeholders [11]. Data collection was conducted in two phases:

- Phase 1: Reviewed the National Department of Health's (NDOH) paper-based FSDR evaluations and analyzed provincial reports through document review.
- Phase 2: Explored stakeholder experiences via semi-structured interviews and focus group discussions to identify factors influencing FSDR implementation. Triangulation of data sources ensured a comprehensive data set.

2.3 | Study Participants

The study included 15 semi-structured interviews and 6 focus group discussions. Purposive and snowball sampling were employed to ensure the inclusion of diverse perspectives, capturing a wide range of stakeholder experiences and expertise. Participants included national and provincial rehabilitation managers, disability person organizations, nongovernmental organizations, clinical rehabilitation therapists, rehabilitation professionals organizations, and academics involved in FSDR implementation. Inclusion criteria were individuals involved in the FSDR implementation at any level. Participants were excluded if they did not consent and were not involved in the FSDR implementation. Ethical clearance for the study was obtained by the University of the Witwatersrand Human Research Ethics Committee (Medical), and permission was obtained from the Gauteng Department of Health. Written informed consent was obtained for the interview and focus group discussions and a separate written consent for the audio recording.

2.4 | Data Collection

- Phase 1: Reviewed NDOH's evaluation reports of FSDR implementation using a thematic analysis approach.
- Phase 2: Developed an interview guide with open-ended questions, conducted interviews and focus group discussions with stakeholders, audio recorded sessions, and transcribed them verbatim. Reflexivity journals were maintained to enhance transparency and self-awareness.

2.5 | Data Analysis

Inductive thematic analysis, as defined by Braun and Clarke [12], was employed to identify themes in the data. MAXQDA, a qualitative data analysis software, was used to streamline coding, theme generation, and data organization, enhancing analytic rigor. An independent researcher co-coded the reports and transcripts, with themes finalized through consensus and reviewed by two co-investigators.

3 | Study Findings

The study identified key barriers to FSDR implementation, including inadequate training and awareness among healthcare professionals, resource constraints, safety concerns, and disjointed policy execution. Conversely, facilitators such as intersectoral collaboration, targeted policy development, provincial training, adaptive implementation strategies, and advocacy by persons with disabilities supported effective policy adoption and improved disability rehabilitation outcomes. An overview of the findings are seen in Table 1 below.

3.1 | Barriers to Implementation

3.1.1 | Training and Awareness

- Insufficient awareness and training: Healthcare professionals lack awareness and adequate training on disability policies, leaving them unprepared to align practices with policy objectives.

3.1.2 | Resource Constraints

- Staffing and infrastructure limitations: Insufficient staff, poor infrastructure, and lack of equipment maintenance hinder timely and quality service delivery.
- Service delays: Long waiting times and referral delays compromise patient care and satisfaction.

3.1.3 | Safety and Accessibility

- Safety concerns: High-crime areas deter healthcare providers, disrupting service provision.
- Catchment area restrictions: Limited capacity and restrictive catchment areas delay access to rehabilitation services.

3.1.4 | Policy and Implementation Gaps

- Inconsistent and fragmented implementation: Policies suffer from resource constraints, limited integration across departments, and disjointed services, reducing their effectiveness.
- Top-down approach: Lack of frontline stakeholder involvement creates a disconnect between policy design and practical needs.

3.2 | Facilitators to Implementation

3.2.1 | Collaborative Efforts

- Cross-sector and community collaboration: Partnerships across sectors, care levels, and community members ensure alignment with provincial needs and foster advocacy.

TABLE 1 | Barriers and facilitators to the implementation of the FSDR in the Gauteng province.

Category	Theme	Key points
Barriers	Lack of awareness & training	Limited awareness of disability policies and inadequate training hinder effective implementation.
	Limited resources	Staffing shortages, service delays, poor infrastructure, and lack of equipment maintenance impact care quality.
	Safety concerns	High-crime areas pose risks, disrupting service delivery and deterring healthcare providers.
	Capacity & catchment issues	Facility capacity limits, long referral times, and catchment restrictions delay access to services.
	Policy implementation challenges	Resource constraints, inconsistent implementation, and misalignment with practical needs reduce access to care.
	Departmental disconnection	Poor integration among departments creates inefficiencies and fragmented services.
	Absence of bottom-up approach	Limited involvement of frontline stakeholders leads to impractical and less effective policies.
Facilitators	Inter-sectoral collaboration	Partnerships across sectors and community advocacy enhance alignment and implementation.
	Policy development & engagement	Complementary policies, subnational development, and workshops ensure alignment with local needs.
	Provincial orientation & training	Orientation and training initiatives support successful policy adoption and capacity-building.
	Flexibility in implementation	Adaptive responses, such as during COVID-19, maintained policy goals while addressing challenges.
	Advocacy by persons with disabilities	Advocacy raises awareness and fosters equitable access to rehabilitation services.

3.2.2 | Policy Development and Engagement

- Localized policy development: Subnational and complementary policies enhance relevance and implementation.
- Stakeholder engagement: Sensitization workshops and inclusive engagement strategies support effective policy adoption.

3.2.3 | Training and Capacity Building

- Orientation and professional training: Targeted orientation and training programs enable healthcare professionals to meet policy objectives effectively.

3.2.4 | Flexibility in Implementation

- Adaptation to challenges: Flexibility in responding to external factors (e.g., COVID-19) while maintaining service quality is essential for successful implementation.

3.2.5 | Advocacy for Disability Rights

- Awareness and access: Advocacy by persons with disabilities raises awareness and ensures equitable access to essential services.

3.3 | Mapping Findings to CFIR Domains

3.3.1 | Intervention Characteristics

- Lack of awareness and training: Insufficient awareness among healthcare professionals and inadequate training at the university level hinder effective policy implementation.
- Challenges in aligning practices with policy objectives: Misalignment due to insufficient understanding and training leads to resistance and inconsistency in implementation efforts.

3.3.2 | Outer Setting

- Limited resources: Staffing shortages, long waiting times, lack of equipment maintenance, and inadequate infrastructure impede effective implementation and compromise patient outcomes.

3.3.3 | Inner Setting

- Safety concerns: High-crime areas pose risks, affecting staff willingness to provide services and disrupting service delivery.

3.3.4 | Characteristics of Individuals

- Capacity and catchment area issues: Limited capacity at district levels and long referral times hinder access to rehabilitation services.

3.3.5 | Process

- Policy implementation challenges: Inconsistent implementation and resource constraints undermine policy effectiveness.
- Disconnection between departments: Lack of integration results in inefficiencies and fragmented services.
- Absence of bottom-up approach: Insufficient involvement of frontline stakeholders leads to disconnects between policy objectives and practical implementation.

Barriers and facilitators to the implementation of FSDR in Gauteng, South Africa, demonstrate the importance of addressing resource limitations, enhancing training, fostering collaboration, and ensuring policies are tailored to local needs. Advocacy, flexibility, and inter-sectoral collaboration emerged as key facilitators. These findings provide critical insights into strengthening disability care policy implementation.

4 | Discussion

This study examined the barriers and facilitators to implementing disability and rehabilitation frameworks in Gauteng, South Africa, using qualitative methods, including interviews, focus groups, and document analysis. It highlighted significant challenges such as resource constraints, organizational inefficiencies, and limited awareness among healthcare professionals. These barriers impede the effective delivery of rehabilitation services and exacerbate existing gaps in healthcare access for individuals with disabilities. At the same time, the study identified several facilitators, including inter-sectoral collaboration, community engagement, and complementary policies, which could improve the implementation and sustainability of rehabilitation frameworks. These facilitators offer valuable insights into how services can be enhanced and adapted to meet the needs of individuals with disabilities.

However, the generalizability of these findings is limited, as the study focuses solely on Gauteng, which may not reflect the experiences of other regions in South Africa or beyond. Future research should explore similar barriers and facilitators in diverse geographic and sociocultural contexts to better understand the broader applicability of these findings. Additionally, the study's reliance on a "snapshot" of data restricts the ability to assess how these factors evolve over time. Longitudinal research, which examines the long-term impacts of capacity-building efforts and policy adaptations, would provide a more comprehensive understanding of the dynamics at play and contribute to refining future policy frameworks.

Several specific barriers to implementation were identified. The lack of awareness and training among healthcare professionals emerged as a critical issue. Smith et al. [13] found that healthcare professionals reported insufficient training in disability-related issues during their education, leaving them ill-prepared to address the needs of individuals with disabilities effectively. Limited awareness among healthcare workers about the FSDR content and disability-related matters impedes policy implementation [14]. Castillo et al. [15] stress the importance of awareness in policy implementation success. Enhancing awareness through targeted training and education programs can mitigate this challenge. Research by Jones et al. [16] identified resource constraints as a significant barrier to policy implementation, resulting in disparities in access to care for individuals with disabilities. The absence of tools for monitoring and evaluating disability and rehabilitation-related activities hamper the implementation of the FSDR [17]. Lindquist [18] emphasizes the importance of policy implementation tools, while Gómez et al. [19] highlight the challenge of developing measurable indicators for disability policies.

Tailored training programs that integrate the CFIR, particularly those addressing individual characteristics and process dynamics, would likely enhance the uptake of disability and rehabilitation policies. Another significant barrier is resource constraints, including chronic staff shortages, poor equipment maintenance, and inadequate infrastructure, which compromise the timely and effective delivery of rehabilitation services. Johnson et al. [20] highlighted staffing shortages, equipment deficiencies, and inadequate infrastructure as key barriers to delivering quality rehabilitation services. These resource constraints result in delays in treatment and compromised care quality, ultimately impeding the implementation of policies aimed at improving services for individuals with disabilities.

Clear, standardized guidelines for resource allocation and procurement, particularly for assistive devices, could help address these challenges. Effective policy implementation necessitates coordinated efforts across stakeholders. Conradie et al. [21] describe the general lack of coordinated efforts in the South African health system, reflecting challenges in FSDR implementation.

The absence of a bottom-up approach in policy development was also noted. Engaging frontline therapists and patients in the policy development process is crucial for ensuring policies are relevant and responsive to their needs. Research by Williams et al. [22] emphasized the importance of a bottom-up approach to policy development, highlighting the need for meaningful stakeholder engagement to inform policy decisions.

A shift toward quantifying the long-term benefits of rehabilitation could also strengthen the case for increased investment in these services. Studies have shown that capacity constraints at the district level contribute to delays in accessing rehabilitation services, leading to patient frustration and dissatisfaction [23]. The shortage of trained rehabilitation professionals poses a significant limitation to FSDR implementation. Bettger et al. [24] note that the redirection of resources during the COVID-19 pandemic further exacerbates manpower shortages in rehabilitation services.

Additionally, safety concerns in high-crime areas deter healthcare providers from offering consistent care, disproportionately

affecting patients with disabilities. Patel et al. [25] demonstrated that healthcare providers working in these environments face increased risks that impact their ability to deliver care safely and effectively. Safety concerns not only affect healthcare providers' willingness to work in these areas but also create additional challenges in delivering care to patients with disabilities, further impeding policy implementation efforts [26]. Finally, inconsistent policy implementation and the lack of integration between therapy departments create inefficiencies, undermining collaborative efforts [27]. Studies have shown that disjointed services and limited resource sharing between departments can create inefficiencies in service delivery and hinder collaboration among healthcare providers [28]. The use of CFIR-based frameworks to monitor policy rollout, including practical metrics for evaluating progress, would strengthen accountability and ensure more effective implementation.

On the other hand, several facilitators of successful implementation were identified. Inter-sectoral collaboration and community engagement were highlighted as key factors in aligning rehabilitation services with local needs. Collaboration across sectors and care levels, coupled with active community advocacy, helps ensure that rehabilitation frameworks are better tailored to the realities of individuals with disabilities [29, 30]. Inter-sectoral collaboration is pivotal for the effective implementation of health policies. Research by Smith et al. [31] emphasizes the importance of collaboration across different sectors and systems, highlighting its role as a catalyst for policy implementation success. This collaboration extends to various levels of rehabilitation care and sectors within provinces, ensuring alignment with local capabilities and needs. Bianchi et al. [30] stress the significance of community collaboration, which fosters buy-in from end-users and strengthens policy implementation processes by involving community members in governance.

Longitudinal research should further explore how these collaborative approaches contribute to the sustainability of rehabilitation frameworks over time. The study also found that flexibility in policy implementation, especially demonstrated during the COVID-19 pandemic, was crucial for maintaining services also seen by Schneider et al. [32]. The COVID-19 pandemic highlighted the importance of flexibility in policy implementation efforts. Provinces demonstrated adaptability in response to increased restrictions and healthcare system demands, as noted by Princen et al. [33]. However, it is important to balance flexibility with the need to maintain quality. Developing metrics to evaluate the impact of adaptive strategies will be vital to ensuring consistent outcomes without compromising policy integrity. Complementary policies, such as the Gauteng Disability Rights Policy, play a crucial role in supporting broader policy implementation efforts, as highlighted by Wanzenböck and Frenken [34]. They argue that developing policies at subnational levels through consultative processes ensures alignment with local needs, potentially enhancing implementation effectiveness compared to national-level policies.

Furthermore, advocacy and awareness-building efforts, especially those led by persons with disabilities, play a critical role in shaping inclusive policies. Active advocacy by persons with disabilities plays a vital role in raising awareness and emphasizing the importance of disability policies like the FSDR. Their advocacy efforts contribute to highlighting the needs of vulnerable populations and ensuring equal access to essential services, as supported by various advocacy organizations and studies [35].

Future research should focus on investigating how training programs, complementary policies, and advocacy initiatives influence the long-term sustainability of disability and rehabilitation policies. Additionally, exploring frameworks for monitoring and evaluation, such as those leveraging CFIR domains, can provide actionable insights for refining these policies and improving their implementation.

5 | Conclusion

This study has identified key barriers to the implementation of disability and rehabilitation frameworks, including inadequate training, resource shortages, safety concerns, and inconsistent policy implementation. It also highlighted facilitators, such as inter-sectoral collaboration, complementary policies, and community advocacy, which can drive more effective and equitable rehabilitation services. These findings underscore the urgent need to address systemic gaps to improve access to rehabilitation services for individuals with disabilities.

Policy recommendations emerging from this study include advocating for national-level initiatives that address regional disparities, implementing participatory policy development processes, and investing in comprehensive training programs for healthcare professionals. It is also critical to develop robust monitoring and evaluation frameworks that ensure policies remain adaptable while maintaining high-quality service delivery. Such frameworks can help identify areas for improvement and guide future policy adjustments.

The broader implications of this study emphasize the critical role of disability rights advocacy in fostering healthcare equity and improving societal outcomes. Effective implementation of rehabilitation frameworks not only enhances the well-being of individuals with disabilities but also contributes to broader social and economic development. Prioritizing equity in rehabilitation services is essential to achieving meaningful progress in disability inclusion and healthcare delivery, which will ultimately lead to a more inclusive and sustainable society.

In conclusion, policymakers, healthcare providers, and other stakeholders must take urgent action to overcome these barriers. By leveraging community engagement and fostering inter-sectoral collaboration, it is possible to create equitable and sustainable rehabilitation services that benefit all individuals, particularly those with disabilities.

Author Contributions

Naeema Ahmad Ramadan Hussein El Kout: conceptualization, investigation, funding acquisition, writing – original draft, methodology, validation, visualization, writing – review and editing, software,

formal analysis, project administration, resources, data curation. **Sonti Pilusa:** supervision, data curation, methodology, conceptualization, writing – review and editing. **Natalie Benjamin-Damons:** data curation, supervision, methodology, conceptualization, writing – review and editing. **Juliana Kagura:** conceptualization, methodology, validation, visualization, writing – review and editing. All authors have read and approved the final version of the manuscript.

Acknowledgments

The authors would like to acknowledge the South African Society of Physiotherapy (SASP), the New Generation of Academics Programme (NGAP), and the Faculty of Health Sciences Research grants (FRC) for their funding contributions to this study. The funders played no direct role in the research.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data is available upon request. The data cannot be shared publicly due to ethical considerations as some information in the transcripts contains potentially identifiable information. Requests for data can be sent to the granting ethical clearance committee, The Human and Research Ethics Committee (Medical) of the University of the Witwatersrand by contacting Ms Zanele Ndlovu at Zanele.ndlovu@wits.ac.za. Naeema Ahmad Ramadan Hussein El Kout had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

Transparency Statement

The lead author, Naeema Ahmad Ramadan Hussein El Kout, affirms that this manuscript is an honest, accurate, and transparent account of the study being reported, that no important aspects of the study have been omitted, and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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CHAPTER 6

6. MANUSCRIPT 4

TITLE: Perceptions of Implementation Process of the Framework and Strategy for Disability and Rehabilitation in Gauteng, South Africa

6.1 PUBLICATION DETAILS

This chapter is presented as a full paper accepted for publication and currently in editing at the African Journal of Primary Health Care and Family Medicine. This paper explores stakeholders' experiences with the implementation of South Africa's Framework and Strategy for Disability and Rehabilitation (FSDR). Using qualitative methods, key themes were identified through interviews and focus groups, revealing the process that was followed to implement the FSDR. Recommendations for policy improvements are provided. The publication details are presented in Table 6.1.

Table 6.1: Publication Specifics

Title of Publication	**Perceptions of implementation process of the framework and strategy for disability and rehabilitation in Gauteng, South Africa**
Authors	Naeema AR Hussein El Kout, Natalie Benjamin-Damons, Sonti Pilusa , Juliana Kagura
Journal Name	African Journal of Primary Health Care and Family Medicine
ISSN	2071-2928
Impact Factor	1.14 (2023)
Year	2025
Volume	To be confirmed- manuscript under review
DOI Number	To be confirmed- manuscript under review

6.2 AUTHOR CONTRIBUTIONS

The contributions of the authors are detailed in Table 6.2, following the Contributor Roles Taxonomy (CRediT) framework (Allen, O'Connell, and Kiermer, 2019). Appendix 1 provides the definitions of these roles.

Table 6.2: Author Contributions based on CRediT Taxonomy

Contributor Role	Description	Authors
Conceptualisation	Development of the study concept and methodology.	Naeema AR Hussein El Kout
Methodology	Design of the study methods, including selection of mixed methods approach and tools.	Naeema AR Hussein El Kout; Sonti Pilusa, Juliana Kagura
Formal Analysis	Conducting data analysis and interpretation.	Naeema AR Hussein El Kout
Investigation	Execution of data collection and related tasks.	Naeema AR Hussein El Kout
Writing – Original Draft	Drafting the original manuscript of the study protocol.	Naeema AR Hussein El Kout
Writing – Review and Editing	Reviewing and revising the manuscript critically for intellectual content.	Sonti Pilusa; Natalie Benjamin-Damons, Juliana Kagura
Supervision	Oversight and guidance throughout the study protocol development.	Sonti Pilusa; Natalie Benjamin-Damons, Juliana Kagura
Funding Acquisition	Securing financial support for the study.	Naeema AR Hussein El Kout

6.3 COPYRIGHT AND PERMISSIONS

6.4 ASSOCIATED DOCUMENTATION

Due to the journal's publication guidelines, the documentation related to this study cannot be attached as appendices. However, these documents have been included in this thesis.

- **Appendix 2:** Ethical clearance certificate
- **Appendix 3:** Letter of permission from the hospital
- **Appendix 4:** Letter of permission from the research site

6.5 PUBLISHED ARTICLE

The full article, titled ***Perceptions of implementation process of the framework and strategy for disability and rehabilitation in Gauteng, South Africa***, has been submitted to African Journal of Primary Health Care and Family Medicine.

MANUSCRIPT 3

Proof of paper acceptance at the African Journal of Primary Health Care and Family Medicine (currently in editing)

PHCFM 4930: Manuscript Accepted for Publication, Sent to Editing

A

aosis@phcfm.org

To: Naeema Hussein El Kout; Sonti Pilusa; Natalie Benjamin-Damons; Juliana Kagura

Wed 4/30/2025 10:26 AM

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Ref. No.: 4930
Manuscript title: Perceptions of implementation process of the framework and strategy for disability and rehabilitation in Gauteng, South Africa
Journal: African Journal of Primary Health Care & Family Medicine

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Dear Naeema Hussein El Kout, Sonti Pilusa, Natalie Benjamin-Damons, Juliana Kagura

We are pleased to confirm your manuscript's acceptance for publication on 29-Apr-25.

We can also confirm that the Submission and Review Department released your manuscript to our Finalisation Department to commence the various editing processes to secure online publication within the next 90 days (if not sooner).

Published article 3:

Title: Perceptions of Implementation Process of the Framework and Strategy for Disability and Rehabilitation in Gauteng, South Africa

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Author contribution:

Naeema Ahmad Ramadan Hussein El Kout: conceptualisation, visualisation, methodology, data collection and analysis, writing-original draft, Natalie Benjamin-Damons, Sonti Pilusa: conceptualisation, visualisation, supervision, writing- review and editing. Juliana Kagura: conceptualisation, visualisation, writing: review and editing.

Transparency statement:

Naeema Ahmad Ramadan Hussein El Kout affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned have been explained.

Conflict of interest:

The authors have no conflict of interest to declare.

Funding statement:

The authors would like to acknowledge the South African Society of Physiotherapy (SASP), the New Generation of Academics Programme (NGAP) and the Faculty of Health Sciences Research grants (FRC) for their funding contributions to this study. The funders had no involvement in the research process of this study.

Acknowledgements:

The authors would like to acknowledge the South African Society of Physiotherapy (SASP), the New Generation of Academics Programme (NGAP) and the Faculty of Health Sciences Research grants (FRC) for their funding contributions to this study. The funders played no direct role in the research.

Data availability statement:

Data is available upon request. The data cannot be shared publicly due to ethical considerations as some information in the transcripts contains potentially identifiable information. Requests for data can be sent to the granting ethical clearance committee, The Human and Research Ethics Committee (Medical) of the University of the Witwatersrand by contacting Ms Zanele Ndlovu at Zanele.ndlovu@wits.ac.za.

Author statement:

All authors have read and approved the final version of the manuscript. Naeema Ahmad Ramadan Hussein El Kout had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

Abstract

Background: The Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa aims to improve rehabilitation services for individuals with disabilities. However, research related to its implementation process is limited.

Aim: To explore the experiences of the implementation process of FSDR amongst stakeholders in Gauteng, South Africa.

Method: A descriptive qualitative study design was used, combining semi-structured interviews, and focus groups with diverse stakeholders, including clinicians, rehabilitation managers, and community health workers. Data were analysed thematically using MAXQDA software, with key themes mapped deductively to the stages of the EPIS (Exploration, Preparation, Implementation, Sustainment) framework to identify key implementation steps taken.

Results: A range of experiences including resource shortages, limited career progression, weak management communication, and procedural inefficiencies were reported. Participants emphasized the need for policy adaptations reflecting field experiences and advocated for increased accountability and resources. The EPIS framework highlighted the critical role of phase-specific interventions and continuous monitoring for effective policy implementation.

Conclusion: The study concludes that systemic barriers must be addressed to enhance the sustainability and impact of the FSDR policy on rehabilitation services. Recommendations include fostering accountability, improving resource allocation, and realigning policies with frontline needs to ensure long-term improvements in disability and rehabilitation services.

Key words: disability, rehabilitation, policy analysis, implementation science

Introduction

Persons with disabilities have greater unmet health needs, which are exacerbated by the COVID-19 pandemic [1]. One of the unmet care needs is access to rehabilitation [2]. Authors 3,4 defined rehabilitation as an intervention to improve functionality in persons with disabilities using a multi-disciplinary approach. Rehabilitation is crucial for persons with disabilities because it improves functionality and overall quality of life, but access to rehabilitation care remains a challenge [3,4,5].

In South Africa, access to rehabilitation is affected by many factors. A situational analysis on rehabilitation services in SA6 found that rehabilitation face significant challenges, including lack of integration into primary care, and inadequate data collection, while highlighting the need for improved collaboration and policy integration. Another study by authors7, found that rehabilitation is also limited by poor resource allocation, a shortage of workers, and insufficient equipment. Other barriers include lack of accessible transport, long waiting times, and negative staff attitudes [4]. To address this challenge the World Health Organization's Rehabilitation 2030 initiative was developed [5].

Rehabilitation 2030 aims to ensure global access to rehabilitation by 2030, addressing disparities in service provision [6]. The action areas linked to the call include creating strong governance structures for rehabilitation and support for adequate implementation [5]. This seeks to increase research in disability and rehabilitation which is imperative in the development of rehabilitation services [7].

Health inequities remain a persistent challenge globally and in South Africa, and equitable access to rehabilitation services is critical to addressing these disparities. Public health policy plays a central role in promoting inclusive health systems that ensure persons with disabilities are not marginalised [8]. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) affirms the rights of persons with disabilities to full and equal access to health and rehabilitation services [9]. In line with these global commitments, the South African government developed the Framework and Strategy for Disability and Rehabilitation Services (FSDR) for 2015–2020 [10], which was extended to 2022 due to the COVID-19 pandemic. The FSDR seeks to guide and enhance the provision of rehabilitation services in a coordinated, equitable, and efficient manner across the country.

Although the FSDR was well conceptualised, previous studies have primarily focused on its content, context, role-players and processes. These studies found that, while the FSDR is well aligned with the global Rehabilitation 2030 agenda, the actual implementation process remains vague and underdeveloped [10]. This presents a significant gap, as the successful implementation of such policies is essential to translating legislative commitments into meaningful service improvements for persons with disabilities.

Understanding how such frameworks are implemented is not only a scientific imperative—contributing

to the field of implementation science—but also a social necessity, given the real-world implications for service delivery to a historically underserved population. Furthermore, identifying barriers and enablers to implementation provides insight into resource allocation, system readiness, and the adjustments required to strengthen future policy implementation [11, 12].

This study aims to contribute to this body of knowledge by examining the implementation of the FSDR in Gauteng province, using the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework [13]. The EPIS framework provides a structured and comprehensive approach to assessing key factors that influence implementation across different stages and has been successfully applied in similar South African contexts [14].

Aim of the Study

To explore the implementation of the Framework and Strategy for Disability and Rehabilitation Services for South Africa (2015–2020).

Objectives

1. To map the process of implementation of the FSDR in Gauteng province based on the experiences of stakeholders involved in the implementation.

2. To explore the perceptions of implementation outcomes and the experiences of stakeholders involved in the implementation of the FSDR in Gauteng.

Study Design

This study adopted a descriptive qualitative single-case study design to explore stakeholder experiences during the implementation of the Framework and Strategy for Disability and Rehabilitation (FSDR) in Gauteng Province. Data collection involved 15 semi-structured interviews and 6 focus group discussions (FGDs). Interviews were conducted using open-ended questions and continued until data saturation was achieved. Both online and face-to-face interviews were transcribed verbatim. Focus groups, conducted during national, provincial and district meetings, provided both qualitative and observational data. Participants included rehabilitation therapists, academics, and NGO representatives. The study adhered to the ethical principles outlined in the Helsinki Declaration. Ethical clearance was obtained from The Human and Research Ethics Committee (Medical) of the University of the Witwatersrand (M220364).

Study Setting

The research was conducted in Gauteng Province, which has a population of approximately 15 million people, accounting for about 25% of South Africa's total population. The study involved participants from five districts within the province, including the City of Johannesburg, Ekurhuleni, West Rand, Sedibeng, and Tshwane. Although Gauteng has made progress in improving data systems, disaggregated data on disability remains limited and inconsistent across districts. Where data is available, it reflects a range of disability types, including physical, sensory, intellectual, and psychosocial disabilities, with higher prevalence reported in poorer communities. However, there is a lack of detailed, up-to-date statistics to guide service planning and policy implementation at district level. This lack of comprehensive data poses challenges for tailoring rehabilitation services to meet the diverse needs of people with disabilities across the province.

Study Participants

Participants were selected using purposive and snowball sampling techniques to ensure a diverse representation of relevant stakeholders. Purposively sampled individuals included national and provincial rehabilitation managers, representatives from disability persons organizations (DPOs), and frontline rehabilitation therapists. Snowball sampling allowed the identification of additional participants such as community health workers, members of rehabilitation professionals' organisations, and academic experts, enhancing the richness of the data.

Data Collection

Data were collected through semi-structured interviews and FGDs, which explored stakeholders' experiences with FSDR implementation. An interview guide comprising open-ended questions was developed to steer the discussions. Two pilot interviews were conducted to refine the guide and were retained in the final dataset due to minimal changes. Interviews and FGDs were audio-recorded and transcribed verbatim. FGDs were held during national and provincial-level meetings and included some participants who had also taken part in the individual interviews. Observational data were gathered during FGDs to capture group dynamics and interactions. All data were stored securely, with personal identifiers removed to maintain confidentiality.

Data Analysis

Data were analysed using deductive thematic analysis, guided by the EPIS framework (Exploration, Preparation, Implementation, and Sustainment) as outlined by a previous study [15]. The framework was used to categorise data into pre-determined themes, focusing specifically on the exploration and preparation stages of FSDR implementation. The EPIS framework supports a structured examination of how evidence-based practices are adopted and sustained within complex systems, providing a lens to understand both contextual and process-related factors. This approach helped illuminate key

actions and stakeholder perceptions that inform the broader implementation landscape.

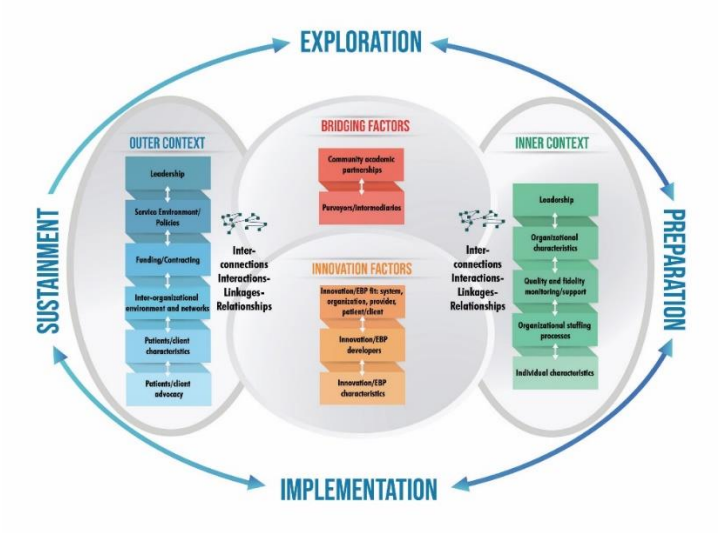

Figure 1: EPIS framework [15]

Trustworthiness

This study employed multiple strategies to ensure trustworthiness in its qualitative research. Credibility, linked to internal validity, was achieved through member checking to ensure transcripts accurately reflected participants' responses. Transferability, addressing the generalisability of findings, was supported by detailed descriptions of the research process, including participant details, methods, and timeframes [16]. Dependability, ensuring consistency, was maintained via an audit trail documenting each step of the research process. Reflexivity and positionality were also emphasised; reflexivity involved using a reflective journal to explore contextual factors, while positionality focused on examining how the researcher's identity (e.g., race, gender) might influence data collection and interpretation [17].

Results

Demographic Data of Participants

The study included 15 semi-structured interviews with stakeholders such as national and provincial rehabilitation managers, rehabilitation professionals, academics, members of professional bodies, and representatives from disability persons' organisations (DPOs). In addition, six focus group discussions (FGDs) were conducted with multidisciplinary rehabilitation professionals, community health workers, and therapy-specific professional groups, including occupational therapists, podiatrists, speech therapists, and audiologists. The participant demographic information revealed a notable gender imbalance, with a significant majority being female (85%) compared to male participants (15%). In terms of age distribution, the participants represented a diverse age range, with the highest concentration in the 25–35 and 35–45 age groups. Fewer participants fell within the 45–55 and 55–65

age brackets, indicating a younger to mid-career demographic was most prominent in the study.

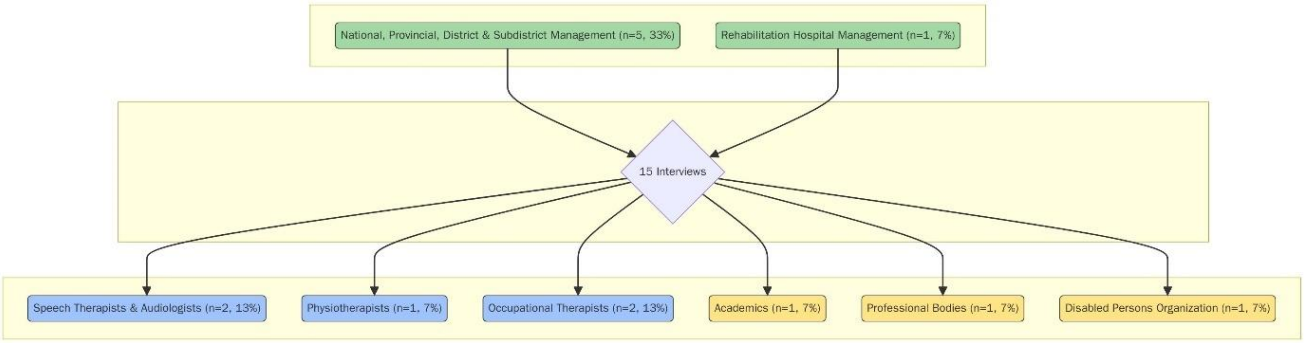

Figure 2: Semi-structured interview participant role distribution

Figure 2 above presents the distribution of participants in 15 interviews, color-coded by role type: green for management levels, blue for clinical staff, and yellow for external stakeholders, with each box showing both the participant count and their percentage of the total.

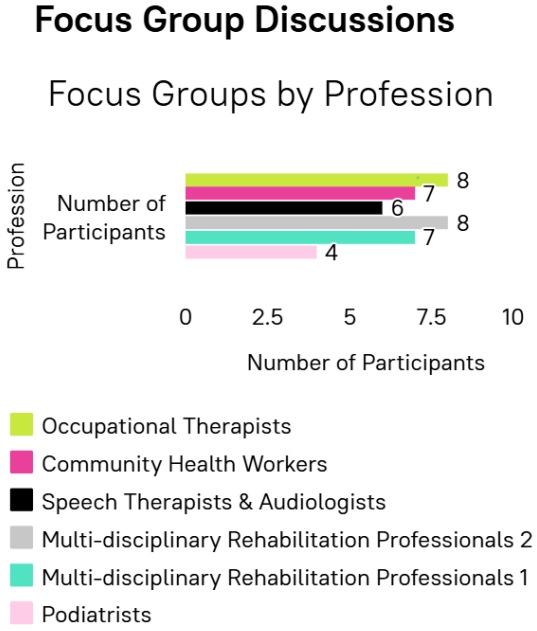

Figure 3: Participant role distribution in the focus group discussions

Figure 3 above shows the number of participants in focus group discussions by profession, with Occupational Therapists and one group of Multi-disciplinary Rehabilitation Professionals having the highest participation (n=8), and Podiatrists the lowest (n=4).

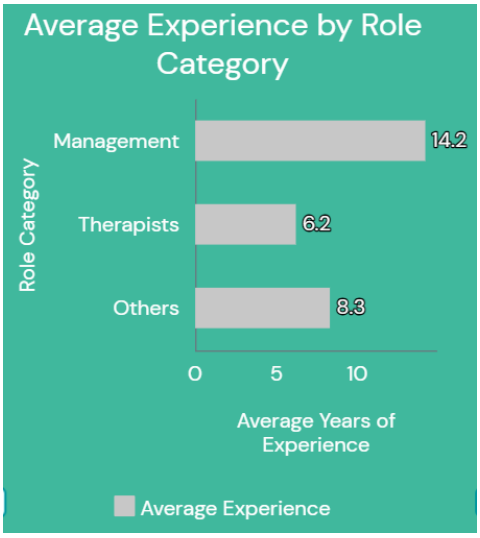

Figure 4: Years of experience in rehabilitation service delivery

Figure 4 above shows that management roles have the highest average experience at 14.2 years, followed by others (primarily clinicians and community health workers) at 8.3 years, and rehabilitation therapists with the least at 6.2 years, indicating varying experience levels across role categories.

Overview of results:

The table below summarises the key themes and illustrative quotes from the study, organised according to the stages of the EPIS framework.

Table 1: Summary of Key Findings Aligned to the EPIS Framework

EPIS Stage	Key Themes	Examples / Quotes
Exploration	- Limited awareness of FSDR policy- Poor dissemination- Lack of end-user engagement	"I don't think everyone understands the policy." – FGD 2"There was no clear direction..." – Interview 5
Preparation	- Outdated internal policies- Clinician advocacy for change- Lack of readiness	"We need clearer guidelines..." – Interview 8
Implementation	- Top-down implementation process- Inconsistent training and support- Resource constraints- Poor integration into services	"It was introduced to all the provinces..." – Interview 2"We're not being trained…" – FGD 3
Sustainment	- Lack of monitoring and evaluation (M&E) systems- Need for long-term planning- Undergraduate training gaps	"We don't have proper M&E systems..." – FGD 3"Final year students… need to be made aware…" – Interview

		13

Exploration Stage: Understanding the Policy Context

This stage explored participants' awareness and understanding of the FSDR policy and its objectives. Many reported limited exposure to the policy during their training or orientation. Several participants noted a disconnect between policy development and frontline realities, particularly the lack of engagement with end-users during the formulation of the FSDR.

Policy awareness:

"I don't think everyone understands the policy." — FGD 2

Lack of end-user engagement:

"There was no clear direction on what is happening. The question why we were not involved with representing Gauteng and we'd never got the answer for that." — Interview 5

"I don't even know if the stakeholders know about it or know of it or know how to implement it or know what the outcomes would be." — Interview 7

Policy dissemination:

"We did a distribution of the manual documents that also ensured that the document is available in soft copy on our website. Also facilitated the development of implementation and template in all the provinces." — Interview 2

Policy approval mechanisms:

"So ultimately every single policy or strategy document has to be approved by the National Health Council… the Minister, Deputy Minister, Members of executive council, and all Heads of departments." — Interview 3

Preparation Stage: Readiness and Local Adaptation

This stage examined how participants prepared for implementing the FSDR. Many highlighted the need to revise existing internal policies and strengthen operational guidelines to support implementation on the ground.

"The existing assistive device policy is outdated, and we need clearer guidelines to ensure that resources are allocated to those who need them most." — Interview 8

Experienced clinicians often advocated for better support systems and clearer processes to facilitate policy implementation in real-world contexts.

Implementation Stage: Actions and Challenges

The FSDR was introduced through a top-down approach, with dissemination beginning at the national level and filtering through provinces and districts. However, there was no standardised implementation plan, resulting in inconsistencies. The absence of formal training and guidance further contributed to

uneven uptake.

Top-down implementation process:

- The National Department of Health (NDoH) commissioned a task team to develop the FSDR.
- The FSDR was approved by the National Health Council in 2014.
- In 2015, the FSDR was disseminated in hard and soft copy to all nine provinces via the National Rehabilitation Forum.
- Provincial rehabilitation managers were expected to cascade the FSDR and facilitate training.
- No national guidelines were provided, leaving each province to decide on implementation.
- The NDoH only conducted training upon request from provinces.
- In Gauteng, hard copies were sent to the five districts.
- District managers were tasked with further dissemination and training.
- Some ground-level clinicians were unaware of the FSDR.

Implementation gaps:

“While the outreach efforts were commendable, the lack of formal FSDR training for staff led to inconsistencies in implementation.” — Interview 6

Top-down implementation:

“It [FSDR] was introduced to all the provinces during the National Rehab Forum... then provincially, it was alluded that it should be incorporated in our operational plans.” — Interview 2

“But management doesn't understand what it actually means... all they know is that you have to see this policy, you have to follow this guideline.” — Interview 9

Training deficits:

“Provinces were given the choice to ask for assistance or to facilitate training... people at Provincial Head Office, Districts and lower down should be familiar with the FSDR.” — Interview 5

“We are not being trained, treating the patient on disability, so it’s difficult for us in the community… when you go into the household because you don’t know how to deal with the patient with the disability.” — FGD 3

Intersectoral collaboration:

“That roadshow [as a result of the FSDR], it was in collaboration with Social Development… We embarked on training all the caregivers. Mental health was also involved.” — Interview 11

Challenges to implementation included:

Feasibility constraints:

“It's just not feasible for users to use the document or any other measure with each patient.” — FGD

Resource limitations:

“I think the lack of resources or limited resources is a major challenge—and human resources too.” — Interview 9

Integration of rehabilitation services:

“Rehab doesn’t seem to be a priority... we’re always a little bit on the outside.” — Interview 10
Lack of stratified implementation:
“There aren’t subcategories for hospitals and community… there's a gap in how hospitals feed into communities.” — Interview 7

Staff burnout:

“We don't want to burn out… our life is over, and we don't enjoy what we've been put here to do.” — FGD 5
Sustainment Stage: Long-Term Integration and Monitoring
This stage focused on how well the FSDR had been integrated over time and what measures were in place to ensure its sustainability. Participants widely noted a lack of formal monitoring and evaluation (M&E) mechanisms, which undermined the ability to track progress and impact.

Monitoring and evaluation:

“We don’t have the proper M&E systems in place to track the success of the policy… difficult to determine if we’re moving in the right direction.” — FGD 3
“The follow-up and monitoring of the progress didn't come through strongly.” — Interview 8
“We do strategic planning at the end of every year… so we know where we are, where we want to go.” — Interview 15

Long-term planning and organisational culture:

Participants highlighted the need for consistent support, planning, and policy integration into the daily functioning of the health system. Several emphasised that undergraduate health professionals should be introduced to such policies early in their training.
“The final year students, especially the rehab ones, need to be made aware of the existence of such policies. So, when they come into a workplace, they have an open mind to say, this is what I should expect as a therapist.” — Interview 13

Summary

Using the EPIS framework allowed for a structured analysis of the implementation process of the FSDR in Gauteng. Key barriers included limited awareness, inconsistent implementation practices, insufficient training, and weak monitoring systems. However, participants also proposed practical recommendations for improving awareness, building capacity, and embedding the policy into daily practice.

Discussion

The study findings showed the implementation process of the FSDR. These insights offer guidance for refining the FSDR and ensuring its long-term impact on disability and rehabilitation services in South Africa. The implementation process of the FSDR policy is intertwined with the broader experiences faced by the healthcare organisation, including resource shortages, poor communication, and management inefficiencies. By addressing these systemic issues and fostering a culture of support and accountability, the organization can better prepare for the effective implementation of policies aimed at improving service delivery and staff well-being.

The findings from the implementation process of the FSDR policy highlight several critical areas of focus, particularly the varied levels of awareness, resource limitations, and the need for systemic changes within the healthcare environment. By aligning the findings with the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework, the process can be scientifically analysed to understand key areas of improvement. Key insights include resource and communication gaps, clinician-led advocacy for policy adaptation, systemic challenges during intervention rollout, and the importance of ongoing monitoring, systemic changes, and accountability to achieve sustained impact.

Exploration Phase

During the Exploration phase, the assessment of policy awareness revealed significant variability among participants, highlighting a critical gap in the dissemination and communication of the FSDR objectives. This lack of awareness, particularly during educational and orientation programs, aligns with previous research, where inadequate policy dissemination has been identified as a barrier to effective implementation in health systems [18]. Moreover, organizational needs, such as resource shortages and poor communication, were recurrent themes. These findings mirror the challenges found in other health policy implementations, where limited resource availability and disconnect between management and frontline staff are key barriers to successful policy rollouts [19].

Preparation Phase

In the Preparation phase, the identification of systemic challenges and recommendations for improvement indicates steps taken toward addressing gaps in the implementation process. Participants, particularly long-serving clinicians, advocated for better career progression opportunities and resource allocation. Similar to findings in other health systems, the lack of career advancement is a well-documented issue in healthcare, often leading to burnout and reduced job satisfaction and reduced willingness to implement policy [15]. The formation of implementation teams that included experienced clinicians reflected the importance of involving stakeholders in the policy adaptation process, ensuring that frontline experiences are incorporated into future revisions of the FSDR policy [20].

Implementation Phase

The Implementation phase revealed ongoing efforts to integrate services, though challenges like high caseloads, understaffing, and long waiting times for referrals hindered progress. The lack of a formal FSDR introduction to staff, despite these efforts, underscores the need for more structured implementation strategies. This finding is supported by authors21,22who highlight poor training on policy implementation as one of four threats to successful policy outcomes. Coordination among team members, particularly in managing outreach and screenings, points to the importance of collaboration in overcoming resource limitations, a theme consistent with previous studies on rehabilitation service provision [23]. Additionally, training and capacity-building initiatives, though discussed, were insufficient, contributing to clinicians' burnout and emotional exhaustion. This echoes the findings of other research on the role of training in successful policy implementation, where capacity-building is pivotal in improving healthcare delivery [24].

Sustainment Phase

Finally, in the Sustainment phase, the focus on continuous training, policy integration, and systemic changes aimed to promote long-term adherence to the FSDR. Participants stressed the need for fostering a culture of accountability and transparency within organizations, a challenge also observed in the broader literature on health policy sustainment [25]. However, monitoring and evaluation (M&E) were notably lacking, which participants attributed to the absence of clear M&E indicators within the FSDR policy. This aligns with prior work that emphasises the critical role of M&E in ensuring the long-term success of health interventions [26].

The implementation of the FSDR and similar policies faces significant challenges due to limited career progression, resource shortages, and systemic inefficiencies like bureaucratic delays and poor facility upkeep. A disconnect between management and frontline staff; marked by weak communication and lack of engagement in policy implementation; further hinders progress, mirroring findings from other

health system research that poor management-staff relations weaken policy effectiveness [27]. Additionally, the findings highlight frustrations over socio-economic challenges and political pressures impacting service delivery, aligning with broader health reform literature that recognizes how political and economic factors can impede policy initiatives [28]. Critiques of the FSDR's feasibility underscore the need to address systemic barriers before implementing new policies [29].

This study's strengths lie in its detailed examination of the FSDR policy implementation through the lens of the EPIS framework, allowing for a structured and comprehensive understanding of the policy's rollout within the South African healthcare system. The inclusion of voices from both frontline clinicians and organisational stakeholders provided rich, context-specific insights into the practical realities of policy implementation. Furthermore, the study successfully highlighted systemic barriers such as poor communication, resource shortages, and limited career advancement opportunities, which are often underreported yet critically affect implementation outcomes. These findings not only align with existing literature but also offer locally relevant guidance for future interventions. However, the study does have limitations. It was conducted within a single organisational context, which may limit the generalisability of its findings to other settings in South Africa. Additionally, the lack of quantitative measures means the insights are largely qualitative and subjective, which could affect the perceived comprehensiveness of the conclusions. The absence of long-term follow-up also restricts the understanding of the policy's sustainability over time.

Based on the findings, several recommendations can be made to better align future policy implementation with both frontline realities and national health priorities. Firstly, improving communication strategies and ensuring consistent policy dissemination across all levels of staff is essential. Management structures should prioritise inclusive planning and decision-making processes that involve frontline workers, fostering a sense of ownership and accountability. Investment in infrastructure and human resources, particularly in rural and under-resourced areas, should be a key policy focus. Ongoing training and capacity-building initiatives must be embedded within organisational culture to support staff well-being and professional development30. Finally, policy design should integrate clear monitoring and evaluation indicators to enable continuous assessment and adjustment31. These recommendations are not only practical but also critical for informing future health policy development and implementation in South Africa, contributing to stronger, more equitable rehabilitation services across the country.

Conclusion

In conclusion, the implementation of the FSDR policy is influenced by a complex array of factors, including resource limitations, communication challenges, and systemic inefficiencies. By mapping these factors within the EPIS framework, it becomes clear that addressing these barriers through structured interventions, stakeholder engagement, and ongoing evaluation is critical for ensuring the

policy's effectiveness and sustainability. Evaluating the perceptions of the FSDR implementation is crucial to identify gaps and recommend future disability policy in South Africa. This evaluation is also required by the NDOH to ensure better future policy implementation. the findings may inform decision-making and policy implementation to enhance rehabilitation service provision. The study’s findings will also contribute to the field of rehabilitation services implementation science.

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CHAPTER 7

1. MANUSCRIPT 5

TITLE: Exploration of Implementation Strategies for the Framework and Strategy for Disability and Rehabilitation in South Africa

1.1 PUBLICATION DETAILS

This chapter has been presented as a manuscript submitted for peer review to The Lancet Global Health journal. This study developed implementation strategies for the Framework and Strategy for Disability and Rehabilitation in South Africa. Using a multi method approach, including document reviews, interviews, and focus groups, it identifies key strategies for implementation to address the determinants identified in the published article number 2 of this thesis. Details regarding the publications are provided in Table 7.1.

Table 7.1: Publication Specifics

Title of publication	**Exploration of implementation strategies for the framework and strategy for disability and rehabilitation in South Africa**
Authors	Naeema AR Hussein El Kout; Sonti Pilusa; Natalie Benjamin-Damons, Juliana Kagura
Journal name	African Journal of Disability
ISSN	2214-109X
Impact factor	19.9 (2023)
Year	2025
Volume	To be confirmed (manuscript under peer review)
DOI number	To be confirmed (manuscript under peer review)

1.2 AUTHOR CONTRIBUTIONS

The authors' contributions are described in Table 7.2 using the Contributor Roles Taxonomy (CRediT) framework (Allen, O'Connell, and Kiermer, 2019), and the definitions of the roles are provided in Appendix 1.

Table 7.2: Author Contributions based on CRediT Taxonomy

Contributor Role	Description	Authors
Conceptualisation	Development of the study concept and methodology.	Naeema AR Hussein El Kout; Juliana Kagura
Methodology	Design of the study methods, including selection of mixed methods approach and tools.	Naeema AR Hussein El Kout; Juliana Kagura
Formal Analysis	Conducting data analysis and interpretation.	Naeema AR Hussein El Kout
Investigation	Execution of data collection and related tasks.	Naeema AR Hussein El Kout
Writing – Original Draft	Drafting the original manuscript of the study protocol.	Naeema AR Hussein El Kout
Writing – Review and Editing	Reviewing and revising the manuscript critically for intellectual content.	Sonti Pilusa; Natalie Benjamin-Damons, Juliana Kagura
Supervision	Oversight and guidance throughout the study protocol development.	Sonti Pilusa; Natalie Benjamin-Damons, Juliana Kagura
Funding Acquisition	Securing financial support for the study.	Naeema AR Hussein El Kout

1.3 COPYRIGHT AND PERMISSIONS

1.4 ASSOCIATED DOCUMENTATION

Due to the journal's requirements, the documentation related to this study could not be included as appendices in the publication but is provided in this thesis as follows:

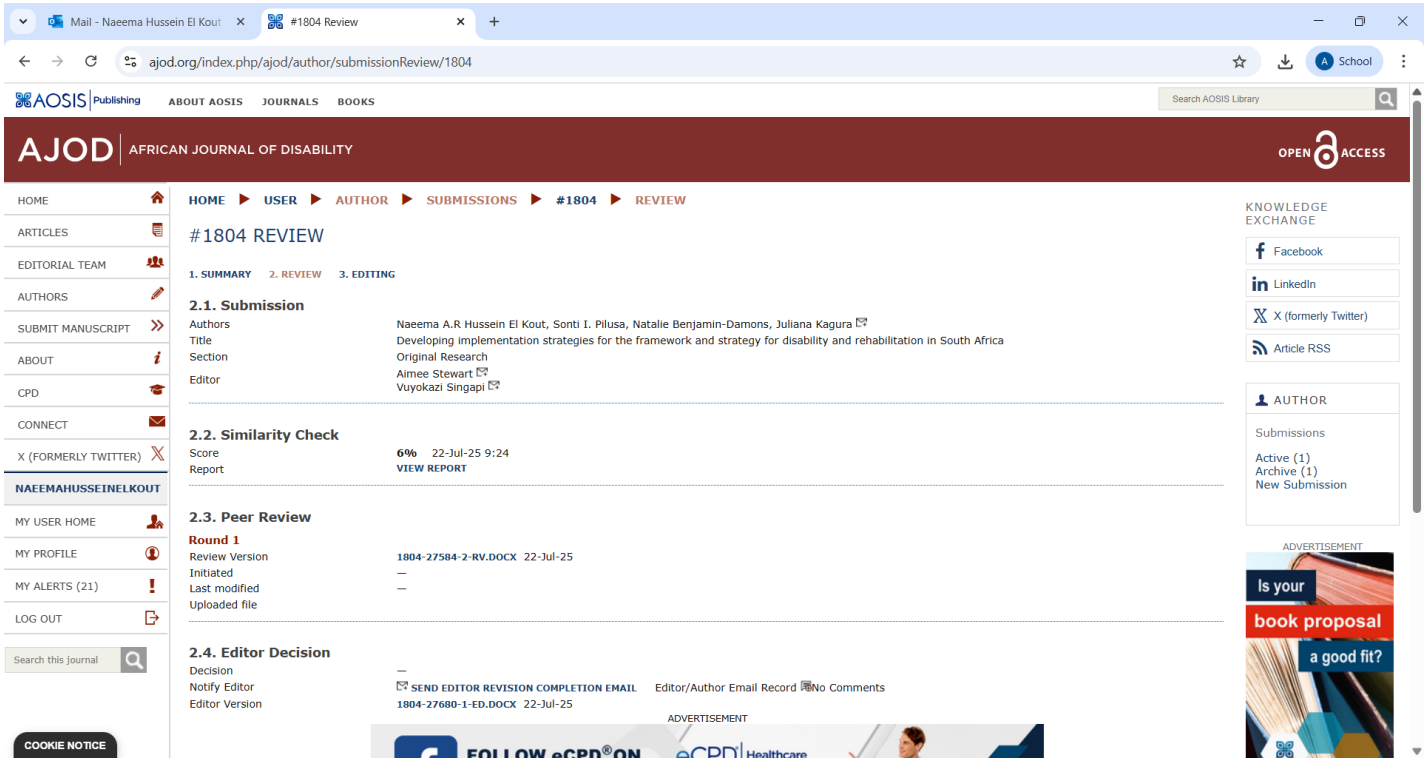
- Appendix 2: Ethical clearance certificate
- Appendix 3: Letter of permission from the hospital
- Appendix 4: Letter of permission from the research site

1.5 SUBMITTED MANUSCRIPT

The full published article is titled " Exploration of implementation strategies for the framework and strategy for disability and rehabilitation in South Africa ". This study identifies critical gaps in training, resources, governance, and stakeholder collaboration, and recommends strategies to improve the implementation of rehabilitation policies in South Africa.

MANUSCRIPT 4

Proof of submission of the 4th manuscript to The African Journal of Disability



MANUSCRIPT 4

Title: Developing implementation strategies for the framework and strategy for disability and rehabilitation in South Africa: a mixed-methods approach using the eric framework

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Author contribution:

Naeema Ahmad Ramadan Hussein El Kout: conceptualisation, visualisation, methodology, data collection and analysis, writing-original draft, Natalie Benjamin-Damons, Sonti Pilusa: conceptualisation, visualisation, supervision, writing- review and editing. Juliana Kagura: conceptualisation, visualisation, writing: review and editing.

Transparency statement:

All authors affirm that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned have been explained.

Conflict of interest:

The authors have no conflict of interest to declare.

Funding statement:

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Acknowledgements:

The authors would like to acknowledge the South African Society of Physiotherapy (SASP), the New Generation of Academics Programme (NGAP) and the Faculty of Health Sciences Research grants (FRC) for their funding contributions to this study. The funders played no direct role in the research.

Data availability statement:

Data is available upon request. The data cannot be shared publicly due to ethical considerations as some information in the transcripts contains potentially identifiable information. Requests for data can be sent to the granting ethical clearance committee, The Human and Research Ethics Committee (Medical) of the University of the Witwatersrand by contacting Ms Zanele Ndlovu at Zanele.ndlovu@wits.ac.za.

Author statement:

All authors have read and approved the final version of the manuscript. Naeema Ahmad Ramadan Hussein El Kout, Sonti Pilusa and Natalie Benjamin-Damons had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis

Abstract

Background: The Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa has expired, highlighting the need for its evaluation to guide future disability and rehabilitation policies. This study aimed to develop evidence-informed implementation strategies by triangulating findings from a document review, semi-structured interviews, and focus group discussions, applying the Expert Recommendations for Implementing Change (ERIC) framework.

Methods: A descriptive qualitative design was used. Four focus group discussions were conducted with stakeholders involved in the implementation of the FSDR. The aim was to reach consensus on practical strategies to enhance policy implementation. Data analysis followed a combination of inductive and deductive thematic approaches to identify themes and map strategies according to the ERIC framework.

Results: Seven key themes emerged as determinants of implementation success or failure: lack of awareness and training, resource limitations, poor interdepartmental collaboration, weak governance and policy buy-in, absence of effective monitoring and evaluation systems, the need for context-specific strategies, and ongoing professional development. Stakeholders contributed actively to identifying and refining strategies under each theme.

Conclusion: The findings highlight critical implementation gaps in training, governance, resources, and collaboration. Addressing these through targeted strategies can enhance future policy and service delivery for disability and rehabilitation in South Africa.

Contribution: This study offers a roadmap for improving disability and rehabilitation policy implementation and can inform both future policy planning and clinical service delivery.

Keywords: disability policy, rehabilitation services, implementation strategies, framework evaluation, stakeholder engagement.

Introduction

Globally, an estimated 15% of the population experiences some form of disability, with South Africa reporting a prevalence of approximately 7.5% (Ding et al., 2022; Lee et al., 2020). Despite progressive policies such as the Framework and Strategy for Disability and Rehabilitation (FSDR) aligning with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), challenges in effective implementation remain persistent ([Author(s), in press]). These barriers, including insufficient resources, weak intersectoral collaboration, and inadequate monitoring mechanisms, significantly hinder the delivery of rehabilitation services (Maart, Mji and Morris, 2024). The FSDR was introduced as a strategic response to promote equitable and efficient disability and rehabilitation services (Maart et al., 2024). However, its implementation has been inconsistent, often impeded by systemic, structural, and operational challenges (Charumbira et al., 2024). These include a lack of awareness among stakeholders, fragmented governance, and resource limitations, all of which exacerbate disparities in access to care (Mudzi, 2024). Understanding and addressing these barriers is critical to optimizing rehabilitation outcomes and aligning South Africa's healthcare system with global standards (Blose, Cobbing and Chetty, 2021).

The objective of this study is to develop actionable implementation strategies for the FSDR, leveraging the Expert Recommendations for Implementing Change (ERIC) framework (McHugh et al., 2022). By triangulating findings from document reviews, semi-structured interviews, and focus group discussions, this study aims to provide a comprehensive evaluation of the FSDR's implementation outcomes. The findings will contribute to the refinement of disability and rehabilitation policies, ensuring they are responsive to the needs of South Africa's diverse population and adaptable to the complexities of the healthcare system.

This paper presents a broad approach to evaluate implementation determinants, propose targeted strategies, and identify key facilitators and barriers. The insights derived from this study aim to inform the development of context-specific, stakeholder-driven solutions, bridging gaps in policy execution and advancing the realization of the rights and well-being of persons with disabilities.

Methods

This study focused on the development of implementation strategies to guide future public health policies related to disability and rehabilitation in South Africa. Data(barriers to map strategies) from a previous phase of the larger study was used from a document review of FSDR implementation reports (Hussein El Kout et al., 2025), 15 semi-structured interviews and 6 focus group discussions were synthesised to inform the strategy development (Hussein El Kout et al., 2025). Ethical clearance was obtained from the HREC of the University of the Witwatersrand Medical. In the present study, proposed implementation strategies were presented to stakeholders in 4 focus group discussions for review and refinement until consensus was reached. The focus groups were

conducted between August 2024 and November 2024. Stakeholders' recommendations were used to finalise the strategies. This process adhered to the Partnership, Engagement, and Collaboration (PEC) approach described by Huang et al. (2018), emphasising the critical role of stakeholder involvement in implementation science.

The ERIC framework was used for concept mapping during the design of the implementation strategies. The 4 focus group discussions were conducted at national, provincial and district levels until data saturation. Data saturation, defined as the point where no new or relevant themes emerged, was achieved through concurrent data collection and analysis. Participants included rehabilitation professionals, academics, and representatives from disability-focused NGOs. Groups of 8–15 participants engaged in discussions lasting one to two hours, conducted either in person or online, depending on availability. A discussion schedule was used to guide the process, enabling interactive dialogue that reduced researcher bias and yielded comprehensive insights. These discussions played a pivotal role in reviewing and refining the proposed strategies, ensuring their alignment with stakeholder experiences and expert perspectives. The finalised implementation strategies represent a collaborative and context-specific approach to improving the execution of disability and rehabilitation policies.

Data Analysis

Maxqda 2020.20 software was used to analyse via inductive and deductive thematic analysis, the document review and interview and focus group discussion transcripts. The ERIC framework was used to map implementation strategies according to determinants identified. Triangulation of data sources ensured comprehensive insights into all aspects of FSDR implementation.

Findings

The key themes, findings, and proposed strategies for improving the implementation of the Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa are outlined in the table below. These strategies aim to address the identified barriers from [Author(s), in press] and optimise the policy's effectiveness across various domains.

Table 1: Overview of determinants and implementation strategies

Theme/determinant	Findings	Proposed Strategies
Lack of Awareness and Training	Insufficient dissemination and inadequate training on FSDR, leading to poor implementation outcomes.	- Conduct workshops and integrate training into CPD programs. - Develop user-friendly educational materials.
Resource Limitations	Staffing shortages, lack of assistive devices, and poor resource allocation hinder service delivery.	- Advocate for increased funding and optimise resource allocation. - Leverage public-private partnerships (PPPs).
Need for Interdepartmental Collaboration	Siloed operations among health disciplines negatively impact holistic care delivery.	- Implement multidisciplinary team meetings. - Develop digital platforms for shared care planning.
Governance and Policy Buy-In	Lack of leadership support and stakeholder engagement weakens policy implementation.	- Engage leadership in co-designing policy. - Provide leadership training on disability-inclusive governance.
Monitoring and Evaluation	Absence of thorough M&E systems to track policy implementation and outcomes.	- Establish digital M&E tools and dashboards. - Use participatory evaluation approaches with end-users.
Context-Specific Strategies	Diverse needs across districts require localised and adaptive approaches.	- Develop adaptive strategies tailored to district-specific needs. - Engage local stakeholders in co-design processes.
Professional	Continuous professional	- Incorporate policy

Development	development is essential for sustaining policy implementation.	training into CPD programs. - Provide incentives for participation in CPD activities.

Based on the above, the overview of implementation strategies agreed upon are seen below:

Figure 1: Implementation strategies overview

The lack of awareness and training among clinicians and stakeholders was one of the key challenges identified in implementing the Framework and Strategy for Disability and Rehabilitation (FSDR). Limited knowledge of the policy's objectives and guidelines, as expressed by the participants, resulted in confusion and inconsistencies in the implementation. The absence of structured training programs further aggravated these issues, leaving staff ill-prepared to integrate the policy into their daily practices. To overcome this, workshops and training programs focusing on the FSDR's core components and practical application are recommended. Furthermore, user-friendly educational materials, such as infographics and simplified guides, can ensure the policy's accessibility to all staff levels.

Another prominent determinant was resource limitations, with stakeholders citing insufficient numbers of rehabilitation professionals, inadequate availability of assistive devices, and logistical challenges, such as a lack of storage facilities for equipment. Inefficiencies in distribution and utilisation continued to hinder service delivery even when resources were allocated. These issues can only be addressed with sponsorships for increased funding to support staffing, training, and

equipment procurement. It is equally important to optimise existing resources through inventory management systems, resource-sharing networks, and partnerships with community organizations and private entities.

The lack of interdepartmental teamwork further hinders an all-inclusive care delivery. It was reported by clinicians that working in isolation within their respective disciplines, fragmented service delivery and negatively impacted patient care. To proposal was to foster collaboration, multidisciplinary team meetings and joint case management sessions. Further improvements in communications and coordination can be experienced if digital platforms are utilised, enabling shared patient records and collaborative treatment planning. Training programs emphasizing teamwork and shared care goals can further reinforce interdepartmental collaboration.

Lack of governance and policy buy-in from senior leadership is a critical barrier to effective implementation. It was noted by stakeholders that insufficient involvement and support from management led to a disconnect between strategic policy objectives and operational execution, demotivating frontline staff. Commitment could be enhanced by engaging leadership in co-design workshops, where they actively contribute to policy adaptation and rollout. Aligning goals and addressing challenges promptly will be achieved if there are leadership training programs and clear communication channels between managers and staff.

Deficiencies in regular monitoring and evaluation (M&E) mechanisms to track implementation progress and outcomes was highlighted as a significant issue. It is difficult for stakeholders to measure success or to identify bottlenecks without clear performance metrics or feedback loops. Digital tools such as dashboards or mobile apps could provide real-time tracking of policy implementation to address this gap. Regular audits and reporting can ensure accountability, while participatory evaluation processes involving end-users and frontline staff can offer valuable insights from the ground level.

The diversity in resources, infrastructure, and population needs across districts highlighted the need for context-specific strategies. A one-size-fits-all approach was deemed ineffective, because of region-specific barriers such as transportation challenges and cultural differences. This can be overcome by developing localised strategies through district-specific consultative workshops and tailor-made solutions to meet unique needs. Sharing successful models and best practices across districts can enable adaptation and duplication in similar situations.

Professional development was emphasised by the stakeholders as the cornerstone for sustaining policy implementation. However, a lack of integration of the FSDR into existing continuous professional development (CPD) activities and limited motivation among staff to engage in such programs was noted. Including FSDR training into compulsory CPD activities can guarantee regular

exposure to the policy. Motivation and incentives, such as certification, promotions, and recognition, can boost participation. Utilising e-learning platforms and virtual workshops for the professional development programs will make it easier and more convenient to access.

Discussion

The findings indicated numerous determinants of FSDR policy implementation, including resource constraints, limited governance, and individualised operations as seen [Author(s), in press]. By utilising the ERIC framework, this study suggests various options to resolve these challenges. The emphasis on stakeholder-driven, context-specific solutions highlights the need for specific application efforts for greater impact. This study reflects critical themes that highlight all the challenges in implementing the Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa. These themes align with current literature on implementation science, rehabilitation policy, and health systems improvements (Bustos et al., 2021; Shogren et al., 2020).

Noteworthy determinants of the FSDR implementation included insufficient dissemination of the FSDR policy document and inadequate training on its implementation ([Author(s), in press]). Many clinicians could not effectively adopt the policy due to a lack of understanding thereof. Awareness and competency-based training are critical to successful policy implementation (Morris et al., 2021). Integrating disability-inclusive modules into medical and allied health curricula could strengthen foundational knowledge. Including ongoing professional development specific to the FSDR within health professional training programs would promote consistent engagement and application of the policy. Workshops, interactive learning modules, and simplified educational materials, such as infographics, could help with understanding the content and would be beneficial for all staff (Anaby et al., 2021).

The stakeholders highlighted resource challenges, including staffing shortages, lack of assistive devices, and poor resource allocation([Author(s), in press]). Service delivery is further limited due to logistical issues such as inadequate storage and equipment maintenance, despite available budget allocation (Cook et al., 2019). In low- and middle-income countries, such challenges are common, with rehabilitation services often competing with other healthcare priorities. The solution to these constraints requires support for increased funding, efficient resource distribution, and innovative solutions such as public-private partnerships and community-based rehabilitation initiatives (Piskur et al., 2021). Other strategies, such as delegating responsibilities to less specialised staff, can also optimise existing human resources and alleviate staffing shortages.

Siloed operations among health disciplines significantly hindered the holistic delivery of rehabilitation services ([Author(s), in press]). Communication and coordination across departments are vital to prevent fragmented care, which negatively impacts patient outcomes (Bustos et al., 2021). It is

essential for departments to work together to ensure comprehensive rehabilitation. Multidisciplinary team meetings and joint case management sessions could encourage teamwork and improve care coordination. Digital platforms for shared patient records and collaborative treatment planning will eliminate miscommunication. Structured protocols, shared goals, and accountability mechanisms would further reinforce collaboration and support integrated care across departments (Shogren et al., 2020).

Critical barriers to the successful implementation of the FSDR were identified as the lack of leadership support and stakeholder engagement ([Author(s), in press]). This divide between strategic policy objectives and operational execution demotivated staff and resulted in limited policy adoption (Morris et al., 2021). Governance and leadership are vital for driving the adoption of policies. Involving senior management in the design and implementation of the policies would improve their commitment. Leadership training programs focusing on disability-inclusive governance and establishing clear communication channels between management and staff would further enhance buy-in and accountability, promoting a supportive environment for successful policy execution (Piskur et al., 2021).

A strong monitoring and evaluation (M&E) system was a critical requirement according to stakeholders to ensure tracking the progress and impact of the FSDR. Without performance metrics or feedback loops, stakeholders are unable to measure success or identify implementation challenges (Cook et al., 2019). Effective M&E systems are essential for accountability and continuous improvement. Digital tools such as real-time dashboards can assist with data collection and reporting, enabling timely alerts where necessary. Participatory evaluation approaches involving end-users and frontline staff can improve the use of and dependability on the M&E frameworks, providing actionable insights to address bottlenecks and inform decision-making (Shogren et al., 2020).

The diversity in resources, infrastructure, and population needs across districts necessitated specific strategies to identify areas. A one-size-fits-all approach was deemed ineffective in addressing unique regional barriers, such as transportation challenges and cultural differences (Anaby et al., 2021). Specific implementation, adapted to the identified socioeconomic and cultural factors, is more likely to succeed. Engaging local stakeholders in co-designing interventions ensures that solutions are relevant and effective for their specific environments. Sharing successful models and best practices across districts can assist with the adaptation of effective solutions to similar situations (Morris et al., 2021).

The findings of this study highlight the importance of a systems-thinking approach to policy implementation. The identified challenges can be resolved with a multi-pronged strategy that integrates training, resource optimization, governance, and stakeholder involvement. Leveraging global frameworks such as the ERIC and Proctor models provides a structured pathway for refining and operationalizing implementation strategies (Shogren et al., 2020).

Conclusion

This study contributes to the field of implementation science by developing specific strategies for the FSDR. Focusing on the identified barriers through targeted interventions can improve the delivery of rehabilitation services in South Africa, advancing the rights and well-being of persons with disabilities.

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CHAPTER 8

2. INTEGRATIVE DISCUSSION

2.1 INTRODUCTION

This chapter discusses the findings of the study, which aimed to explore the perceptions of the implementation of the Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa. This chapter begins by outlining the various dimensions of the process and the experiences of stakeholders involved in the implementation of the FSDR. The chapter begins by detailing the structure of the implementation process, emphasising the stages from community-based rehabilitation at the primary level to specialised services at secondary and tertiary levels. It also explores the experiences of participants, highlighting both successes and challenges encountered throughout the implementation period.

The discussion then examines the factors that influenced implementation, highlighting facilitators such as collaboration and flexible strategies, as well as barriers like poor coordination, resource constraints, and limited monitoring. Additionally, it identifies key influences such as political will, financial constraints, and institutional capacity while also addressing critical barriers, including a lack of awareness and training among healthcare professionals, which hinder effective policy integration.

The outcomes of implementation, including adoption, feasibility, and sustainability, are analysed to these challenges, considering the fragmented execution and gaps in monitoring. The chapter also discusses key implementation strategies, such as professional development, leadership training, and resource optimisation, which play a role in mitigating some of the barriers faced during implementation. Finally, the chapter concludes with implementation strategies aimed at enhancing future FSDR implementation. These strategies focus on improving training and resource allocation, fostering intersectoral collaboration, and streamlining referral processes to ensure equitable access to rehabilitation services. Overall, this chapter provides a structured analysis of FSDR implementation, aiming to inform future policy efforts and improve healthcare delivery for individuals with disabilities in South Africa. Figure 8.1 below provides an overview of the discussion chapter.

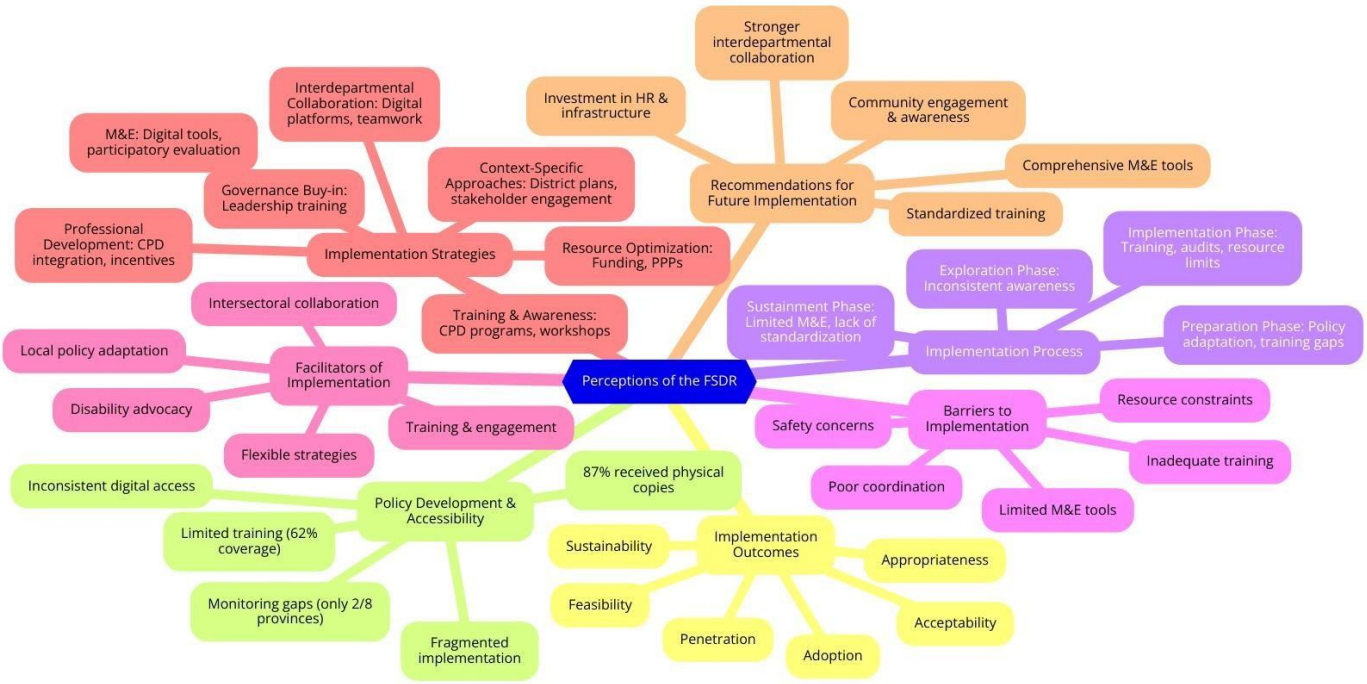

Figure 8.1: An Overview of the Integrative Discussion

The next section will give an overview of the findings based on the study objectives. In this study, objective one sought to explore the provincial implementation of the FSDR based on paper-based reports. The study findings showed that while most provinces had physical access to the FSDR, its implementation was inconsistent and lacked standardized monitoring mechanisms. The document reviews highlighted disparities in the level of training, awareness, and evaluation across provinces, with only two provinces conducting structured monitoring and evaluation (M&E) activities. Table 8.1 shows the key findings and their implications.

Table 8.1: Evaluation of Paper-Based Provincial Implementation of the FSDR in South Africa: Key Findings, Discussion, and Implications

Study Objective	Key Findings	Discussion	Implications
To evaluate the paper-based provincial implementation of the framework and strategy for disability and rehabilitation for South Africa	The implementation of the FSDR across eight provinces showed gaps in accessibility, training, and monitoring. Only 62% of provinces received training, and only two conducted M&E. Lack of human resources and equipment further hindered implementation.	The lack of training and M&E aligns with previous studies showing that policy effectiveness depends on structured implementation (Glasgow et al., 2009). South Africa's fragmented healthcare system exacerbates these challenges (Benatar and Fleischer, 2021).	Strengthening training programs, allocating dedicated funding for rehabilitation services, and integrating M&E tools to track policy effectiveness. Enhancing intersectoral collaboration to improve implementation.

Objective two explored the participants' perceptions of implementation outcomes and experiences of implementation of the FSDR in Gauteng province. The study findings showed that adoption, acceptability, appropriateness, feasibility, and sustainability of the FSDR varied

widely among implementers. Stakeholders reported challenges such as inadequate training, lack of awareness, and resource shortages, which affected policy penetration and integration. Concerns about the policy's appropriateness were raised, as some regions lacked the necessary infrastructure and support systems to implement FSDR effectively. Stakeholders' experiences underscore the critical need for improved awareness, tailored training programs, and active engagement with frontline implementers to ensure that rehabilitation services are effectively delivered to individuals with disabilities. Table 8.2 outlines the key findings for objective two and shows the key findings and implications of understanding the perceptions of the FSDR implementation.

Table 8.2: Exploring Stakeholders' Perceptions of FSDR Implementation Outcomes and Experiences in Gauteng: Key Findings and Implications

Study objective	Key Findings	Discussion	Implications
To explore the perceptions of implementation outcomes and experiences of implementation of the FSDR in Gauteng among the stakeholders involved in the FSDR implementation.	- **Penetration:** Limited stakeholder reach due to poor dissemination. - **Adoption:** Inconsistent utilisation of the FSDR across provinces. - **Acceptability:** Stakeholders found policy objectives relevant but lacked clear implementation guidelines. - **Appropriateness:** Policy aligns with global disability frameworks but requires localisation for South African context. **Feasibility:** Implementation hindered by resource constraints, weak leadership, and intersectoral inefficiencies. **Sustainability:** Lack of long-term funding and structured M&E limited policy longevity.	Implementation science literature highlights the need for clear frameworks to ensure policy adoption and sustainability (Proctor et al., 2011). South Africa's experience mirrors global challenges in policy uptake and execution (Fixsen et al., 2005).	Enhancing dissemination strategies for broader penetration. Establishing structured implementation guidelines to improve adoption. Investing in long-term resource allocation and leadership training to ensure sustainability.

Objective three aimed to outline the implementation process of the FSDR in Gauteng province. The findings revealed that implementation followed a phased approach, beginning with exploration, which involved assessing needs and planning. This was followed by the preparation phase, where necessary resources and structures were put in place. The implementation phase involved the actual rollout of the programme, and finally, the sustainment phase focused on ensuring long-term continuity and impact. However, the implementation process was fragmented, with variations in how different provinces including Gauteng province and districts, operationalised the policy. Some regions in the province reported proactive dissemination and training efforts, while others struggled with weak interdepartmental coordination and unclear implementation guidelines. The findings highlight inconsistencies in the rollout process, where inadequate training and a lack of long-term

support mechanisms were reported. The implementation of the FSDR in the Gauteng province of South Africa was fragmented, with efforts including orientation workshops, referral system development, and partial integration into priority programmes, but lacking structured monitoring and full execution of workforce planning initiatives. Key challenges included limited resources, inadequate training, poor data tracking, weak monitoring and evaluation, and inconsistent political commitment, exacerbated by the COVID-19 pandemic. Despite these barriers, successes such as community-based rehabilitation initiatives, intersectoral collaboration, and policy advancements were noted, with recommendations highlighting the need for improved M&E systems, dedicated funding, structured workforce training, and strengthened leadership for more sustainable implementation. Table 8.3 shows an overview of key findings linked to objective three and the implications of knowing exactly how the FSDR was implemented in Gauteng.

Table 8.3: FSDR Implementation Process in Gauteng: Stakeholder Experiences, Key Findings, and Implications

Study objective	Key Findings	Discussion	Implications
To map the process of implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process	Implementation followed a top-down approach with unclear guidelines. Stakeholders reported inconsistencies in execution due to resource constraints, lack of training, and absence of a structured dissemination plan.	Previous research shows that top-down approaches often fail without stakeholder involvement (Buse et al., 2023). Fragmented implementation leads to inefficiencies (Hudson et al., 2019).	Establishing standardised implementation frameworks. Using a bottom-up approach by involving frontline workers. Strengthening accountability measures to ensure consistent execution.

Objective four explored the factors affecting FSDR implementation in Gauteng province. The findings showed that political will, financial constraints, institutional capacity, and interdepartmental collaboration played significant roles in shaping outcomes. Barriers such as inadequate funding, lack of standardized training, and minimal stakeholder engagement were identified as major obstacles to successful implementation. In contrast, facilitators such as intersectoral collaboration and alignment with broader health and disability policies were seen as enabling factors. The findings also highlight structural limitations, including inconsistent referral pathways and weak monitoring systems, which hinder effective policy execution. Table 8.4 below shows the findings related to objective four which explored the factors affecting the FSDR implementation in Gauteng.

Table 8.4: Factors Influencing the Implementation of the FSDR in Gauteng and Their Implications - An Overview

Study Objective	Key Findings	Discussion	Implications
To explore the factors influencing the implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process	Barriers included lack of awareness, resource shortages, and weak intersectoral collaboration. Facilitators included community engagement, advocacy, and policy integration with international guidelines.	Studies highlight the importance of intersectoral collaboration for policy success (Smith et al., 2019). However, limited funding and training create gaps in policy adoption (Morris et al., 2021).	Developing participatory approaches for policy rollout. Establishing cross-sector task forces to address gaps. Increasing funding for training initiatives and resource allocation.

In Objective five, strategies for improving future FSDR implementation were explored. The findings of the study highlighted that enhancing training programs, securing adequate resources, fostering intersectoral collaboration, and refining referral processes were key priorities. The study identified the need for structured implementation guidelines, continuous professional development initiatives, and improved stakeholder engagement to address existing gaps. These strategies emphasise improving training and resource allocation, fostering collaboration between different government departments and rehabilitation professionals, and streamlining referral pathways to ensure equitable access to services. Additionally, the need for robust M&E systems is highlighted to track policy implementation effectively and inform evidence-based decision-making. Overall, the discussion provides actionable insights into refining the FSDR to enhance rehabilitation service delivery for individuals with disabilities in South Africa. Table 8.5 below highlights the key findings of objective five and shows the implications of having implementation strategies for future policy.

Table 8.5: Strategies for Improving Future Implementation of the FSDR: Key Findings, Discussion, and Implications

Study Objective	Key Findings	Discussion	Implications
To map strategies to improve future implementation of the FSDR	Key strategies identified include improving training, resource allocation, interdepartmental collaboration, governance, and policy buy-in. M&E remains a major gap, requiring digital tracking tools and participatory evaluation.	Effective implementation requires structured strategies and stakeholder engagement (McHugh et al., 2022). Studies emphasize the need for real-time monitoring systems in policy execution (Proctor et al., 2011).	Implementing ERIC framework-based strategies. Introducing digital M&E dashboards. Conducting regular training and stakeholder engagement sessions to refine policy implementation.

The above section described the study findings in relation to each objective. The following section will discuss the key actors in the FSDR implementation review.

Key actors based on the study.

Without key actors or stakeholders, the policy process will fail. The key informants and participants included in the FSDR implementation review included healthcare providers, community health workers, frontline staff, senior management, and long-serving clinicians involved. The diversity of roles, from senior clinicians to multidisciplinary teams, represents a range of experiences across different service levels in the healthcare system. Understanding the demographic profile of participants is crucial as it provides context for interpreting their responses, particularly how career stage, professional expertise, and exposure to rehabilitation services influence their engagement with the policy (Ettelt, Williams and Mays, 2022). The majority of participants had experience with FSDR implementation for the full duration from 2014 to 2022. Natesan and Marathe., (2017) show that the more experienced a policy implementer is, the higher the probability of adequate planning of policy implementation. It is beneficial that actors from the public health care system were included in the study.

There were key actors that were not included in the study. The private sector was not included due to a lack of consent from the participants. The role of private sector is important because the South African health system comprises of both public and private sectors, and in the context of NHI, there is the potential for more public-private partnerships. The lack of consent from the private sector may allude to a lack of willingness to be involved in policy, particularly with the FSDR. While these are mere speculations, it does probe the thought that the private sector may not consider the FSDR applicable to their context as they were not included in initial FSDR consultations (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). Going forward, particularly with NHI and the potential role that the private sector might play in subsidised rehabilitation care (Mokoena and Naidoo, 2024), it is important that the private sector is included in future disability and rehabilitation policy discussions and related research. Including the perspectives of the private sector would also help assess how public-private partnerships could improve access to assistive devices, rehabilitation technologies, and community-based rehabilitation initiatives because it does benefit heavily on public health funding (Mazibuko Nadasan and Govender, 2023). Other key actors that were not included were some non-governmental organisations (NGOs). The researcher tried to recruit NGOs to participate, albeit unsuccessfully due to them declining participation. Not including all the key actors might not give a full picture of FSDR implementation as this may limit the understanding of how rehabilitation services are being implemented across different sectors and whether they effectively meet the needs of persons with disabilities. Information from these additional actors would have provided critical insights into service delivery gaps, funding challenges, and innovative approaches that could strengthen the integration of rehabilitation into the broader healthcare system.

Another important group that was not included in the study was people with disabilities. The participation of PWDs is not just an ethical imperative but a necessity for effective policy development. Research has shown that when PWDs are included in policy design and evaluation, there is greater accountability, improved service accessibility, and better alignment with real-world challenges (Harris et al., 2021). A study by Vergunst et al. (2019) on South Africa's disability-inclusive health policies found that while policies exist to improve rehabilitation services, implementation often falls short due to a lack of consultation with persons with disabilities. This results in services that are either inaccessible or impractical, reinforcing the need to integrate user perspectives to prevent tokenistic inclusion and ensure meaningful engagement. The principles of *co-production* in disability research further highlight that involving PWDs in policy review leads to more relevant, context-sensitive interventions (Slattery et al., 2020). In the case of the FSDR, PWDs can provide crucial insights into whether the strategy has improved access to rehabilitation, addressed systemic barriers such as stigma, and whether monitoring and evaluation (M&E) tools effectively track service outcomes. As highlighted by Maart et al. (2015), South Africa's rehabilitation services remain underfunded and poorly integrated, and without input from those most affected, future strategies may continue to fail in addressing these systemic issues.

Future policy processes related to the FSDR must actively include persons with disabilities (PWDs) in reviewing the Framework and Strategy for Disability and Rehabilitation (FSDR) to ensure that policies and interventions genuinely reflect their needs and lived experiences. Countries like Norway and Canada, which have successfully implemented disability-inclusive policies, have established participatory governance models where persons with disabilities play an active role in shaping rehabilitation services (Lord and Hutchison, 2007). These examples reinforce the argument that inclusive policy review mechanisms lead to more effective and sustainable outcomes. Future studies and policy processes must therefore adopt participatory methodologies, such as community-based participatory research (CBPR) and lived-experience-led evaluations, to ensure that the voices of PWDs are not only heard but actively shape the evolution of the FSDR. Without this, the framework risks remaining a top-down policy that does not fully address the realities of disability and rehabilitation in South Africa.

The above sections highlighted key actors involved in the FSDR implementation process and the implications of their inclusion or exclusion in the policy process. The next section will discuss how FSDR was implemented in the Gauteng province of South Africa.

The FSDR Implementation Process

The FSDR was developed between 2014 and 2015 and launched and implemented from 2015 to 2022 in South Africa, to improve accessibility to rehabilitation care for persons with disabilities (South African National Department of Health, 2015). The Framework and Strategy for Disability and Rehabilitation (FSDR) was developed as a guiding document to strengthen access to rehabilitation services and promote the inclusion of persons with disabilities within South Africa's healthcare system. The ideal implementation process according to the content of the Framework and Strategy for Disability and Rehabilitation (FSDR) should have involved several stages, beginning with community-based rehabilitation initiatives at the primary level and extending to more specialised services at secondary and tertiary levels of care (Maart et al., 2024). In terms of access to the FSDR, 87% of provinces reported receiving copies of the FSDR for distribution. This is concerning as a starting point for policy implementation as dissemination of the policy to all provinces should have been 100% to ensure equal access to the policy for all stakeholders.

There were discrepancies in the stakeholders' views on the FSDR implementation process. Key actors from senior rehabilitation management, indicated that the FSDR implementation followed a structured, multiphase approach. This alluded to the fact that this process began with policy development that emphasised stakeholder engagement, including people with disabilities, and aligning FSDR objectives with national health priorities such as HIV, TB, and non-communicable diseases (NCDs) (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). The policy underwent review and approval through national-level consultations (upon request only), securing political endorsement and necessary government structures for effective implementation. However, the key actors on the ground viewed it differently. Implementation followed a top-down approach with unclear guidelines. Stakeholders reported inconsistencies in execution due to resource constraints, lack of training, and absence of a structured dissemination plan (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). The implementation process was fragmented, with variations in how different provinces and districts operationalised the policy. In the present study, findings showed that some regions in the Gauteng province reported proactive dissemination and training efforts, while others struggled with weak interdepartmental coordination and unclear implementation guidelines. Eisman et al., (2021) reflects this finding that unclear implementation processes often limit implementation of policies. The implementation phase integrated community-based rehabilitation at the primary level and specialised services at the secondary and tertiary levels. What is important to note, is the difference in perspectives between senior management and FSDR end users and ground level clinicians.

Collective understanding of policy implementation is important for future policy improvement. Rehabilitation therapists on the ground who were identified as FSDR implementers by senior

management described their experience of implementation to be somewhat different to the process described above by management according to the present study findings in concordance with Rapport et al., (2022) who showed that the disjunction from a top-down approach results in implementation challenges. From the focus group discussions and semi-structured interviews in this study, many clinicians expressed that the FSDR was just dropped off in hard copies at certain clinical sites, with no orientation to the implementation or training support. Upon submission of quarterly reports, they were expected to provide statistics on the outputs and indicators of FSDR implementation, which was lacking in the first place. The differences between the key actors show communication challenges throughout the implementation phase. This gap in communication and referral systems between these levels was confirmed by the key actors as a significant barrier, indicating the need for a more streamlined approach to enhance the continuity of care, as seen by Al-Tarawneh, Al-Badawi and Hatab (2024). Al-Tarawneh, Al-Badawi and Hatab (2024) argue that clear communication through stakeholder engagement is amongst the best practices to address implementation challenges.

There were challenges in the FSDR implementation. There were inconsistencies in the rollout process, particularly in the preparation and sustainment phases, with inadequate training and a lack of long-term support mechanisms. This lack of training is shown by Frenk et al., (2022) who highlight that inadequate training on policy implementation is often associated with challenges in training mediums and the authors suggest the use of technology for training. There were also challenges with ongoing monitoring, evaluation, and adaptation, resulting in poor continuous tracking of progress, addressing gaps, and promoting sustainability, as seen by Kuchenmüller et al., (2022), who show an association between poor monitoring and evaluation and a lack of policy sustainability. These findings emphasise the importance of ensuring a uniform and well-coordinated implementation approach that incorporates feedback from frontline stakeholders as revealed by Hinterleitner and Wittwer (2023), who highlight the need for frontline stakeholder engagement for policy implementation to be successful. The current literature on policy implementation supports this structured approach described by senior management, with a focus on systems and complexity concepts (Head, 2022). The ideal implementation process begins with identifying the inputs, resources, and pressures that drive the need for change (Razavi et al., 2021). This is followed by a feedforward and planning phase to develop a communication strategy that unifies stakeholders and minimizes competition (Viterouli et al., 2024). Given the inherent oscillation between order and chaos in complex systems, adaptive management strategies are critical for addressing fluctuating circumstances (Leong, 2024). The next phase focuses on converting these inputs into actionable outputs, with system monitoring offering feedback on policy effectiveness and acceptance (Grelle and Hofmann, 2024). This process acknowledges potential failures and uses regenerative, dissipative structures to foster

learning for future policy refinement. Finally, periodic assessments guide necessary adjustments and ensure ongoing evaluation of the impact (Head, 2022). Rangachari, Mushiana and Herbert (2022), emphasized the importance of iterative learning in healthcare system improvement. This can be done through reviewing and analysing policy to deepen our understanding of policy implementation and factors that affect policy.

The above section provided an overview of what the FSDR implementation process looked like. The next section focuses on the factors that influenced the FSDR implementation process which comprised of barriers and facilitators.

Factors Influencing FSDR Implementation Stemming from FSDR Development

Multiple factors influenced the implementation of the FSDR that span from the development phase as shown in the study by Hussein El Kout, Pilusa and Dlamini-Masuku (2022) who conducted a policy analysis of the FSDR document and explored the processes focusing on development of the FSDR. One of the primary issues with the development of the FSDR was the rushed nature of the process (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). Stakeholders involved in drafting the framework reportedly had only 15 days to complete it, raising concerns about the depth of engagement and the comprehensiveness of the policy's design (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). Effective policy development requires extensive consultation, data-driven decision-making, and iterative refinement (Livingstone, 2023). Yet the FSDR appears to have been created under time constraints that limited thorough analysis and stakeholder input. As a result, gaps emerged in its operationalization, particularly in the areas of resource allocation, stakeholder coordination, and monitoring mechanisms.

Another significant finding in this study and in the study by Hussein El Kout, Pilusa and Dlamini-Masuku (2022), namely a barrier affecting the FSDR's development, was the lack of intersectoral collaboration. While the framework acknowledged the importance of integrating rehabilitation services across different levels of care, the absence of clear mechanisms for interdepartmental coordination weakened its potential impact. Policy actors, including rehabilitation professionals, disability advocacy organizations, and healthcare administrators, were involved in the development phase, but their role in shaping the framework was constrained by poor leadership and limited government commitment (Hussein El Kout, Pilusa and Dlamini-Masuku). This misalignment between policy actors and decision-making structures meant that critical aspects of rehabilitation service delivery were not fully addressed (Maart et al., 2024).

From a policy analysis perspective, the FSDR's development reflects broader challenges in health policy formulation, particularly in low- and middle-income countries (Hussein El Kout,

Pilusa and Dlamini-Masuku, 2022). Using the Walt and Gilson (1994) policy analysis framework, which considers the interaction of context, content, actors, and processes, it is evident that the structural and political context played a major role in shaping the FSDR's development (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). The South African government, having ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD), was under international pressure to create policies that aligned with disability rights principles (Mudzi, 2024). However, the rapid drafting process and lack of a clear implementation strategy suggest that the FSDR was more of a response to international obligations than a carefully planned and locally responsive policy intervention (Hussein El Kout, Pilusa and Dlamini-Masuku, 2022). Additionally, the content of the FSDR, while grounded in principles of CBR, lacked the depth required to translate policy into practice (Bello et a;., 2024). Many of its provisions were broad and aspirational rather than actionable, making it difficult to operationalise within South Africa's existing healthcare infrastructure (Conradie et al., 2022). The failure to establish a dedicated budget for rehabilitation services further illustrates the disconnect between policy formulation and real-world feasibility (Maart et al., 2024). Without financial commitment and clear implementation pathways, the FSDR risked becoming another well-intentioned but ineffective policy document (Blose et al., 2021).

In conclusion, the development of the FSDR highlights key weaknesses in health policy formulation, including rushed decision-making, insufficient stakeholder engagement, and a lack of strategic alignment with national healthcare priorities. While the framework aimed to address critical gaps in disability and rehabilitation services, its development process ultimately limited its ability to drive meaningful change. Moving forward, future disability policies must emphasise thorough consultation, evidence-based planning, and strong intersectoral collaboration to ensure they are both actionable and sustainable.

Other Factors Influencing Implementation of the FSDR from the Present Study

The previous section showcased factors affecting all the processes of the FSDR from previous studies. The section below describes and discussed the present study's findings on several factors that specifically influenced the implementation of the FSDR that posed as barriers or facilitators to FSDR implementation process. The next section will discuss the lack of data availability related to disability and rehabilitation, lack of FSDR awareness and training on implementation, safety concerns as well as the lack of resources to implement the FSDR as per the document requirements. Albeit many barriers, there were some facilitators to implementation which are discussed below and include intersectoral collaboration, advocacy by persons with disabilities and flexibility in the policy implementation process.

Barriers to FSDR Implementation

A major shortfall was the lack of monitoring and evaluation (M&E) mechanisms, which limited the ability to track progress and make data-driven adjustments. Without M&E indicators, it is challenging to sustain policy implementation and adapt to emerging needs. This reflects findings from other studies that emphasize the role of ongoing evaluation in the success of long-term health initiatives (Giles-Corti, Lowe and Arundel, 2020).

The findings related to the barriers overall, highlighted the need to foster a culture of accountability, transparency, and support for frontline staff. Long-term policy adherence is contingent on creating an organisational culture that values continuous improvement and addresses frontline concerns. The absence of cultural integration is a barrier to sustainability and can lead to disengagement among healthcare providers (Syakur et al., 2020). In South Africa, cultural attitudes towards disability often stem from historical and socio-economic factors. Traditional beliefs and practices can influence perceptions of disability, sometimes leading to marginalisation. Additionally, the legacy of apartheid has resulted in systemic inequalities that disproportionately affect people with disabilities. Addressing these causes requires a stratified approach, including public awareness campaigns, capacity building for service providers, and policy reforms to ensure inclusive and equitable access to services (Masitera, 2020).

Lack of Data Disaggregation

Without a relevant health information system, planning for services and resources lags behind, particularly in the context of rehabilitation (Nizeyimana et al., 2022). One of the main challenges was the lack of data disaggregation, which meant that GDoH did not systematically track disability and rehabilitation integration in priority programmes, making it difficult to assess progress (Giles-Corti et al., 2022). Louw et al., (2021) alluded to the lack of rehabilitation indicators in the national health information system. The only rehabilitation related health information is limited information related disability collected via the Census, and some information regarding assistive device issuing (Louw et al., 2023). The lack of disability related data, and indicators for M&E, affects planning for resources and proper monitoring and evaluation (M&E) as shown by Giles-Corti et al., (2022), who showcased the need for indicators and data to benchmark policy implementation progress. National and Provincial rehabilitation units must advocate for rehabilitation related health information system where data on disability is included (McKinney, McKinney and Swartz, 2021). A critical gap in disability and rehabilitation policy implementation was the lack of national indicators for rehabilitation or disability data. There had been no systematic tracking of Years Lived with Disability (YLD), making it difficult to assess the burden of disability. Disability data had also been fragmented across different departments, leading to inconsistencies in service

provision. Authors show that countries with effective rehabilitation policies had centralised disability registries that tracked service utilisation and patient outcomes; something that Gauteng lacked (Kayola et al., 2023; Olusanya et al., 2022).

Lack of Awareness and Training

One of the most critical barriers identified in both the quantitative and qualitative component of this study was the lack of awareness and insufficient training among healthcare professionals regarding FSDR. The quantitative study in phase one reflected that only 62% of implementation stakeholders received training on implementation across provinces, a concerningly low number considering the expected outcomes of the FSDR. Brownson et al., (2022), reflects this finding from an implementation science perspective highlighting how inadequate training of implementation stakeholders' limits policy implementation. There was no structured, province-wide training plan to equip all healthcare workers with rehabilitation-specific skills, a finding confounded by George (2021) who advocate for a context-specific multistep implementation plan for policy implementation. Many stakeholders highlighted that university and professional training programs do not adequately prepare healthcare workers to understand or implement the biopsychosocial model of disability, which is a core aspect of the FSDR and also shown by Brewster et al., (2022), who show the need for disability and policy training at undergraduate levels in healthcare. This finding is consistent with previous research which highlights that insufficient knowledge among professionals regarding disability policies and frameworks negatively impacts implementation (Cunningham et al., 2023; Shahabi et al., 2022). For example, Molete et al. (2020) found that a significant percentage of healthcare workers were unaware of policy details, which hindered their ability to effectively integrate these into practice. The lack of adequate training at the university level further compounded this issue, leaving professionals ill-prepared to implement disability-related policies as seen by Rahmani et al., (2024), who conducted a scoping review of rehabilitation policies and documents in middle and high-income countries and found that training rehabilitation staff on policy implementation is key to implementation success. While these authors focused on middle- and high-income countries, the findings can still be considered in the context of this study as The World Bank has recently classified South Africa as upper middle income, despite major socio-economic discrepancies across different communities (World Bank, 2024). Insufficient alignment between healthcare practices and policy objectives can be attributed to this training deficit, leading to inconsistent and fragmented care (Nizeyimana, Joseph and Louw, 2023). Without a firm grounding in the principles of disability and rehabilitation policy, healthcare workers struggled to align clinical practices with the FSDR's objectives, leading to inconsistent implementation and poor prioritisation of rehabilitation (Morris et al., 2021).

In cases where participants were aware of the FSDR, participants showed varying levels of

awareness of the FSDR policy, which indicated that dissemination efforts were insufficient. This gap highlights the need for better communication and education during policy orientation programs, a common challenge in policy implementation studies (Proctor et al., 2023). As shown in the study's findings, limited exposure to FSDR during education and training poses significant barriers. This aligns with research that emphasizes the importance of early-stage awareness-building to ensure smooth policy integration (Hill and Hupe, 2021). The findings of the present study also indicate limited engagement with frontline staff, which can create a disconnect between policy formulation and ground-level implementation. Stakeholder engagement, particularly with those responsible for direct patient care, is critical for gathering practical insights that can refine policy dissemination (Masefield et al., 2021).

Resource Constraints

Allocation of resources is key to service delivery and policy implementation (Al Imam et al., 2022). Resource limitations are another significant barrier to the effective implementation of the FSDR as found in the current study and Al Imam et al., (2022), showing how inadequate resources limit policy implementation. Resource constraints that were lacking included staffing and inadequate infrastructure and poor equipment maintenance. These challenges mirror the global health system issues identified by the World Health Organization (WHO, 2019), where inadequate resource allocation leads to reduced service quality. (Murphy et al., 2021). In South Africa, the lack of equipment and personnel, especially in rural areas, compromises patient outcomes, impeding the policy's reach and success (Tiwari, Shah, and Tiwari (2022); Louw et al., (2021)).

A lack of staffing affected FSDR implementation in the present study, with a key finding being that district-level healthcare facilities are often overwhelmed by limited capacity, which results in long waiting times and restricted catchment areas. This finding is consistent with other global health system studies that underscore how limited resources at the district level can hinder care delivery (Van Zyl et al., 2021; Karam et al., 2021). Inadequate staffing and resources have created bottlenecks in the referral system, delaying patient access to essential rehabilitation services and compromising the overall equity of care (Morwane, Dada and Bornman, 2021). This issue aligns with the struggles of global healthcare systems to meet increasing demands due to capacity limitations (Retnandari, 2022). Long waiting times and restrictions on catchment areas exacerbate this problem, leading to delays in care that worsen patient outcomes. Inadequate capacity also restricts healthcare providers from attending to the specific needs of patients with disabilities, undermining the principles of equitable care provision which may lead to unethical practices such as shortened treatment times (Dupuis, 2022).

Participants consistently associated resource shortages with bureaucratic delays, and

understaffing. The lack of essential equipment, medication, and basic amenities (such as chairs for persons with disabilities) reflects systemic resource allocation issues that require urgent attention. These findings align with the broader healthcare system literature, in which resource scarcity has been shown to impede effective policy implementation (Putansu and Putansu, 2020). Despite these challenges, senior clinicians such as Mark and Helen served as advocates for policy change, emphasizing the importance of forming dedicated teams to spearhead implementation efforts. Their advocacy highlights the role of leadership in driving policy changes, which has been shown to facilitate successful implementation (Khan et al., 2022).

Safety Concerns in High-Crime Areas

Safety concerns was also a theme that emerged as presenting a substantial implementation barrier to the FSDR. The Gauteng province, particularly in high-crime urban areas, has many regions often referred to as the “red zones” in SA (Geldenhuys, 2024). Despite this, many participants in this study, along with paramedic staff, were expected to implement the FSDR in these areas. Healthcare professionals working in these environments are often reluctant to deliver services, which exacerbates workforce shortages (Geldenhuys, 2024). Without adequate security measures or incentives to attract and retain staff in these areas, the effectiveness of FSDR is severely limited. Research supports these observations; Lim et al., (2022) discuss the impact of occupational safety on healthcare professionals' willingness to engage in risky environments. This finding highlights the need for improved safety protocols and interventions to protect healthcare workers, thus ensuring that services can be delivered consistently across different areas.

To improve the implementation of the FSDR implementation, several recommendations can be made. Firstly, a standardised digital M&E system should be implemented to track progress at the district and facility levels. Secondly, dedicated funding streams for rehabilitation should be established to ensure sustainability. Structured in-service training for healthcare workers on rehabilitation best practices should also be prioritised. Additionally, the provincial rehabilitation strategy should be finalised and formally adopted to provide consistent guidance for implementation. Disability-related data should be integrated into routine health information systems to improve tracking and reporting. Lastly, leadership and governance structures should be strengthened to ensure accountability and sustained political commitment to FSDR implementation.

The implementation of the FSDR in Gauteng has been partial, with some successes in community-based initiatives but significant barriers related to resources, M&E, and workforce planning. The province’s experience reflects broader challenges in South Africa’s rehabilitation sector and underscores the need for stronger governance, improved funding,

and integrated monitoring systems. Addressing these issues will be critical for enhancing disability and rehabilitation services in Gauteng and across the country.

The findings from Gauteng's FSDR implementation align with both international and South African studies on disability and rehabilitation. The World Health Organization's *Rehabilitation 2030* initiative emphasises the need for strong governance, resource allocation, and the integration of rehabilitation into primary healthcare, challenges that Gauteng also faces, particularly in terms of monitoring and evaluation (M&E) and workforce shortages (World Health Organization, 2017). Similarly, South African studies confirm that rehabilitation services in the country suffer from systemic underfunding and poor integration into primary healthcare, reinforcing the issues observed in Gauteng (Louw et al., 2023; Maart et al., 2015). From an implementation science perspective, frameworks such as Proctor's model and the Consolidated Framework for Implementation Research (CFIR) highlight the importance of fidelity, feasibility, and sustainability in policy execution (Proctor et al., 2011; Nilsen and Bernhardsson, 2019). However, Gauteng's reliance on ad hoc leadership rather than a structured, systemic approach to implementation demonstrates poor sustainability, a challenge commonly seen in under-resourced health systems.

According to literature, policy implementation includes the processes, actions, and mechanisms through which a policy is translated from legislative intent into practice within institutions and communities (Martuli et al., 2024). It involves coordination across multiple levels of governance, resource allocation, stakeholder engagement, and monitoring and evaluation to ensure effectiveness (Muthathi, Kawonga and Rispel, 2021). Effective implementation requires clear guidelines, adequate funding, well-trained personnel, and mechanisms for accountability to address challenges such as bureaucratic inefficiencies, lack of compliance, and contextual barriers (Wittman et al., 2021). Furthermore, implementation science highlights that policies often undergo adaptation based on institutional capacity, political will, and socio-economic conditions, impacting their sustainability and success (Rafiqi, 2023). Their insights highlighted the importance of interdisciplinary collaboration and the role of leadership in advocating policy change. Despite these positive experiences, challenges such as high caseloads, long waiting times, and insufficient training are prevalent. The success of multidisciplinary teams in service provision was noted, but the lack of formal policy introduction to many staff members limited the overall effectiveness of the implementation. Understanding these factors is crucial for bridging the gap between policy formulation and its intended outcomes in various sectors, including healthcare, education, and social welfare.

While the above section showed many barriers to the FSDR implementation in Gauteng, the next section discusses the facilitators to the FSDR Implementation, albeit a few compared to the barriers. These included intersectoral collaboration, advocacy by persons with disabilities, policy development and engagement, and flexibility in policy implementation.

Facilitators to FSDR Implementation

Soma facilitators focused on the actual rollout of interventions and service provisions related to the FSDR policy. Implementation efforts included outreach, screening, and team-based management of patients, but the policy was not formally introduced to many staff members. Despite challenges such as high caseloads and long referral waiting times, the success of multidisciplinary teams in service provision suggests the importance of collaboration in overcoming systemic barriers (Imperial, 2021). Participants advocated for increased training to better equip staff to manage administrative and policy-related tasks. Adequate training is essential for the practical application of policies, as it ensures that staff are knowledgeable about the policy's objectives and processes (Allen et al., 2020). However, a lack of training undermines the policy's ability to achieve its intended outcomes, as seen in similar studies, where undertrained staff hindered effective policy implementation (Mavrogordato and White, 2020).

Intersectoral Collaboration

Inter-sectoral collaboration emerged as a critical facilitator for the successful implementation of the FSDR in the current study. Amri, Chatur, and O'Campo, (2022), showcase this finding that intersectoral action in healthcare facilitates improved policy implementation outcomes. By fostering partnerships between health, social services, and community-based organisations, stakeholders can leverage resources and streamline service delivery (Amri, Chatur and O'Campo, 2022). This finding is strongly supported by existing literature, which indicates that collaborative efforts enhance health outcomes and policy compliance (Tancred et al., 2024; Mondal, Van Belle and Maioni, 2021). The involvement of local organizations in the FSDR rollout has also been shown to improve the policy's reach, particularly in rural and underserved communities (Botha and Watermeyer, 2025). In South Africa, non-profit organizations partnering with public sector rehabilitation teams, have played a crucial role in advocating for inclusive health policies and improved rehabilitation service delivery (Trafford et al., 2021). Examples of these organisations include RURESA, DART and CARE4U2. RURESA and DART aim to improve disability and rehabilitation related data and research as well as lobby for policies like the FSDR to have supported implementation (Magaqa, 2021). CARE4U2 is an NGO that aims to provide access to assistive devices for individuals with disability and provide respite care for caregiver of persons with disabilities to improve quality of care (CARE4U2, 2024). These organisations mentioned, work to raise awareness,

influence policy decisions and hold the government accountable for its commitments to inclusive disability practices (Van Pletzen et al., 2014). Additional to the role of NGO's, are the role of individuals who push for change. Case studies of advocacy initiatives led by clinicians (as was the case in the current study) and civil society, such as campaigns for accessible healthcare facilities and the inclusion of disability in public health programs, illustrate how health policy can be used to promote disability rights. One participant from the provincial rehabilitation office, described how they took it upon themselves to drive the FSDR implementation to improve rehabilitation access, using their previous knowledge of other rehabilitation programmes. These initiatives are often effective and are typically driven by proactive individuals; often called champions for change; yet they tend to be unsustainable due to inadequate resource allocation and staff burnout (Sabatello and Schulze, 2014).

Advocacy by Persons with Disabilities

Advocacy by persons with disabilities was a crucial facilitator in ensuring that disability policies like the FSDR are equitably implemented. Advocacy in this context, is the process of achieving social justice by amplifying the message of achieving equitable health care access for persons with disabilities run by individuals with disabilities, rehabilitation professionals and civil society (Bruce and Aylward, 2021). Advocacy not only raises awareness but also provides a voice to those directly affected by the policies. The active engagement of people with disabilities in policy discussions strengthens the connection between policy objectives and individuals' lived realities. The literature supports this notion, indicating that advocacy improves policy relevance and ensures that the needs of marginalised groups are appropriately addressed (Toepler and Fröhlich, 2020). While the current study participants' showed case studies of successful advocacy run by persons with disabilities (for example: advocating for increased wheelchair access at primary health care), further efforts are required to amplify the voices of persons with disabilities, by rehabilitation professionals through proper policy implementation (Schalock, Luckasson and Tassé, 2021).

Policy Development and Engagement

Another key facilitator identified was the alignment of policy development with local needs of some primary health care providers in rehabilitation. Stakeholders emphasised that national policies often fail to address the specific challenges faced by different provinces or communities. However, when local engagement was prioritised through workshops, consultations, and sensitisation initiatives in certain facilities, the uptake of FSDR principles was more successful. These findings align with the literature that highlights the importance of context-specific policies in ensuring successful implementation and reducing stigma surrounding disabilities (Cieza et al., 2022; Martin Ginis and West, 2021). Cieza et al., (2022) conducted a multistakeholder engagement at a WHO meeting and emphasise the

importance of evidence-informed context specific implementation through adequate end user engagement for policies to be successful.

Flexibility in Policy Implementation

There was flexibility in policy implementation, and this was considered a facilitator to the FSDR implementation in this study as it allowed each district to implement the FSDR within the capacity that they had when resources were redistributed to prioritise the COVID-19 pandemic. During the COVID 19 pandemic there was a lack of prioritisation of rehabilitation care, as services were restructured to focus on emergency and acute care at all levels of care from primary health care to specialised care (McKinney, McKinney and Swartz, 2021; Ned et al., 2021). The present study findings highlight the importance of flexibility in policy implementation, especially in adapting to external pressures like the COVID-19 pandemic. Flexibility allows for adaptations in response to evolving needs while maintaining policy integrity (Chatterjee, Chaudhuri and Vrontis, 2022). However, maintaining a balance between flexibility and quality is essential to ensure that deviations from policies do not compromise the care standards (Kayesa and Shung-King, 2021). Imperial (2021) noted that adaptability in policy implementation is a critical factor for success in dynamic healthcare environments.

Considering the FSDR implementation challenges mentioned in the above section, policy implementation process lessons can be learnt to influence future implementation. Literature shows that that the policy implementation process should include a well-structured, inclusive, and systematically monitored process that ensures the policy's objectives are effectively translated into practice (Nweke, 2021). Policy implementation requires strong leadership, adequate resource allocation, intersectoral collaboration, stakeholder engagement at all levels, and a clear monitoring and evaluation (M&E) framework to track progress and address emerging challenges (Kariki, 2021). Additionally, policy implementation should be flexible enough to adapt to contextual differences while maintaining fidelity to its core principles (World Health Organization, 2022). Figure 2 below shows what the FSDR implementation would have looked like, incorporating current literature on disability and rehabilitation policy (Buse et al., 2023). Ideally, the FSDR should have followed a phased approach, beginning with comprehensive stakeholder engagement, including persons with disabilities (PWDs), rehabilitation professionals, policymakers, and community organisations (Buse et al., 2023). This engagement would have ensured that the framework was co- designed to address real-world challenges in rehabilitation service delivery (Ortenzi et al., 2022). A structured rollout should have included formal adoption at the provincial level, accompanied by detailed implementation guidelines, capacity-building initiatives, and a clear funding model to support sustainability (Anders, 2021). Figure 2 below outlines the "The proposed future FSDR implementation process based on literature".

The ideal FSDR implementation process would have integrated rehabilitation services within primary healthcare from the outset, ensuring that disability and rehabilitation were not treated as peripheral concerns but as central components of healthcare delivery (Hanson et al., 2022). The process would have also required provinces to develop contextualised implementation plans, with clear performance indicators to measure progress (Abdel-Razik et al., 2023). A strong M&E system, supported by data disaggregation on disability, would have allowed for continuous assessment and improvement of rehabilitation services.

However, as evidenced by the findings of this study, the actual implementation of the FSDR deviated significantly from this ideal. The absence of structured leadership, inconsistent dissemination, and the lack of a formal implementation plan at the provincial level led to fragmented and uneven application across provinces (Kyanko et al., 2022). The omission of PWDs from both the policy design and evaluation process further weakened the framework's ability to address the needs of its intended beneficiaries (Remillard et al., 2022). Future policy implementation efforts must learn from these gaps and adopt a more structured, inclusive, and well-resourced approach to ensure that disability and rehabilitation services are effectively integrated into South Africa's healthcare system (Candel, 2021). This is illustrated in Figure 2.

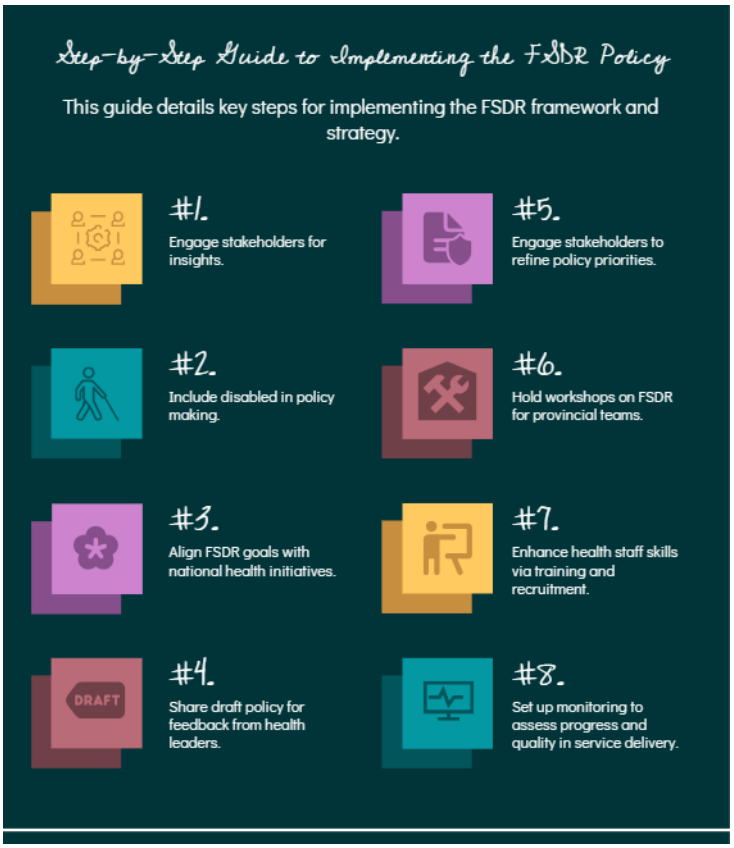

Figure 8.2: The Ideal FSDR Implementation Process Based on Literature

The above section focused on the factors which affected the FSDR implementation. The next section will discuss the perceptions of the FSDR implementation as framed by the adapted Proctor Model in this study.

Implementation Outcomes

The implementation outcomes of the FSDR in South Africa reflected systemic failures in disability and rehabilitation policy execution. The lack of prioritisation of rehabilitation services, as highlighted by Louw et al., had resulted in poor penetration, adoption, feasibility, and sustainability of the framework. Moreover, the absence of rehabilitation indicators, particularly YLD tracking, undermined efforts to assess and improve disability-related services. To enhance the implementation of disability policies, South Africa would have needed to prioritise rehabilitation in national health policy and budgeting, strengthen training programmes for rehabilitation professionals, develop national indicators for disability and rehabilitation, and improve intersectoral collaboration to integrate rehabilitation into primary healthcare. These steps would have been essential in ensuring that disability and rehabilitation policies in South Africa moved beyond theoretical frameworks to practical implementation that benefited persons with disabilities. The perceptions of the implementation outcomes of the FSDR implementation were framed through an adaptation of the Proctor (2011) model, which includes the following implementation outcomes, penetration, adoption, acceptability, appropriateness, feasibility and sustainability.

2.2 PENETRATION OF THE FSDR

Penetration refers to the extent to which the FSDR reached the intended stakeholders. From the study analysis, very few stakeholders were reached in terms of the FSDR. Although 87% of provincial reports acknowledged physical accessibility to the FSDR document, only 62% of provinces had received training on its implementation according to the findings of the present study's document review of the implementation reports. In the Gauteng province specifically, there was no quantitative data available to understand the extent to which training took place within each district. The limited FSDR reach was attributed to poor dissemination strategies and a lack of integration into routine healthcare services as some participants reported that management within each district received copies of the FSDR and were instructed to disseminate it without any formal training on implementation. Studies have shown that policies addressing disability and rehabilitation often struggled with poor uptake in resource-constrained settings due to inadequate communication and training strategies (Maart et al., 2024). The findings highlighted a broader issue where rehabilitation was not a national priority, resulting in weak institutionalisation across health districts (Louw et al., 2023; Louw et al., 2021).

2.3 FSDR ADOPTION

Adoption refers to the acceptance and uptake of the FSDR by implementing agencies including health departments and intersectoral partners. A key success factor in this study, from the provincial document review, was inter-sectoral collaboration, such as the task team for intellectual disabilities in the Western Cape or partnerships between Mpumalanga and the Office on the Status of Disabled Persons. This aligns with global evidence that multisectoral collaboration is essential for the successful implementation of disability and rehabilitation frameworks (Alhassan et al., 2021). However, the lack of similar collaboration in other provinces, particularly where inter-provincial knowledge sharing is absent, limits the broader adoption of the FSDR.

The present study findings showed that the FSDR adoption was also inconsistent especially at different levels of care and contexts, and links back to the lack of a clear implementation plan that should have accompanied the FSDR. In the document review findings, while some provinces had access to the document, the uptake of its recommendations was minimal due to poor awareness content and a lack of implementation training. Specifically in the Gauteng province, many districts did not receive FSDR implementation training at primary healthcare levels. The lack of implementation training for end users, resource shortages, and misalignment between policy recommendations and local needs had hindered its effective use as seen by Maart et al., (2024). The situational analysis by Louw et al. (2023) revealed that rehabilitation services in South Africa are severely underfunded, making it difficult for policies such as the FSDR to move beyond theoretical frameworks into practical implementation and often resources allocated to policy implementation training fall short. Therefore, the successful implementation of the FSDR framework requires not only increased financial investment but also strategic planning to ensure that available resources are effectively utilised (Neill et al., 2024). This includes strengthening workforce capacity, improving infrastructure, and encouraging intersectoral collaboration to bridge the gap between policy and practice. Without these measures, rehabilitation services will continue to face significant challenges in delivering equitable and accessible care across the country (Taylor, Zwisler and Uddin, 2020).

The lack of widespread adoption and standardised implementation in Gauteng reveals fundamental weaknesses in the province's approach. The failure to secure buy-in from key provincial decision-makers, particularly at the executive level, contributed to the FSDR being sidelined rather than actively pursued as a guiding policy. Furthermore, the absence of structured training and orientation for rehabilitation professionals meant that many frontline service providers did not have the necessary knowledge or tools to apply the framework effectively. The absence of M&E tools further compounded these issues, as there was no structured method to assess whether the framework was achieving its intended goals.

The challenge of inconsistent adoption, particularly regarding disability advocacy within healthcare programmes, reveals the importance of building networks between sectors and provinces (Barth, 2023). These findings are consistent with Putrik et al., (2021), who conducted a delphi study of health policy and found that multidisciplinary action is necessary for rehabilitation to be integrated into priority health programmes. This could be further enhanced through regional platforms for rehabilitation professionals, which may address some of the issues of isolation noted in provincial reports (Gimigliano and Negrini, 2017).

A key limitation in Gauteng Province's (GP) assessment of the FSDR's implementation is the lack of direct input from persons with disabilities (PWDs). The evaluation largely relied on data from provincial rehabilitation managers, healthcare professionals, and policy implementers, failing to capture the lived experiences of those the framework was meant to benefit. Without meaningful engagement with PWDs, caregivers, and community-based disability organisations, the assessment does not fully reflect the realities of access to rehabilitation services (Morales, Sarsak, and Chockalingam, 2025). The exclusion of PWDs from policy evaluation is a common issue in disability-inclusive health policies, as seen in Brazil, where limited stakeholder engagement weakened the effectiveness of the National Health Policy for PWDs (Lyra et al., 2022). Similarly, in Ghana, a lack of direct consultation with PWDs in health policy formulation led to inconsistent implementation and service gaps, reinforcing the need for participatory approaches (Seidu et al., 2021).

The poor adoption of the FSDR across multiple sectors further added to these challenges, as fragmented implementation resulted in inconsistent policy uptake at both institutional and community levels. The absence of a structured, multi-sectoral adoption strategy meant that while some rehabilitation managers took proactive steps to integrate the framework, others were either unaware of it or lacked institutional support for effective implementation. This reflects global trends, where disability and rehabilitation policies often fail to gain traction due to weak intersectoral collaboration and poor policy dissemination (Morales et al., 2025). Without deliberate efforts to involve PWDs in both policy development and evaluation, rehabilitation frameworks risk remaining top-down initiatives that do not translate into meaningful, real-world improvements. Future evaluations must prioritise direct engagement with PWDs to ensure that policy developments are not just institutional but also deliver tangible benefits for end-users.

2.4 FSDR ACCEPTABILITY

Acceptability refers to the understanding of stakeholders that the intervention or policy was agreeable to its content objectives in concordance with cultural beliefs as well (Dubey, Vasa and Zadey, 2021). In this study the stakeholders found the FSDR appropriate and agreeable

in addressing disability rehabilitation needs similar to Jansson (2023) who explored the acceptability of the Conceptual Framework for Adult Community Rehabilitation (CFACR) in Canada and found that while rehabilitation staff deemed it acceptable, they still struggled with implementation due to poor leadership. In the present study, while policymakers had endorsed the framework, frontline healthcare workers and rehabilitation professionals had expressed concerns about its practicality, for example, a high assistive device issue rate when there is are challenges with procurement in the system. Although the policy was acceptable many barriers affected its implementation. Diepeveen et al., (2013) conducted a scoping review to understand what affects acceptability of public health policy and also found that reduced awareness of the policy coupled with impractical policy expectations results in reduced acceptability. Many rehabilitation professionals had limited exposure to the FSDR's content, which affected their ability to integrate its guidelines into service delivery. This was also seen by Darzi et al., (2016) who conducted a questionnaire amongst the different WHO regions, and included persons with disabilities and policy makers, to explore perceived acceptability of rehabilitation standards and found that reduced understanding of policy content and processes, lead to lower acceptability and ultimately reduced implementation. Studies in other low- and middle-income countries indicated that successful rehabilitation policies required stakeholder buy-in through inclusive training and engagement (Jesus et al., 2017).

2.5 FSDR APPROPRIATENESS

The FSDR appropriateness refers to the perception of stakeholders regarding the fit of the intervention to the context it is implemented in (Parkhurst and Abeysinghe, 2016). The appropriateness of the FSDR in the South African context has also been questioned (Maart et al., 2024). This is due to it being outdated since the COVID-19 pandemic and shift in rehabilitation approaches since then such as the inclusion of telerehabilitation for example (Charumbira et al., 2024). While it aligned with global disability rights frameworks such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), its practical implementation had been hindered by structural health system challenges (Philpott, Mclaren and Rule, 2020). The lack of rehabilitation personnel, inadequate infrastructure, and poor integration of rehabilitation into primary healthcare undermined its effectiveness (Day et al., 2021). Sherry (2014) and Myezwa and Van Niekerk (2013) have highlighted that rehabilitation services were treated as secondary concerns within the broader healthcare framework, reducing their impact. One of the key reasons for the poor implementation of rehabilitation policies in South Africa, as highlighted by Louw et al., (2021) was that rehabilitation had not been prioritised within the national health agenda. Rehabilitation services had received minimal funding compared to curative health interventions, leading to gaps in service provision (Blose et al., 2021). Policy fragmentation had also contributed to

the issue, as rehabilitation policies such as the FSDR were not well integrated into broader health policies, resulting in inconsistent implementation. Additionally, the shortage of rehabilitation professionals, including physiotherapists and occupational therapists, was a direct consequence of poor investment in training and workforce development (Louw et al., 2023).

Feasibility, which referred to the practical implementation of the FSDR given the available resources, had been severely affected by financial and human resource constraints (Crowley et al., 2022). Only two out of eight provinces conducted any form of monitoring and evaluation of the FSDR. Without proper M&E on progress made and the impact of policy, lessons can't be noted and it makes measures impact very difficult. Therefore, the revised or renewed DSDR must have clearly articulated indicators that must be monitored at all levels (national, provincial and district levels). Reporting on these indicators should be mandatory. Furthermore, the severe shortage of rehabilitation professionals had led to poor service delivery. The shortage of rehabilitation staff in South Africa is currently due to rehabilitation posts being reduced to lack of finances to fund these posts. International studies have suggested that rehabilitation frameworks were most effective when supported by adequate funding and workforce development, which had remained a significant challenge in South Africa (dos Santos Sixel et al., 2024; Campbell and Mills, 2022).

Another practical example of an outcome of the FSDR implementation in Gauteng, is that community-based rehabilitation (CBR) initiatives were implemented in certain districts, improving access to rehabilitation services. Intersectoral collaboration was another positive aspect, as seen in early childhood intervention (ECI) programmes, which involved partnerships between health, social development, and education sectors. The launch of the Gauteng Disability Rights Policy in 2022 along with a roadshow also contributed to raising awareness and fostering a more inclusive approach to disability rights. In workforce planning, while the Human resource plan was not fully implemented, some districts reviewed their organisational structures to better integrate rehabilitation professionals and this was also seen by Amore et al., (2024) who showed that increase rehabilitation human capacity enables the feasibility of policy implementation.

2.6 SUSTAINABILITY

Sustainability, in this study, is referred to as the ability of the policy to be consistently and continuously implemented (Palstam et al., 2022). This had also emerged as a key issue, as the FSDR had struggled to be maintained consistently over time. The lack of indicators for tracking progress had made it difficult to evaluate the success of the framework especially in Gauteng. The quantitative findings in this study showed that only 2 out of 8 provinces employed some form of monitoring and evaluation of the FSDR implementation, a

significantly low level of M&E considering the importance of this step in policy implementation. The absence of standardised rehabilitation and disability indicators in South Africa had limited long-term tracking, and Years Lived with Disability (YLD) data were not systematically collected. Unlike other countries, South Africa had not established a disability registry that tracked service utilisation and patient outcomes, which had hampered evidence- based policy evaluation and service planning (Leonardi et al., 2022; Morris et al., 2021).

From the document review, most provinces lacked tools and mechanisms to conduct continuous monitoring and evaluation (M&E) of the framework, despite the inclusion of M&E as a critical component of the FSDR's goals. The absence of data disaggregation for disability-related indicators and the lack of appropriate M&E tools hindered provinces' ability to track progress and adjust strategies accordingly (Hageman et al., 2023). This finding correlates with global evidence that effective M&E systems are crucial for the sustainability of public health initiatives (Villumsen, Adler-Milstein and Nøhr, 2020).

Moreover, the limited focus on M&E suggests that the long-term benefits of the FSDR may not be realised unless significant improvements are made to the provincial data collection and reporting systems (Giuffrè and Shung, 2023). Without reliable data, the FSDR risks becoming another well-intentioned policy that fails to deliver lasting change because of poor accountability mechanisms (Gómez Sánchez, Schalock and Verdugo Alonso, 2021). While South Africa has made progress in recognising the rights of PWDs through policies and legislation, significant challenges remain in translating these rights into real-world improvements (Chirowamhangu, 2022). The lack of implementation science frameworks in rehabilitation, along with insufficient focus on policy-level interventions, continues to hold back progress (Chibaya et al., 2022). To address these challenges, South Africa needs to apply structured implementation strategies, strengthen policy enforcement, and create a supportive environment for sustainable change (Chibaya et al., 2022).

2.7 FSDR REACH

The FSDR reach refers to the extent to which the framework impacted its intended end-users, including rehabilitation professionals and, ultimately, persons with disabilities. The fragmented implementation of the FSDR in Gauteng highlights broader systemic challenges in rehabilitation service delivery, primarily due to inadequate provincial leadership, a lack of structured implementation plans, and insufficient financial investment (Louw et al., 2023). Unlike other provinces that integrated rehabilitation into priority health programmes, Gauteng's reliance on individual champions, such as in Ekurhuleni, resulted in inconsistent uptake and a lack of centralised coordination. This aligns with findings in South African healthcare policy, where the absence of structured provincial oversight has hindered equitable service delivery, particularly in wheelchair provision (McIntyre, Cleland, and

Ramklass, 2021). Furthermore, a critical shortcoming was the lack of a monitoring and evaluation (M&E) framework, which is essential for tracking implementation success, as noted in other global health contexts (Hyzak et al., 2024). The limited training and capacity-building efforts for rehabilitation professionals further exacerbated the issue, reflecting concerns raised in sub-Saharan Africa regarding the neglect of disability-focused workforce training (Rotenberg, Reichenberger, and Smythe, 2024). Similarly, policy implementation challenges in post-conflict Uganda revealed barriers to access due to weak coordination and stakeholder engagement (Mac-Seing et al., 2021), reinforcing the notion that without clear directives and systemic accountability, rehabilitation policies struggle to transition from theory to practice. While intersectoral collaboration in Gauteng, such as discussions at the Premier's Office, demonstrated potential for policy integration, the lack of a formal directive from the provincial health department limited its effectiveness. Addressing these barriers requires strategic investment, structured policy dissemination, and robust leadership to ensure the FSDR achieves its intended impact.

A key limitation in evaluating the FSDR's reach is that persons with disabilities (PWDs) were not actively included in the assessment process. Without direct input from the intended beneficiaries, it is difficult to determine whether the FSDR effectively improved access to services or addressed the real challenges faced by PWDs. Accessibility is a broad concept that extends beyond policy documents and training efforts; it includes the lived experiences of those who require rehabilitation services. This omission limits the credibility of the findings, as the evaluation reflects an institutional perspective rather than a user-centred assessment. Future evaluations must prioritise direct engagement with PWDs to ensure a more comprehensive understanding of the framework's impact.

While the FSDR had the potential to transform rehabilitation services, its reach in Gauteng was limited by poor stakeholder engagement, the absence of a clear implementation plan, and a lack of direct involvement from PWDs in the evaluation process. The framework's success depended heavily on the initiative of individual professionals rather than a coordinated provincial effort, which led to fragmented and inconsistent adoption. Moving forward, structured policy implementation, clear provincial leadership, and thorough monitoring mechanisms will be essential to ensure that future frameworks are effectively integrated into Gauteng's healthcare system.

This variance in reach aligns with literature suggesting that unequal dissemination efforts can limit the success of rehabilitation frameworks (Sager and Gofen, 2022). Moreover, the involvement of community service physiotherapists during induction highlights an inclusive approach to training across professional levels. However, the long-term retention and sustainability of training efforts remain unclear and require further investigation into how

knowledge transfer occurs post-training (Li and Pilz, 2023).

2.8 FSDR EFFICACY

Efficacy, in the context of the FSDR implementation, refers to its success in improving access to rehabilitative services for persons with disabilities (Wakim et al., 2025). The present study findings showed that the Gauteng province faced significant challenges, including a lack of formal training due to the COVID-19 pandemic, reduced human resources, and the absence of a dedicated monitoring and evaluation (M&E). Compared to provinces such as KwaZulu-Natal (KZN) who reported notable progress, with 50% of priority programmes integrating disability services and improved referral pathways for conditions like cerebral palsy as the province had developed their own indicators. Gauteng (GP) presented a more complex and uneven picture. These factors limited the full realisation of the FSDR's intended goals in the province also seen by van Kessel et al., (2022), who the efficacy of international policies on improving health for persons with disabilities and showed that for policies to be effective in achieving equitable health access, persons with disabilities must be positioned at the centre of interventions such as rehabilitation and rehabilitation should be positioned centrally to the health system and health programmes.

Unlike some provinces where structured referral systems were established, GP struggled with fragmented implementation, worsened by inadequate funding and an inability to implement the National Department of Health's (NDoH) human resource plan according to the current study. However, Gauteng's resilience and adaptability in implementing disability policies can be attributed to several factors, including its status as the most populous and economically significant province in South Africa (Jacobs, David and Stiglingh-Van Wyk, 2023). The launch of the Gauteng Disability Policy under the Office of the Premier marked a crucial step in integrating disability rights into broader provincial governance, reflecting a growing recognition of the need for inclusive policies at a strategic level. However, the unique socio-economic and demographic pressures in Gauteng presented both challenges and opportunities for policy implementation. With a high population density and significant migration inflows, the demand for rehabilitation services far outstrips available resources, making systematic policy implementation more complex (Buse et al., 2023). Unlike less urbanised provinces, Gauteng's healthcare infrastructure is under immense strain, often prioritising urgent medical care over long-term rehabilitation and disability inclusion efforts (Anyanwu et al., 2024).

Despite these constraints, intersectoral collaboration and multi-disciplinary approaches enabled some progress in partially implementing the FSDR's objectives. The province's economic and administrative capacity facilitated cross-sectoral engagement, a crucial factor in overcoming fragmented service delivery (Wiedermann et al., 2023). Additionally, Gauteng's

role as a policy hub meant that initiatives such as the Disability Policy gained traction more rapidly than in other provinces, benefiting from established governance structures and existing stakeholder networks. This aligns with global findings, where policy integration is often more successful in regions with strong intergovernmental coordination and data-driven decision-making (Jorgenson, Wolinetz, and Collins, 2021). However, challenges persist due to regulatory gaps and the lack of a structured digital health strategy to support rehabilitation services, mirroring broader issues in healthcare policy adaptation (Iqbal and Biller-Andorno, 2022). Gauteng's partial success in implementing the FSDR highlights both the advantages of its well-established governance structures and the difficulties posed by overpopulation and systemic healthcare pressures. While the province demonstrated adaptability through targeted policy initiatives, sustainable and equitable implementation will require ongoing commitment to intersectoral collaboration, improved regulatory frameworks, and enhanced data management strategies.

The study findings highlight significant gaps in the efficacy of the FSDR in fully transforming service delivery, as inconsistent progress across provinces indicates that regional context plays a crucial role in public health framework implementation (Bachtrögler, Fratesi and Perucca, 2020). While some provinces reported improvements, others faced systemic barriers such as inadequate funding, a shortage of rehabilitation professionals, and poor intersectoral coordination. These disparities suggest that a one-size-fits-all approach to rehabilitation service delivery is ineffective, reinforcing the need for localised strategies that align with provincial capacities and needs (Gorman and Gustafsson, 2022). Future research should go beyond general measures of accessibility and focus on specific factors that influence access to rehabilitation services. This includes physical access to healthcare facilities, the affordability of services, the availability of assistive devices, and the adequacy of human resources in rehabilitation (Magaqa, Ariana and Polack, 2021). Additionally, research should explore social and systemic barriers, such as stigma, the lack of disability-inclusive policies, and the responsiveness of the healthcare system to the needs of persons with disabilities (Feldner et al., 2022). The work of Masuku (2020)'s policy analysis in Eswatini provides a valuable framework for investigating how policy implementation gaps contribute to limited-service access, particularly for marginalised communities. Their research highlights the importance of policy coherence, stakeholder engagement, and continuous monitoring to ensure that disability and rehabilitation frameworks lead to meaningful change.

Another critical avenue for future studies is assessing the sustainability of FSDR-driven improvements over time. Quantifying whether access gains have been maintained post-implementation is essential in evaluating the framework's long-term impact (Strauser, 2021). This includes tracking service uptake, rehabilitation outcomes, and patient satisfaction while considering whether policy adjustments are needed to address emerging challenges (Anaby

et al., 2022). By incorporating both quantitative and qualitative methods, researchers can provide a more comprehensive picture of how the FSDR has shaped the rehabilitation landscape in South Africa and identify areas for further intervention (Mitchell, Shirota and Clanchy, 2023).

The above section discussed the implementation outcomes of the FSDR implementation as adapted from the Proctor (2011) model. The next section will discuss the implementation strategies that were explored to map the determinants mentioned previously on the section of factors affecting the FSDR implementation process.

Implementation Strategies for Future FSDR Implementation

As a final output of this current study, several strategies have been proposed to improve future FSDR implementation using the ERIC framework to map determinants identified to strategies. Further details on the implementation strategies are seen in appendix 14 with specific determinants matched to implementation strategies. Enhancing training for healthcare workers to align with the biopsychosocial model of disability is essential, as is increasing resource allocation, particularly in rural and under-resourced areas (Conradie et al., 2022). The strategies to improve future FSDR implementation included enhancing awareness and training through workshops and CPD programmes, addressing resource limitations by advocating for increased funding and leveraging public-private partnerships, and fostering interdepartmental collaboration through multidisciplinary team meetings and digital care planning platforms. Additionally, strengthening governance and policy buy-in by engaging leadership in co-designing policies and providing disability-inclusive governance training was recommended. Monitoring and evaluation efforts were proposed through digital tracking tools and participatory evaluation approaches. Context-specific strategies tailored to district needs and continuous professional development initiatives were also highlighted to ensure sustainable policy implementation. Table 9 outlines the proposed strategies.

The findings from all the components of the above study informed the development of the below figure 9 which is a proposed model of implementation strategies to improve future FSDR implementation in South Africa. An infographic was also developed for public dissemination as an output of this study linking to the implementation strategies and is seen in appendix 15.

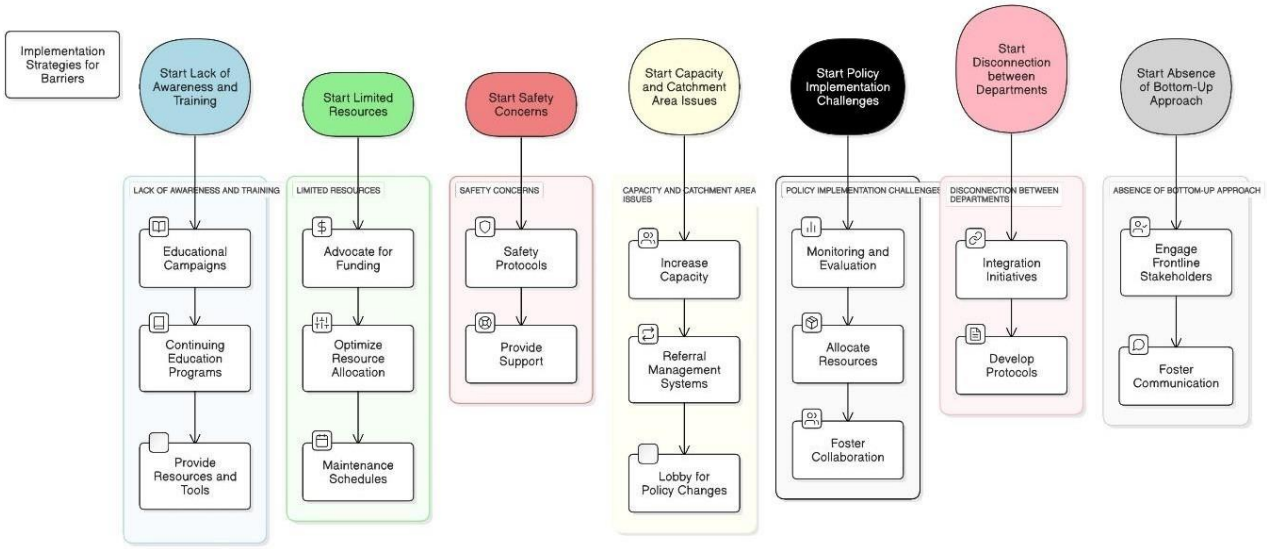

Figure 8.3: Proposed Model of Implementation Strategies for Future FSDR Implementation

The elements of the above implementation strategy model are briefly discussed below.

Table 8.6: Implementation Strategies for the FSDR

Theme/determinant	Findings	Proposed Strategies
Lack of Awareness and Training	Insufficient dissemination and inadequate training on FSDR, leading to poor implementation outcomes.	- Conduct workshops and integrate training into CPD programs. - Develop user-friendly educational materials.
Resource Limitations	Staffing shortages, lack of assistive devices, and poor resource allocation hinder service delivery.	- Advocate for increased funding and optimize resource allocation. - Leverage public-private partnerships (PPPs).
Need for Interdepartmental Collaboration	Siloed operations among health disciplines negatively impact holistic care delivery.	- Implement multidisciplinary team meetings. - Develop digital platforms for shared care planning.
Governance and Policy Buy-In	Lack of leadership support and stakeholder engagement weakens policy implementation.	- Engage leadership in co-designing policy. - Provide leadership training on disability-inclusive governance.
Monitoring and Evaluation	Absence of adequate M&E systems to track policy implementation and outcomes.	- Establish digital M&E tools and dashboards. - Use participatory evaluation approaches with end-users.
Context-Specific Strategies	Diverse needs across districts require localised and adaptive approaches.	- Develop adaptive strategies tailored to district-specific needs. - Engage local stakeholders in co-design processes.
Professional Development	Continuous professional development is essential for sustaining policy implementation.	- Incorporate policy training into CPD programs. - Provide incentives for participation in CPD activities.

Each component from the above table 9 is briefly discussed below.

Lack of Awareness and Training: Enhancing Education and Training

In response to insufficient dissemination and inadequate training on the FSDR, workshops and the integration of training into Continuing Professional Development (CPD) programs have been proposed. These strategies aim to address the knowledge gap and improve skills, while developing user-friendly educational materials that ensure content is accessible and practical for a wide range of stakeholders. This strategy is supported by Buse et al., (2023) and The World Health Organization (2021) who both emphasise that increasing policy understanding through training of stakeholders, improves policy agenda setting as well as policy implementation.

Resource Limitations: Securing Resources and Optimising Allocation

To tackle staffing shortages, lack of assistive devices, and poor resource allocation, advocating for increased funding and optimising resource distribution are key strategies. Additionally, leveraging public-private partnerships (PPPs) can help secure additional resources, ensuring that the necessary infrastructure and tools are available for effective service delivery. This is supported by Karki et al., (2023) and Minotti et al., (2021) where the authors reveal that for rehabilitation to be successful and ultimately rehabilitation policy to be successfully implemented, adequate availability of resources coupled with appropriate resources distribution is necessary.

Need for Interdepartmental Collaboration: Promoting Integrated Care

To overcome siloed operations and improve holistic care delivery, implementing multidisciplinary team meetings and developing digital platforms for shared care planning are proposed. These strategies promote collaboration across various health disciplines, facilitating a more coordinated and integrated approach to patient care. Adams and Hakonarson (2024), Ghaffar et al., (2024), as well as Bohanna et al., (2022), advocate for a silo to synergy shift to ensure that rehabilitation is integrated into current and future universal health systems to facilitate easier rehabilitation policy implementation. Additionally, these authors support the need for a multidisciplinary approach to disability management.

Additionally, advocating for the adoption of these strategies at the national level, particularly within the Department of Health, is critical for their successful integration into the National Health Insurance (NHI) system. The literature suggests that effective advocacy can drive policy changes that align with the goals of frameworks like the FSDR (Chisholm et al., 2016). For example, studies by Rispel et al. (2017) and the National Department of Health (2015) highlight the importance of political will and strategic lobbying to ensure that rehabilitation services are prioritized within national health policies and the NHI framework. A well-

organized advocacy campaign can highlight the potential benefits of rehabilitation services, both in terms of health outcomes and long-term cost savings.

Governance and Policy Buy-In: Strengthening Leadership Support

Lack of leadership support and stakeholder engagement can undermine policy implementation. Engaging leadership in co-designing policies and providing leadership training on disability-inclusive governance are critical strategies for fostering greater buy-in and strengthening the policy's alignment with organizational priorities, ensuring effective execution and support at all levels. Tang et al., (2021) who analysed multiple policy and strategy documents by the WHO to improve rehabilitation and found that a fundamental pillar (one of six) of rehabilitation policy implementation is strong and appropriate governance and leadership.

Monitoring and Evaluation: Strengthening Policy Tracking

To address the absence of adequate monitoring and evaluation (M&E) systems, establishing digital M&E tools and dashboards will enable real-time tracking of policy implementation and outcomes. Incorporating participatory evaluation approaches with end- users will ensure that the M&E process is inclusive, gathering feedback directly from those affected by the policy for more accurate assessments. This is confounded by Ghaffar et al., (2024) who highlight the needs for monitoring and evaluation tools such as key performance indicators that must accompany rehabilitation policy from its inception, and it must be adapted according to the policy implementation landscape.

Context-Specific Strategies: Tailoring Solutions to Local Needs

Given the diverse needs across districts, developing adaptive strategies tailored to specific district requirements and engaging local stakeholders in co-design processes will ensure that the implementation is context-sensitive and responsive to local conditions, making it more relevant and effective. Adams and Hakonarson (2024) and Barnes and Peltier (2022) support this by highlighting how different contexts have different needs, and that disability has specific needs at different levels of care and that rehabilitation policy should be sensitive to this throughout the implementation process.

A key implementation strategy from participants was to streamline the referral process across different levels of care to reduce delays and improve service efficiency. Participants expressed that the next version of the FSDR needs to be strategically focused on the primary, secondary, and tertiary levels of care to ensure successful implementation. Grindle (2017) supports the notion that the policy context must be adapted to the implementation context, particularly in developing countries such as South Africa, due to the heterogeneity of

rehabilitation service provision across provinces. The author further argues that the socio-political context must be considered during this context-specific approach.

Primary Level of Care

The primary level of care forms the foundation of early rehabilitation interventions in South Africa. This level focuses on community-based rehabilitation (CBR) and aims to provide accessible and basic services close to individuals' homes. The FSDR encourages the integration of rehabilitation into primary healthcare (PHC) by leveraging the reach of local clinics and community health workers to identify, assess, and refer patients.

At the district care level, participants suggested several implementation strategies for primary health care aimed at improving services for individuals with disabilities. These include promoting Community-Based Rehabilitation (CBR) to foster the inclusion of people with disabilities in community programs. They also recommended training Community Health Workers through capacity-building initiatives to enhance their skills in basic rehabilitation. Furthermore, the importance of early detection and referral was highlighted to ensure the timely identification of disability-related conditions, enabling early intervention and prevention of complications.

The primary care level is critical for preventing long-term disability by promoting early rehabilitation. It also promotes equity in healthcare, ensuring that rural and under-resourced areas have access to basic rehabilitation services. Studies have shown that integrating rehabilitation with PHC reduces long-term healthcare costs and improves patient outcomes (Nelson-Brantley et al., 2020). Nelson-Brantley et al., (2020) further debate that supporting implementation at primary care, particularly in rural settings, can accelerate overall policy implementation.

The secondary care level addresses the continuum of care by managing cases referred from PHC and providing more intensive rehabilitation interventions. The FSDR policy focuses on ensuring that these facilities have specialized rehabilitation units with professionals such as physiotherapists, occupational therapists, speech therapists, and psychologists. Participants emphasised Interdisciplinary Collaboration to ensure strengthening the referral system between PHC and secondary care, with a focus on interdisciplinary management of disability cases. Studies in rehabilitation science emphasize that patients receiving care at this level experience better functional outcomes owing to multidisciplinary collaboration and specialised treatment options (Le Boutillier et al., 2022).

Tertiary care involves highly specialised rehabilitation services provided in academic hospitals or rehabilitation centres. This level is applicable to patients with severe disabilities or complex rehabilitation needs, including spinal cord injuries, brain injuries, and other significant impairments. Participants suggested that the next FSDR advocates for highly specialised rehabilitation centres to focus on advanced rehabilitation techniques such as assistive technology, prosthetics, and advanced therapies. This poses a question regarding the advanced scope of practice for rehabilitation professionals. Tawiah et al., (2024) discuss the importance of rehabilitation staff having the option to specialise in their field and work in specialised centres where the focus is on one area of the discipline. The next FSDR must consider this in the context of implementation.

Professional Development: Sustaining Continuous Learning

To sustain policy implementation, incorporating policy training into CPD programs and providing incentives for participation is essential. A practical method for this is to advocate for the Health Professions Council of South Africa (HPCSA) to establish specific CPD points for policy activities in the same way that CPD points are allocated to clinical and ethics related activities. A realistic way of creating incentive to implement future FSDR policy, is to attach it to rehabilitation staff performance appraisal with proof of implementation required. These strategies ensure that healthcare professionals continue to build their capacity, stay updated on policy changes, and remain motivated to contribute to the successful implementation of future FSDR and rehabilitation policies. This is confounded by Sajadi et al., (2021) and Oh, Abazeed and Chambers (2021) who show the importance of incentivising policy stakeholders to encourage implementation and the authors go as far as suggesting financial incentives which can be linked to performance appraisal of rehabilitation staff members. This approach is widely used in health systems to drive improvements in service delivery (Sweeney et al., 2019). However, literature also warns that such strategies could lead to superficial compliance, such as ticking off boxes on a checklist rather than fostering genuine engagement within the biopsychosocial model (Doherty and Honikman, 2019). Therefore, it is crucial to ensure that performance appraisal systems are designed to measure meaningful outcomes, such as improved patient satisfaction or comprehensive assessments of disability, rather than focusing solely on task completion. These approaches must be carefully balanced to avoid turning well-intended strategies into routine, bureaucratic exercises. By incorporating these considerations into the strategy development process, the chances of successful and sustainable FSDR implementation across varied contexts in South Africa can be significantly improved.

Additionally, suggestions were made for the next policy to support research and development and ensure the integration of rehabilitation research to ensure that innovative and up-to-date

treatment options are available. A practical suggestion was for the policy to outline collaborations with academic institutions to strengthen the link between clinical practice and academic research to improve rehabilitation outcomes. Fung et al., (2020), suggest support for this in that policy firstly, should be integrated into academic education for rehabilitation professionals, and also investment into research support for rehabilitation, which should be facilitated through policy.

Why Implementation Strategies Matter

The successful implementation of the next Framework and Strategy for Disability and Rehabilitation (FSDR) policy in South Africa is essential to address the country's high burden of disability, which arises from various factors, such as trauma (e.g. road accidents), infectious diseases (e.g. TB and HIV), and non-communicable diseases (e.g. diabetes). By embedding rehabilitation services across all levels of care, implementation strategies have the potential to comprehensively address diverse causes of disability. Historically, rehabilitation services have been concentrated in urban areas, leaving rural and underserved populations without access. The proposed strategies seek to promote equity and accessibility by integrating rehabilitation services within the primary healthcare (PHC) framework, thereby ensuring universal access to care. In the context of NHI, Louw et al., (2023) justify this statement that an effective policy will ensure that rehabilitation is not forgotten in the roll out of the NHI.

Furthermore, the strategies encourage patient-centered rehabilitation by involving communities, tailoring rehabilitation plans to individual needs and ensuring continuous care across various levels. This approach aligns with global trends, and highlights the importance of addressing the social, psychological, and physical aspects of patient care. These strategies strengthen the health system by establishing clear referral pathways, ensuring timely and appropriate care, reducing delays, and preventing the escalation of disability-related complications. This is supported by Juckett et al. (2020); however, it is important to note that this study was conducted in the United States, which may have affected the outcomes. Overall, the implementation of the next version of the FSDR at all levels of care has the potential to promote equitable access to rehabilitation, improve patient outcomes, and enhance the efficiency of the healthcare system.

The proposed implementation strategies, including enhanced training, resource optimisation, interdepartmental collaboration, leadership engagement, appropriate monitoring, context-specific approaches, and continuous professional development, aim to address key determinants and improve the effective delivery of the FSDR.

2.9 CONCLUSION OF DISCUSSION CHAPTER

This chapter outlines how the current study has provided a comprehensive evaluation of the perceptions of the FSDR's implementation, identifying key barriers, facilitators, and strategies for improving future implementation. The findings and supporting literature underscore the need for targeted interventions to address challenges posed by inadequate training, resource constraints, and safety concerns. Inter-sectoral collaboration and local engagement have emerged as critical facilitators that could enhance the implementation process. By addressing systemic gaps and leveraging existing facilitators, South Africa can improve equitable access to rehabilitation services and ensure better outcomes for individuals with disabilities.

The findings of this study have significant clinical, educational, research, and policy implications for rehabilitation services in South Africa, particularly in aligning with the World Health Organization's Rehabilitation 2030 strategy. Rehabilitation 2030 emphasises the need for strengthening rehabilitation services within health systems, prioritising workforce development, and improving governance structures to enhance disability-inclusive healthcare. Addressing the barriers to implementing the Framework and Strategy for Disability and Rehabilitation (FSDR) is essential for ensuring that South Africa meets the goals set out in this global strategy.

This study highlights the need to integrate rehabilitation into primary healthcare to improve accessibility and service delivery. Fragmented services result in poor patient outcomes, emphasising the importance of multidisciplinary collaboration among rehabilitation professionals, general practitioners, and social workers. Strengthening these approaches, increasing access to assistive devices, and optimising resources would enhance rehabilitation services. South Africa must align with Rehabilitation 2030 by embedding rehabilitation within universal health coverage.

From an educational perspective, disability and rehabilitation policy training should be included at undergraduate and postgraduate levels to address knowledge gaps. Policy literacy in health sciences curricula would equip professionals to implement rehabilitation strategies effectively. Continuous Professional Development (CPD) should allocate policy-related CPD points alongside clinical and ethics training. Interdisciplinary education is also essential to build a well-trained rehabilitation workforce. Research must establish thorough monitoring and evaluation systems to assess policy implementation. The lack of standardised indicators hinders service evaluation. A national rehabilitation database would provide key data, while community-based participatory research (CBPR) should involve rehabilitation users in policy evaluation. Stronger leadership, dedicated funding, and inclusive policy co-design with disability persons' organisations are crucial. An updated national rehabilitation

strategy would improve governance, ensuring accessible, effective, and sustainable rehabilitation services in South Africa.

CHAPTER 9

3. CONCLUSION OF THESIS

This study explored the perceptions of the implementation outcomes of the Framework and Strategy for Disability and Rehabilitation (FSDR) in South Africa, using an explanatory mixed-methods approach. The study findings revealed many challenges and some successes in the FSDR implementation process. There were significant gaps in training, monitoring and evaluation (M&E), resource availability, and intersectoral collaboration. Other barriers related to the implementation included limited awareness, weak collaboration, and resource constraints, while facilitators involved community engagement, advocacy, and alignment with international policies. Implementation had followed a top-down approach with unclear guidelines and inconsistent execution. Despite this, facilitators included public-private partnerships and advocacy for policy implementation by persons with disabilities.

Key strategies for improvement included better training, governance, and digital M&E tools, though stakeholder engagement and structured policy execution had remained lacking. The FSDR had limited reach and inconsistent adoption among rehabilitation staff professionals, particularly at primary health care levels.

Although the stakeholders found the FSDR relevant barriers such as resource shortages and weak leadership, undermined the feasibility and sustainability of the FSDR. To improve FSDR implementation and long-term impact there is need to strengthen implementation frameworks, increase funding, adopt participatory approaches, and integrate digital M&E tools to track progress.

Implementation outcomes showed mixed results in achieving FSDR penetration, adoption, acceptability, appropriateness, feasibility, and sustainability. There were notable gaps in monitoring and evaluation systems that limited data-driven decision-making. These findings underscore the urgent need for a more inclusive and sustainable approach to disability and rehabilitation policy implementation. The study developed implementation strategies to enhance the future implementation of the next version of the FSDR, including capacity-building initiatives, stakeholder engagement, and the use of digital tools for real-time monitoring and evaluation. Despite these efforts, the study found that gaps remain in governance, leadership, and resource allocation, which may hinder effective execution if not addressed adequately.

This study provides a replicable model for evaluating health policy, especially in the field of rehabilitation, with the implementation of appropriate theoretical frameworks which can be applied in low- and middle-income countries. Through focusing on implementation outcomes, as opposed to only policy intentions, the study adds a deeper understanding of what it

takes to translate disability rights into service delivery. This work may potentially inform future national strategies and contribute to global health systems strengthening efforts.

3.1 STUDY LIMITATIONS

Several limitations must be acknowledged in this study. The study was conducted exclusively in Gauteng province, limiting the generalisability of findings to other provinces with different healthcare landscapes and socio-economic conditions. Additionally, while the mixed-methods approach provided rich insights, future research should expand its scope to include more diverse regional perspectives and longitudinal data to assess long-term policy impact. The study did not include all key actors, such as persons with disabilities and private sector rehabilitation staff. Their insights, especially persons with disabilities, may provide added value to the study by providing different perspectives and experiences to the FSDR implementation.

3.2 STUDY RECOMMENDATIONS

Policy: This study offers several recommendations for enhancing the FSDR at different levels. At a policy level, it is recommended that there be a revision of the current FSDR along with clear, measurable objectives and timelines. Additionally, there should be integration of disability and rehabilitation into broader health and social policies, such as the National Health Insurance (NHI) framework, to ensure that rehabilitation is prioritised.

Health system strengthening:

Leadership and governance: From a leadership perspective, strengthening governance in rehabilitation is necessary, with dedicated task forces at the provincial and national levels to oversee FSDR implementation and promote accountability through regular reporting and stakeholder consultations.

Health professionals

Capacity building: Furthermore, capacity-building initiatives should include training programmes for rehabilitation professionals focusing on developed policies, standardised protocols and evidence-based practices, alongside fostering interdisciplinary collaboration through workshops and seminars. Expanding community-based rehabilitation (CBR) programmes to rural and underserved areas and empowering community health workers and local organisations are crucial for enhancing service delivery. Adequate monitoring and evaluation frameworks aligned with implementation science principles, supported by digital tools for real-time data collection and analysis, should be implemented to ensure adaptive strategies. Looking forward, the findings and recommendations provides actionable

strategies which may enhance disability and rehabilitation services in South Africa through improved policy implementation.

Finances:

Funding for rehabilitation service provision needs to be increased in national health budgets in order for policy implementation to be successful. Secondary to this, is the urgent need for separate funds to be allocated to policy implementation processes such as training on implementation and continuous M&E.

Personal reflection post PHD

Throughout this doctoral journey, the researcher has continuously reflected on lessons learnt and opportunities for improvement. This study has highlighted key disparities in disability rights actualisation and rehabilitation service provision. Moreover, this process has enabled the researcher to understand health and rehabilitation service provision as an issue of equity and justice for persons with disabilities. The findings have been utilised effectively through the development of a policy brief which has been adopted by a working group of the D20 movement, and this policy brief will be presented at the C20 conference to ensure that civil society voices, and those of persons with disabilities are represented in the G20 mission.

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APPENDIX 1

- **ETHICAL CLEARANCE CERTIFICATE**

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research and Innovation)

TO:	Ms NAR Hussein El Kout School of Therapeutic Sciences Department of Physiotherapy Medical School University E-mail: Naeema.HusseinelKout@wits.ac.za
CC:	Supervisor: Drs S Pilusa and N Benjamin-Damons <Sonti.Pilusa@wits.ac.za> and <HREC-Medical Research Office@wits.ac.za>
FROM:	Mr Iain Burns Human Research Ethics Committee (Medical) Tel: 011 717 1252 E-mail: Iain.Burns@wits.ac.za
DATE:	2022/11/07
REF:	R14/49
PROTOCOL NO:	**M220364** (This is your ethics application reference number. Please quote it in all enquiries, oral or written, relating to this study.)
PROJECT TITLE:	*Evaluation of the implementation outcomes of the framework and strategy for disability and rehabilitation for South Africa: an explanatory mixed methods study*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

R49 Ms NAR Hussein El Kout

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M220364

NAME: (Principal Investigator)	Ms NAR Hussein El Kout
DEPARTMENT:	School of Therapeutic Sciences Department of Physiotherapy Medical School University
PROJECT TITLE:	*Evaluation of the implementation outcomes of the framework and strategy for disability and rehabilitation for South Africa: an explanatory mixed methods study*
DATE CONSIDERED:	2022/03/25
DECISION:	Approved unconditionally
CONDITIONS:	
NOTE:	If contact information regarding student study participants is required, please contact the Registrar's office - <Nicoleen.Potgieter@wits.ac.za>
SUPERVISOR:	Drs S Pilusa and N Benjamin-Damons
APPROVED BY:	Dr N Naran, Co-Chairperson, HREC (Medical)
DATE OF APPROVAL:	2022/11/07

This Clearance Certificate is valid for 5 years from the date of approval. An extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office secretariat on the 3rd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to submit details to the Committee. **I agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date when the study was initially reviewed. In this case, the study was initially reviewed in **March** and therefore reports and re-certification will be due in the month of **March** each year. Unreported changes to the study may invalidate the clearance given by the HREC (Medical).

Signature of Principal Investigator — Date: 11/07/2022

APPENDIX 2

- **APPROVAL OF TITLE FORM**

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172076

Reference: Mrs Sandra Benn
E-mail: sandra.benn@wits.ac.za

20 October 2022
Person No: 726945
PAG

Mrs NAR Hussein El Kout
Box 42012
Fordsburg
2033
South Africa

Dear Mrs Naeema Hussein El Kout

Doctor of Philosophy: Approval of Title

We have pleasure in advising that your proposal entitled *Evaluation of the implementation outcomes of the framework and strategy for disability and rehabilitation for South Africa: an explanatory mixed-methods study* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

APPENDIX 3

- **AN OVERVIEW OF OBJECTIVES OF THE STUDY AND THE METHODS USED**

Objective	Study Design	Study Sample	Framework	Data Analyses
1.1.1. To evaluate the paper-based provincial implementation of the framework and strategy for disability and rehabilitation for South Africa	Mixed methods/document review/semi structured interviews	stakeholders	REAIM	Descriptive and thematic analysis
1.1.2. To explore the perceptions of implementation outcomes and experiences of implementation of the FSDR in Gauteng among the stakeholders involved in the FSDR implementation.	Qualitative /semi structured key informant interviews	stakeholders		Thematic
1.1.3 To map the process of implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process	Mixed methods/document review/semi structured interviews	stakeholders	EPIS framework	Descriptive
1.1.4 To explore the factors influencing the implementation of the FSDR in Gauteng based on the experience of stakeholders involved in the implementation process	Qualitative semi structured interviews	stakeholders	CFIR	Framework Analyses
1.1.5 To map strategies to improve future implementation of the FSDR	Mixed methods/semi structured interviews/focus groups	stakeholders	ERIC framework/concept mapping	Thematic analysis

APPENDIX 4

- **SEMI-STRUCTURED INTERVIEW GUIDE**

INTERVIEW GUIDE

Good morning/afternoon. Thank you for giving your time to interview you. My name is Naeema AR Hussein El Kout and I am a PHD student at the University of the Witwatersrand. Today I would like to learn from you about the implementation of the Framework and Strategy for Disability and Rehabilitation (FSDR).

This interview should last 30 minutes to an hour approximately and will be audio recorded. I have specific questions I would like to ask, but feel free to provide additional information. Please ensure throughout the interview you remain anonymous by avoiding the use of your own name. Please try to speak loudly, clearly, slowly so that your comments can all be audio recorded.

Do you have any questions?

Section 1: Identification Information

1.1 Participant identifier(number):	**1.3 Name of Interviewer:**
1.2 Date of interview	**1.4 Interview venue**

Section 2: Demographic Data Sheet for Key Informants

1.8 Identifier code:	
1.2 Gender	
1.3 Age	
1.4 Level of education	
1.5 Occupation	
1.6 Position in the department	

Interview Guide

THEME 1: Stakeholder involvement:	Can you tell me a little bit about your role in this department? Can you tell me a little bit about your role in disability management and what your thoughts are on the FSDR? What role did you play in the implementation of the FSDR? Probe: How do you feel about policy related to access to health for persons with disability?
THEME 2: Stakeholder experiences and perceptions	What was your experience of the implementation of the FSDR?
THEME 3: Mapping the process of implementation and associated factors	What specific steps were taken to implement the FSDR? What factors affected the implementation process of the FSDR?

<table>
<tr><td>THEME 4:
Implementation outcomes</td><td>How acceptable do you think the FSDR implementation was?
How appropriate do you think the FSDR implementation was?
How feasible do you think the FSDR implementation was?
How sustainable do you think the FSDR implementation is?
Probe: Provide operational definitions for implementation outcomes if necessary

<table><tr><th>Implementation Outcome</th><th>Operational Definition</th></tr><tr><td>Acceptability</td><td>The understanding of stakeholders that the intervention or policy was agreeable to its content objectives</td></tr><tr><td>Appropriateness</td><td>The perception of stakeholders regarding the fit of the intervention to the context it is implemented in</td></tr><tr><td>Feasibility</td><td>This refers to how far the policy can be implemented in its context in a practical manner</td></tr><tr><td>Sustainability</td><td>This refers to the ability of the policy to be consistently and continuously implemented</td></tr></table></td></tr>
<tr><td>THEME 5:
Recommendations</td><td>What lessons have been learnt from the implementation of the FSDR?
What recommendations do you have for future disability policy revision and development?</td></tr>
</table>

This concludes the interview.

Thank you for your time and input

Interview Guide Checklist

Checklist	**Tick**
▪ Consent for interview and recordings	
▪ Audio recorder and extra batteries	
▪ Demographic information of the participant	
▪ All questions addressed	
▪ All responses rechecked with participant	

APPENDIX 5

- **FOCUS GROUP DISCUSSION SCHEDULE**

SCHEDULE

Good morning/afternoon. Thank you for giving your time to participate in the focus group discussion. My name is Naeema AR Hussein El Kout and I am a PHD student at the University of the Witwatersrand. Today I would like to learn from you about the implementation of the Framework and Strategy for Disability and Rehabilitation (FSDR).

This session should last an hour to an hour and a half approximately and will be audio/audiovisually recorded with your permission. I have specific questions I would like to ask, but feel free to provide additional information. Please ensure throughout the interview you remain anonymous by avoiding the use of your own name. Please try to speak loudly, clearly, slowly so that your comments can all be audio recorded.

Do you have any questions?

Section 1: Identification Information

1.1 Participant identifier(number):	**1.3 Name of Interviewer:**
1.2 Date of interview	**1.4 Interview venue**

Section 2: Demographic Data Sheet for focus group discussion participants

1.9 Identifier code:	
1.2 Gender	
1.3 Age	
1.4 Level of education	
1.5 Occupation	
1.6 Position in the department	

Focus group discussion interview Guide

THEME 1: Stakeholder engagement	What engagement did you have with each other regarding the implementation of the FSDR?
THEME 2: Experiences and mapping of implementation	What was your experience of implementing the FSDR? What steps did you follow to implement the FSDR? How did you manage your staff under you during the implementation process of the FSDR?
THEME 3: Implementation outcomes	Was the FSDR implementation acceptable? If so, in what way? Was the FSDR implementation appropriate? If so, in what way? Was the FSDR implementation feasible? If so, in what way? Was the FSDR implementation sustainable? If so, in what way?
THEME 4: Lessons learnt, and challenges drawn	What challenges did you experience during the implementation of the FSDR? What lessons can be drawn from the implementation of the FSDR?
THEME 5: Policy recommendations	What suggestions do you have for future disability policy?

This concludes the interview.

Thank you for your time and input

Interview Guide Checklist

Checklist	**Tick**
▪ Consent for interview and recordings	
▪ Audio recorder and extra batteries	
▪ Demographic information of the participant	
▪ All questions addressed	
▪ All responses rechecked with participant	

APPENDIX 6

- **DOCUMENT REVIEW GUIDE**

DOCUMENT REVIEW GUIDE

This is a document developed by the researcher and the supervisors to be used as a tool to guide the process of the document review. This ensures that valuable information is realized, analyzed, coded and finally documented (Witkin et al., 1995).

The process of the document review: The markers will first be operationally defined specifically for the study. Following the final agreement of the coding manual by the student and the two supervisors, collaborative coding of the FSDR will commence. Saldhana, (2009) postulates that collaborative coding is useful as a means of ensuring rigor. The paper-based evaluation will be read line by line, then analysed according to the indicators in the FSDR strategic plan.

DOCUMENT REVIEW GUIDE

Indicator/theme 1:	- Integrate disability and rehabilitation services in the operational plans of respective priority programmes at National level
Indicator/Theme 2:	- Provinces orientated and supported on the implementation of the Framework
Indicator/Theme 3:	- Disability and rehabilitation service norms on including HR, infrastructure and equipment developed
Indicator/Theme 4:	- Compilation of provincial Directories of Disability and Rehabilitation Services facilitated
Indicator/Theme 5:	- Inter-sectoral Disability and Rehabilitation for Health Steering Committee established
Indicator/Theme 6:	- Existing accessibility standards for public sector facilities reviewed and aligned
Indicator/Theme 7:	- HPCSA, SANC, SA Pharmacy Council engaged on the inclusion of awareness on disability and rehabilitation in undergraduate training programmes.
Indicator/Theme 8:	- Facility based complaints registers audited to identify disability related complaints
Indicator/Theme 9:	- Monitoring and evaluation framework developed and implemented
Indicator/Theme 10:	- A human resources plan developed and implemented
Indicator/Theme 11:	- Appropriate assistive/technology and accessories provided

APPENDIX 7

- **STUDY INFORMATION SHEET**

STUDY INFORMATION SHEET

STUDY TITLE: Evaluation of the Framework and Strategy for Disability and Rehabilitation for South Africa: Implementation Outcomes

Introduction
My name is Naeema AR Hussein EL Kout. I am currently doing my PhD at the University of the Witwatersrand. My research is focused on the disability framework and strategy in South Africa. Research is a process used in seeking new knowledge. In this study we aim to review the disability framework and strategy in south Africa related to access to health care for persons with disabilities. It may be used to inform future disability policy in South Africa. This study has been given ethical approval by the Human Research Ethics Committee, Faculty of Health Sciences, the University of the Witwatersrand (Reference number to be added once obtained).

Invitation to Participate
We are inviting you to take part in a research study which involves the monitoring and evaluation of the Framework and Strategy for Disability and Rehabilitation document.

The information below describes what the study will entail:
1. We would like to request your voluntary participation in the semi-structured interviews in this study.
2. If you wish to participate in this study after reading this information form, you can sign the attached consent form for the interview, and one form for the audio recording. Once permission from you has been obtained, we will arrange for a time and place that is convenient for you to meet where we will conduct the interview. I (Naeema Hussein El Kout) will conduct the interviews myself.
3. The interviews will be approximately 30 minutes to an hour maximum. The interviews will be recorded on an audio recorder and will then be transcribed after the interview.
4. The questions to be asked will be very broad and open-ended about the implementation of the FSDR
5. You will be given a copy of this information page and the consent forms, to keep for your personal records.
6. Feedback and any other pertinent information on this study during and after the completion of the study, will be available to you, should you request this information.

Risks of being involved in the study
There are no risks associated with participating in the interviews. The interviews will be done out of your stipulated working time so as not to affect your work and permission will be obtained from the Gauteng Department of Health prior to the interviews.

Benefits of being in the study
There are no direct benefits from being in the study.

Participation is voluntary
Your participation in this study is voluntary and refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Moreover, there is no requirement to provide a reason for withdrawing and any data collected on you will in default be destroyed if you withdraw unless you specifically consent to its retention.

Confidentiality
All the information obtained during this research will remain strictly confidential. This includes the audio recordings as well as the transcripts. A number will be allocated to you in the findings, and you will be identified as a key informant. The information in the interview will be for the purpose of this study only. This research may be referenced in other studies; however, no reference will be made to your name hence you will not be identified personally. Any information obtained will not be disclosed to a third party, without your permission.

Results of this study may be published, which may, exceptionally, lead to cohort, or more rarely, individual identification. All data collected in the course of the study will be securely retained for two (2) years, if a scientific publication arises from the study and six (6) years if there is no publication. Thereafter it will be destroyed accordingly.

Outputs
The study may inform future disability policy of South Africa. If you wish, we can share the outcomes of the study once it is completed.

Contact details of researcher/s
Should you wish to clarify anything, or find out more information on this study, please contact me on 0712745405 or email me on naeema.husseinelkout@wits.ac.za. I will be supervised by two lecturers at Wits University. Their contact details are seen below:

1. Dr Natalie Benjamin-Damons (Wits Physiotherapy department) – Natalie.benjamindamons@wits.ac.za
2. Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand. A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research.

If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za

Thank you for reading this Study Information Sheet.
Date: Month and Year only (*To be confirmed)*
Principle investigator: Naeema AR Hussein El Kout
Contact number: 0712745405
Email address: naeema.husseinelkout@wits.ac.za.
Yours sincerely,
Naeema A R Hussein El Kout

APPENDIX 8

- **PARTICIPANT INFORMED CONSENT SHEET**

PARTICIPANT INFORMED CONSENT SHEET

STUDY TITLE: Evaluation of the framework and strategy for disability and rehabilitation for South Africa: implementation outcomes

SPONSOR: to be confirmed

Principal Investigators: Naeema AR Hussein El Kout

Institution: UNIVERSITY OF THE WITWATERSRAND

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):
Daytime numbers: 011 717 3715/ 082 0536190/0712745405
Afterhours: 082053 6190

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION: dd/mm/yr/time

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved. If you agree to be a part of this study, we require written informed consent below.

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study, I am free to speak to any of these contacts.

Contact details:
Naeema AR Hussein El Kout, Principal Investigator, telephone no. 0712745405
naeema.husseinelkout@wits.ac.za

Dr Natalie Benjamin-Damons (Wits Physiotherapy department) –
natalie.benjamindamons@wits.ac.za

Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by email at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant : _____
Date : _____
Place : _____
Signature or Mark : _____

Name of Researcher : _____
Signature or Mark : _____

Witnessed by
Name of Witness : _____
Signature : _____
Date : _____

APPENDIX 9

- **AUDIO RECORDING CONSENT FORM**

CONSENT FORM FOR AUDIO RECORDING OF STUDY PARTICIPATION

STUDY TITLE: Evaluation of the Framework and Strategy For Disability and Rehabilitation for South Africa: Implementation Outcomes

I hereby consent for Naeema AR Hussein El Kout to do an audio recording of the interview.

I understand that:

1. The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher, the research supervisors and the individual doing the transcription.
2. The recording will be transcribed and any information that could identify me will be removed,
3. The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years if no publications arise from this research
4. Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
5. Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

Name of Participant : _____

Date : _____

Place : _____

Signature or Mark : _____

Name of Researcher : _____

Signature or Mark : _____

Witnessed by

Name of Witness : _____

Signature : _____

Date : _____

Research supervisors

- Dr Natalie Benjamin-Damons (Wits Physiotherapy department) Natalie.benjamindamons@wits.ac.za
- Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

APPENDIX 10

- **STUDY INFORMATION SHEET FOR FOCUS GROUP DISCUSSION**

STUDY INFORMATION SHEET FOR FOCUS GROUP DISCUSSION

STUDY TITLE: Evaluation of the Framework and Strategy For Disability and Rehabilitation for South Africa: Implementation Outcomes

Introduction

My name is Naeema AR Hussein EL Kout. I am currently doing my PHD at The University of the Witwatersrand. My research is focused on the disability framework and strategy in South Africa. Research is a process used in seeking new knowledge. In this study, we aim to review the disability framework and strategy in South Africa related to access to health care for persons with disabilities. It may be used to inform future disability policy in South Africa. This study has been given ethical approval by the Human Research Ethics Committee, Faculty of Health Science, the University of the Witwatersrand (*Reference number to be added once obtained*).

Invitation to Participate

We are inviting you to take part in a research study which involves a focus group discussion on the implementation outcomes of the Framework and Strategy for Disability and Rehabilitation document.

The information below describes what the study will entail

1. We would like to request your voluntary participation in the focus group discussion in this study.
2. If you wish to participate in this study after reading this information form, you can sign the attached consent form for the interview, and one form for the audio recording. Once permission from you has been obtained, we will arrange for a time and place that is convenient for you to meet where we will conduct the interview. I (Naeema Hussein El Kout) will conduct the interviews myself.
3. The interviews will be approximately 30 minutes to an hour maximum. The interviews will be recorded on an audio recorder and will then be transcribed after the interview.
4. The questions to be asked will be very broad and open-ended about the implementation of the FSDR
5. You will be given a copy of this information page and the consent forms, to keep for your personal records.
6. Feedback and any other pertinent information on this study during and after the completion of the study, will be available to you, should you request this information.

Risks of being involved in the study

There are no risks associated with participating in the interviews. The interviews will be done out of your stipulated working time so as not to affect your work and permission will be obtained from the Gauteng Department of Health prior to the interviews.

Benefits of being in the study

There are no direct benefits from being in the study.

Participation is voluntary
Your participation in this study is voluntary and refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Moreover, there is no requirement to provide a reason for withdrawing and any data collected on you will in default be destroyed if you withdraw unless you specifically consent to its retention.

Confidentiality
Please note that confidentiality and anonymity cannot be maintained during the focus group discussion however, all the information obtained during this research will remain strictly confidential. This includes the audio/audio-visual recordings as well as the transcripts. A number will be allocated to you in the findings and you will be identified as a key informant. The information in the focus group discussion will be for the purpose of this study only. This research may be referenced in other studies; however, no reference will be made to your name hence you will not be identified personally. Any information obtained will not be disclosed to a third party, without your permission.

Results of this study may be published, which may, exceptionally, lead to cohort, or more rarely, individual identification. All data collected in the course of the study will be securely retained for two (2) years, if a scientific publication arises from the study and six (6) years if there is no publication. Thereafter it will be destroyed accordingly.

Outputs
The study may inform future disability policy of South Africa. If you wish, we can share the outcomes of the study once it is completed.

Contact details of researcher/s
Should you wish to clarify anything, or find out more information on this study, please contact me on 0712745405 or email me on naeema.husseinelkout@wits.ac.za. I will be supervised by two lecturers at Wits University. Their contact details are seen below:

- Dr Natalie Benjamin-Damons (Wits Physiotherapy department) – Natalie.benjamindamons@wits.ac.za
- Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand. A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research.

If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za

Thank you for reading this Study Information Sheet.
Date: Month and Year only (*To be confirmed)*
Principle investigator: Naeema AR Hussein El Kout
Contact number: 0712745405
Email address: naeema.husseinelkout@wits.ac.za.
Yours sincerely,
Naeema A R Hussein El Kout

APPENDIX 11

- **PARTICIPANT INFORMED CONSENT SHEET FOR FOCUS GROUP**

PARTICIPANT INFORMED CONSENT SHEET FOR FOCUS GROUP

STUDY TITLE: Evaluation of the Framework and Strategy for Disability and Rehabilitation for South Africa: Implementation Outcomes

SPONSOR: to be confirmed

Principal Investigators: Naeema AR Hussein El Kout

Institution: UNIVERSITY OF THE WITWATERSRAND

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):
Daytime numbers: 011 717 3715/ 082 0536190/0712745405
Afterhours: 082053 6190

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION: dd/mm/yr/time

You are invited to volunteer for a research study. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the investigator. You should not agree to take part unless you are completely happy about all the procedures involved. If you agree to be a part of this study, we require written informed consent below.

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study, I am free to speak to any of these contacts.

8. I acknowledge that my confidentiality and anonymity cannot be maintained during the focus group discussion

Contact details:
Naeema AR Hussein El Kout, Principal Investigator, telephone no. 0712745405 naeema.husseinelkout@wits.ac.za

Dr Natalie Benjamin-Damons(Wits Physiotherapy department) – Natalie.benjamindamons@wits.ac.za

Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by email at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant : _____
Date : _____
Place : _____
Signature or Mark : _____

Name of Researcher : _____
Signature or Mark : _____

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Name of Witness : _____
Signature : _____
Date : _____

APPENDIX 12

- **AUDIO/AUDIO-VISUAL RECORDING CONSENT FORM FOR FOCUS GROUP DISCUSSIONS**

CONSENT FORM FOR AUDIO/AUDIO-VISUAL RECORDING OF STUDY PARTICIPATION

STUDY TITLE: EVALUATION OF THE FRAMEWORK AND STRATEGY FOR DISABILITY AND REHABILITATION FOR SOUTH AFRICA: IMPLEMENTATION OUTCOMES

I hereby consent for Naeema AR Hussein El Kout to do an audio or audio-visual recording of the interview.

I understand that:

1. The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher, the research supervisors and the individual doing the transcription.
2. The recording will be transcribed and any information that could identify me will be removed,
3. The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years if no publications arise from this research
4. Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
5. Direct quotes from my focus group discussion, without any information that could identify me, may be cited in the research report or other write-ups of research.

Name of Participant : _____
Date : _____
Place : _____
Signature or Mark : _____

Name of Researcher : _____
Signature or Mark : _____

Witnessed by

Name of Witness : _____
Signature : _____
Date : _____

Research supervisors
Dr Natalie Benjamin-Damons (Wits Physiotherapy department) – Natalie.benjamindamons@wits.ac.za
Dr Sonti Pilusa(Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

APPENDIX 13

- **PERMISSION LETTER TO THE NATIONAL DEPARTMENT OF HEALTH**

PERMISSION LETTER TO THE NATIONAL DEPARTMENT OF HEALTH

Request for permission to conduct research at The Gauteng Department of Health

My name is Naeema AR Hussein El Kout. I am a PHD student at the University of the Witwatersrand. The title of my research is the following: **EVALUATION OF THE FRAMEWORK AND STRATEGY FOR DISABILITY AND REHABILITATION FOR SOUTH AFRICA: IMPLEMENTATION OUTCOMES.**

The prevalence of disability in South Africa is 7.5% (Stats SA, 2016). There are various underlying causes and factors affecting disability in South Africa. Persons with disability (PWD) have the right to access health care and to ensure this, health policy should be implemented.

An effort to ensure these rights include the Strategy and Framework for Disability and Rehabilitation, however, it has not been evaluated, which is what this study aims to do.

Research objectives:

1.2.1 To review and analyse the paper-based Gauteng provincial implementation of the framework and strategy for disability and rehabilitation for South Africa

1.2.2 To explore the perceptions and experiences of implementation stakeholders of the implementation of the FSDR

1.2.3 To map the process of implementation and factors influencing the implementation of the FSDR

1.2.4 To evaluate the acceptability, appropriateness, feasibility and sustainability of the implementation of the framework and strategy for disability and rehabilitation for South Africa in the Gauteng province

1.2.5 To draw lessons learnt from the FSDR implementation process

1.2.6 To formulate recommendations for future disability policy revision in South Africa

I would like to request permission to conduct the study by inviting employees of The Gauteng Department of Health to be interviewed as part of the study. This includes the rehabilitation services manager, the district therapeutic managers and the Johannesburg Metro District manager, as well as the chief and clinical allied therapists. The interviews require 30 minutes to an hour of the employee's time. This will be done out of their stipulated working time in order not to interfere with their work duties. Ethical clearance will be obtained from the Human Ethics Research Committee of the University of the Witwatersrand. The data collected from the study will be forwarded to the interview participants, should they request it. This information may be

useful in informing future disability policy and to assist in the evaluation of the disability strategy and rehabilitation. Participation is completely voluntary, and the participants can withdraw anytime. The information will be treated with the strictest confidence.

Should you require any further clarity or information regarding the study, you are welcome to contact me on the details provided below.
Kind regards

Naeema AR Hussein El Kout
0712745405,
726945@students.wits.ac.za
PHD Physiotherapy – Student
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Research supervisors
Dr Natalie Benjamin-Damons (Wits Physiotherapy department) -
Natalie.benjamindamons@wits.ac.za
Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

APPENDIX 14

- **PERMISSION LETTER**

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT THE GAUTENG DEPARTMENT OF HEALTH

My name is Naeema AR Hussein El Kout. I am a PHD student at the University of the Witwatersrand. The title of my research is the following: **EVALUATION OF THE FRAMEWORK AND STRATEGY FOR DISABILITY AND REHABILITATION FOR SOUTH AFRICA: IMPLEMENTATION OUTCOMES.**

The prevalence of disability in South Africa is 7.5% (Stats SA, 2016). There are various underlying causes and factors affecting disability in South Africa. Persons with disability (PWD) have the right to access health care and to ensure this, health policy should be implemented. An effort to ensure these rights include the Strategy and Framework for Disability and Rehabilitation, however, it has not been monitored or evaluated, which is what this study aims to do.

Research objectives:

1.2.1 To review and analyse the paper-based Gauteng provincial implementation of the framework and strategy for disability and rehabilitation for South Africa

1.2.2 To explore the perceptions and experiences of implementation stakeholders of the implementation of the FSDR

1.2.3 To map the process of implementation and factors influencing the implementation of the FSDR

1.2.4 To evaluate the acceptability, appropriateness, feasibility and sustainability of the implementation of the framework and strategy for disability and rehabilitation for South Africa in the Gauteng province

1.2.5 To draw lessons learnt from the FSDR implementation process

1.2.6 To formulate recommendations for future disability policy revision in South Africa

I would like to request permission to conduct the study by inviting employees of The Gauteng Department of Health to be interviewed as part of the study. This includes the rehabilitation services manager, the district therapeutic managers and the Johannesburg Metro District manager, as well as the chief allied therapists. The interviews require 30 minutes to an hour of the employee's time. This will be done out of their stipulated working time in order not to interfere with their work duties. Ethical clearance will be obtained from the Human Ethics Research Committee of the University of the Witwatersrand. The data collected from the study will be forwarded to the interview participants, should they request it. This information may be useful in informing future disability policy and to assist in the evaluation of the disability strategy

and rehabilitation. Participation is completely voluntary, and the participants can withdraw anytime. The information will be treated with the strictest confidence.

Should you require any further clarity or information regarding the study, you are welcome to contact me on the details provided below.

Kind regards

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Research supervisors
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Dr Sonti Pilusa (Wits Physiotherapy department) – sonti.pilusa@wits.ac.za

APPENDIX 15

- **PHASE 3: DEVELOPMENT OF IMPLEMENTATION STRATEGIES**

DETERMINANTS IDENTIFIED:

BARRIERS		
Theme	**Subtheme**	**Description**
Lack of Awareness and Training	Insufficient Awareness among Healthcare Professionals	Healthcare professionals lack awareness of disability policies and frameworks, hindering effective policy implementation.
	Inadequate Training at the University Level	Professionals receive inadequate training during their education, leaving them ill-prepared to implement disability policies effectively.
	Challenges in Aligning Practices with Policy Objectives	Without adequate understanding and training, healthcare practices struggle to align with policy objectives, hindering successful implementation.
Limited Resources	Staffing Shortages	Insufficient staffing levels lead to challenges in delivering timely and quality rehabilitation services.
	Long Waiting Times and Service Delays	Patients experience delays in treatment due to resource constraints, compromising their health outcomes.
	Lack of Equipment Maintenance	Inadequate maintenance of equipment affects the quality of care provided to patients with disabilities.
	Inadequate Infrastructure	Poor infrastructure limits the capacity to deliver rehabilitation services effectively, impacting patient care and satisfaction.
Safety Concerns	Risks in High-Crime Areas	Safety and security issues in high-crime areas pose significant barriers to healthcare professionals in providing services.
	Impact on Service Delivery	Safety concerns affect the delivery of care to patients with disabilities, as healthcare providers may be reluctant to work in unsafe environments.
Capacity and Catchment Area Issues	Limited Capacity at District Levels	District-level healthcare facilities face capacity constraints, leading to delays in accessing rehabilitation services.
	Long Waiting Times for Referrals	Patients experience long waiting times for referrals, exacerbating their health conditions and dissatisfaction.

	Restrictions on Catchment Areas	Catchment area restrictions limit patients' access to rehabilitation services, contributing to delays and frustration.
Policy Implementation Challenges	Inconsistent Implementation	Despite existing policies, challenges in consistent implementation hinder efforts to improve rehabilitation services.
	Resource Constraints Impacting Implementation	Resource constraints lead to inadequate services for patients with disabilities, resulting in disparities in access to care.
	Impact on Access to Care	Ineffective policy implementation affects access to rehabilitation services, undermining efforts to improve healthcare outcomes for individuals with disabilities.
Disconnection between Departments	Lack of Integration	Disconnection between therapy departments results in inefficiencies in service delivery and limited resource sharing.
	Disjointed Services	Lack of integration leads to disjointed services, negatively impacting the quality and accessibility of care for patients with disabilities.
Absence of Bottom-Up Approach	Insufficient Involvement of Frontline Stakeholders	Lack of involvement from frontline therapists and patients results in policies that are not tailored to their needs.
	Disconnects between Policy Objectives and Implementation	Disconnects between policy objectives and practical implementation hinder efforts to improve rehabilitation services, as policies may not address the actual needs of patients and healthcare providers.
FACILITATORS		
Inter-sectoral Collaboration	Collaboration Across Sectors and Systems	Collaboration between different sectors and systems is essential for effective health policy implementation.
	Collaboration at Rehabilitation Care Levels	Collaboration between rehabilitation care levels within provinces actss a catalyst for policy implementation.
	Involvement of Health Sector, Service Providers, and Community Members	Collaboration between the health sector, service providers, and community members ensures policy implementation aligns with provincial capabilities.
	Community Buy-in and Advocacy	Community collaboration fosters buy-in from end-users and strengthens policy implementation through advocacy efforts.
Policy Development and Engagement	Role of Complementary Policies	Complementary policies support the implementation of broader policies and enhance alignment with local needs.

	Subnational Policy Development	Developing policies at subnational levels through consultative processes enhances implementation effectiveness compared to national-level policies.
	Policy Engagement Strategies	Policy engagement involves sensitization workshops to destigmatize disability and ensure effective implementation.
Provincial Orientation and Training	Significance of Orientation and Training	Orientation and training on policy implementation are significant predictors of successful outcomes.
	Implementation of Orientation and Training	Most provinces reported some degree of orientation and training on the FSDR, enabling effective implementation.
	Importance of Training Healthcare Professionals	Training healthcare professionals on policy implementation processes is crucial for ensuring policy objectives are met.
Flexibility in Policy Implementation	Adaptation to External Factors	The COVID-19 pandemic necessitated adaptation of policy implementation efforts due to increased restrictions and healthcare system demands.
	Demonstration of Flexibility by Provinces	Provinces demonstrated flexibility in adapting the FSDR to changing circumstances.
	Balance Between Flexibility and Quality	While flexibility enables implementation, it's essential to maintain quality across regions to ensure effective policy outcomes.
Advocacy by Persons with Disabilities	Role in Raising Awareness	Active advocacy by persons with disabilities raises awareness and emphasizes the importance of disability policies.
	Contribution to Equal Access	Advocacy efforts contribute to highlighting the needs of vulnerable populations and ensuring equal access to essential services.

Appendix 15 continued:

Barriers to the implementation of the framework and strategy for disability and rehabilitation in Gauteng, South Africa

1. **Lack of Awareness and Training**: Healthcare professionals lack awareness and training regarding the policy and framework for disability in rehab. Insufficient communication and training at the university level leave professionals ill-prepared to implement the policy effectively. Without adequate understanding and training, aligning practices with policy objectives becomes challenging, hindering successful implementation.

2. **Limited Resources**: Challenges such as staffing shortages, long waiting times, lack of equipment maintenance, and inadequate infrastructure indicate a lack of resources allocated to rehabilitation services. This results in delays in treatment, compromised quality of care, and frustration among both patients and healthcare providers. Without sufficient resources, it becomes difficult to meet the needs of patients with disabilities effectively, impeding the implementation of the policy.

3. **Safety Concerns**: Safety and security issues, particularly in high-crime areas, pose significant barriers to implementing rehab services. Therapists face risks that impact their ability to provide services effectively and safely. Safety concerns create additional challenges in delivering care to patients with disabilities, as healthcare providers may be reluctant to work in such areas, leading to gaps in service provision.

4. **Capacity and Catchment Area Issues**: Limited capacity at district levels, long waiting times for referrals, and restrictions on catchment areas contribute to delays in accessing services and increase patient frustration. These capacity constraints create bottlenecks in the healthcare system, making it difficult for patients to receive timely care. Delays in accessing services can lead to worsening health outcomes and dissatisfaction among patients, undermining the effectiveness of the policy.

5. **Policy Implementation Challenges**: Despite the existence of policies, challenges in consistent implementation were noted. Policies might not be implemented consistently due to resource constraints, resulting in inadequate services for patients with disabilities. Ineffective policy implementation can lead to disparities in access to care and undermine the overall effectiveness of efforts to improve rehabilitation services for individuals with disabilities.

6. **Disconnection between Departments**: Integration between different therapy departments has not been seamless, leading to disjointed services and limited resource sharing. This disconnection creates inefficiencies in service delivery and impedes collaboration among healthcare providers, ultimately affecting the quality and accessibility of care for patients with disabilities. Without effective coordination between departments, it becomes challenging to address the complex needs of individuals with disabilities comprehensively, hindering the implementation of the policy.

7. **Absence of Bottom-Up Approach**: Policies are often developed without sufficient input from frontline therapists and patients, leading to disconnects between policy objectives and practical implementation. Lack of involvement from frontline stakeholders can result in policies that are not tailored to the needs of patients and healthcare providers, undermining the effectiveness of efforts to improve rehabilitation services for individuals with disabilities. A bottom-up approach to policy development is essential to ensure that policies are relevant, feasible, and responsive to the needs of those they aim to serve.

These barriers encompass a range of challenges, from lack of stakeholder engagement to resource limitations, highlighting the multifaceted nature of obstacles to effective policy implementation in disability care. Addressing these barriers requires a comprehensive and coordinated approach involving policymakers, healthcare providers, patients, and other stakeholders to ensure that policies are effectively implemented and lead to meaningful improvements in disability care.

Facilitators to the implementation of the framework and strategy for disability and rehabilitation in Gauteng, South Africa

1. **Inter-sectoral Collaboration:** This involves collaboration across different sectors and systems to ensure effective implementation of health policies. Studies highlight the importance of collaboration between rehabilitation care levels and sectors within provinces, emphasizing its role as a catalyst for policy implementation. Collaboration between the health sector, service providers, and community members ensures policy implementation aligns with the province's capabilities. Community collaboration fosters buy-in from end-users, while advocating for community involvement in governing policy implementation processes further strengthens this approach.

2. **Policy Development and Engagement:** Complementary policies, such as the Gauteng Disability Rights Policy, support the implementation of broader policies like the FSDR. Developing policies at subnational levels through consultative processes ensures alignment with local needs, potentially enhancing implementation effectiveness compared to national-level policies. Policy engagement involves sensitization workshops to destigmatize disability, although some argue that training healthcare professionals on disability issues beforehand is essential for effective policy implementation.

3. **Provincial Orientation and Training on FSDR**: Orientation and training on policy implementation are significant predictors of successful outcomes. Most provinces reported some degree of orientation and training on the FSDR, enabling effective implementation. Training healthcare professionals on policy implementation processes is crucial for ensuring policy objectives are met, as highlighted by systematic reviews on policy implementation determinants.

4. **Flexibility:** The COVID-19 pandemic necessitated adaptation of policy implementation efforts due to increased restrictions and healthcare system demands. Provinces demonstrated flexibility in adapting the FSDR, complemented by the flexibility of rehabilitation professionals in implementation. While flexibility enabled implementation, it's essential to maintain quality across regions, as excessive flexibility may raise concerns about implementation quality.

5. **Advocacy by Persons with Disabilities**: Active advocacy by persons with disabilities raises awareness and emphasizes the importance of disability policies like the FSDR. Their advocacy efforts contribute to highlighting the needs of vulnerable populations and ensuring equal access to essential services

Proposed implementation strategies according to the above determinants.

Based on the ERIC framework, below, are potential implementation strategies to address the identified barriers and leverage the facilitators:

1. **Lack of Awareness and Training:**
   - *Strategy:* Conduct sensitization workshops and training sessions for healthcare professionals to increase awareness of disability policies and frameworks.
   - *Facilitator Leveraged:* Utilize the involvement of Health Sector, Service Providers, and Community Members to organize and facilitate training sessions, ensuring alignment with provincial capabilities and community needs.

2. **Limited Resources:**
   - *Strategy:* Advocate for increased funding and resource allocation to address staffing shortages and infrastructure inadequacies.
   - *Facilitator Leveraged:* Harness the support of Inter-sectoral Collaboration to advocate for resource allocation across different sectors and systems, ensuring effective health policy implementation.

3. **Safety Concerns:**
   - *Strategy:* Implement safety protocols and training programs to address risks in high-crime areas and ensure safe service delivery.
   - *Facilitator Leveraged:* Utilize Community Buy-in and Advocacy to raise awareness of safety concerns and garner support from community members in implementing safety measures.

4. **Capacity and Catchment Area Issues:**
   - *Strategy:* Advocate for increased capacity and reduced catchment area restrictions to improve patient access to rehabilitation services.
   - *Facilitator Leveraged:* Utilize Inter-sectoral Collaboration to foster collaboration between different sectors and systems, facilitating policy changes to address capacity and access issues.

5. **Policy Implementation Challenges:**
   - *Strategy:* Establish monitoring and evaluation systems to ensure consistent policy implementation and address resource constraints.
   - *Facilitator Leveraged:* Utilize Policy Development and Engagement to develop complementary policies that support broader policy objectives and enhance alignment with local needs, facilitating effective implementation.

6. **Disconnection between Departments:**
    - *Strategy:* Implement integration initiatives and develop protocols to streamline service delivery and resource sharing between therapy departments.
    - *Facilitator Leveraged:* Utilize Collaboration at Rehabilitation Care Levels to promote collaboration between rehabilitation care levels within provinces, acting as a catalyst for integrated service delivery.

7. **Absence of Bottom-Up Approach:**
    - *Strategy:* Engage frontline stakeholders in policy development and implementation processes to ensure policies are tailored to their needs.
    - *Facilitator Leveraged:* Utilize Advocacy by Persons with Disabilities to raise awareness and emphasize the importance of involving frontline stakeholders, contributing to a more inclusive and effective policy development process.

By implementing these strategies and leveraging the facilitators, policymakers and stakeholders can address barriers effectively and enhance the implementation of disability policies and frameworks in Gauteng, South Africa.

IMPLEMENTATION STRATEGIES SPECIFIC TO THE BARRIERS:

Based on the ERIC framework, here are implementation strategies derived for each identified barrier:

1. Lack of Awareness and Training:
    - Disseminate information through educational campaigns and workshops to increase awareness among healthcare professionals.
    - Implement continuing education programs to address gaps in knowledge and training.
    - Provide resources and tools to help healthcare professionals align their practices with policy objectives effectively.

2. Limited Resources:
    - Advocate for increased funding to address staffing shortages and improve access to rehabilitation services.
    - Develop strategies to optimize resource allocation and streamline service delivery processes.
    - Establish maintenance schedules and protocols to ensure equipment is properly maintained.

3. Safety Concerns:
    - Implement safety protocols and training programs to address risks in high-crime areas.
    - Provide resources and support for healthcare professionals to mitigate safety concerns and ensure safe service delivery.

4. Capacity and Catchment Area Issues:
    - Advocate for increased capacity and resources at district-level healthcare facilities to reduce waiting times.
    - Develop referral management systems to improve the efficiency of patient referrals.
    - Lobby for policy changes to remove restrictions on catchment areas and enhance patient access to services.

5. Policy Implementation Challenges:
    - Establish monitoring and evaluation systems to ensure consistent policy implementation.
    - Allocate additional resources to address constraints impacting implementation, such as staffing and equipment.
    - Foster collaboration and communication between healthcare departments to improve policy alignment and implementation.

6. Disconnection between Departments:
    - Implement integration initiatives to promote collaboration and resource sharing between therapy departments.
    - Develop protocols and workflows to streamline service delivery and enhance coordination between departments.

7. Absence of Bottom-Up Approach:
    - Engage frontline stakeholders in policy development and implementation processes to ensure policies are tailored to their needs.
    - Foster collaboration and communication between policymakers, healthcare professionals, and patients to bridge gaps between policy objectives and practical implementation.

These strategies, aligned with the ERIC framework, aim to address the identified barriers effectively, thereby facilitating the successful implementation of disability policies and frameworks in Gauteng, South Africa.

APPENDIX 16

- **INFOGRAPHIC DEVELOPED FOR PUBLIC DISSEMINATION TO POLICY MAKERS AND PUBLIC EDUCATION AS AN OUTPUT OF THIS STUDY**

APPENDIX 17

- **TURN-IT-IN REPORT**

Naeema Phd

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