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# Determinants Of Satisfactory Service Delivery In The Health Sector

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#### **Abstract**

This study is based on a secondary analysis of data sets gathered by Rakau (2020, 2022) to identify and quantify determinants of satisfactory health service delivery in the North-West province of South Africa. The survey was conducted by using information gathered from 488 health professionals working in the North-West province. A review of the literature shows that the prevention of communicable diseases is economically cheaper than curing such diseases, especially in developing nations. The aim of research was to identify and quantify the main determinants of satisfactory health service delivery in health facilities such as clinics and hospitals in the province. The results showed that the quality of primary health care services was satisfactory according to 63.32% of participants based on indicators used by the World Health Organisation (WHO, 2024). The survey identified three determinants of satisfactory service delivery by WHO (2024) benchmarks (the availability of adequate budget for the recruitment of enough suitably qualified health professionals, the capacity to render services at all designated health facilities, and the capacity to ensure the availability of essential medicines and drugs at all designated health facilities).

Key words: Primary health care services, Efficiency, Structural equations modelling

## INTRODUCTION AND BACKGROUND TO STUDY

This study is based on a secondary analysis of data sets gathered by Rakau (2020, 2022) to identify and quantify determinants of satisfactory health service delivery in the North-West province of South Africa. A report published by Statistics South Africa (2024) shows that the North-West province is home to 4, 199, 747 people and that it has an area of 104, 882 square kilometers. The province is known for its huge mineral resources of platinum, gold, diamond, chromite and uranium. The major urban centres of the province are Mafikeng, Rustenburg, Klerksdorp and Potchefstroom. The province has an HIV/AIDS prevalence rate of 17.7%. The main diseases in the province are communicable diseases such as HIV/AIDS, tuberculosis, and diarrheal diseases, as well as non-communicable diseases such as diabetes, cardiovascular diseases, hypertensive heart disease, respiratory infections, perinatal conditions, and accidental injuries.

In 2022, the North-West province contributed 6.6% to the GDP of South Africa and had a GDP of R438.878 billion and a per capita GDP of R116, 000 (Statistics South Africa, 2024). In 2020, the GDP of the province contracted by 0.4% due to lockdown arising from the outbreak of Covid-19. The mining sector contributed 28% of the provincial GDP in the year 2022. According to Statistics South Africa (2024), the official unemployment rate of the North-West province is 40.4%, whereas the percentage of discouraged jobseekers is 56%. Surveys conducted in the province indicate that social entrepreneurs, the private sector, national and local governments and non-governmental organisations have all participated in the provision of basic health care services to the population living in the province. Such efforts have shown the benefit of providing clear economic incentives to private sector institutions and non-governmental organisations. A survey conducted by Molato, Moloko-Phiri, Koen and Matsipane (2025) shows that the province provides social and health reltated services to HIV/AIDS orphans. The authors state the benefits of partnerships with private sector caregivers and non-governmental organisations.

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Ricci, Kruger, Kruger, Breet, Moss, Van Oort, and Pieters (2024) have identified risk factors for mortality in the province and have found that access to quality health care services in public health facilities is undermined due to shortage of health professionals, budget, medicines and infastructure. Mboweni (2024) has conducted a survey in the province by gathering data from professional nurses working in public health facilities and has found that the quality of nursing care and employee morale is undermined due to heavy workload and shortage of professional health workers. The survey has highlited the benefits of partnerships with private sector institutions and local and interanational investors.

Social entrepreneurs can make a valuable contribution to the health care sector if they are provided with socioeconomic incentives so that they can play a meaningful role in sharing the huge task of providing quality and affordable health care to all people living in the province. Shopo, Rabie, Du Preez and Bester (2024) have conducted a survey by gathering data from public hospitals in the North-West Province and have found that the province needs to upgrade the health infrastructure in public hospitals and clinics and recruit suitably qualified health professionals in order to be able to maintain its capacity to render essential public health services to the population living in the province.

Assessing and evaluating the fulfilment of health care priorities requires the use of benchmarks set out for developing nations by the World Health Organisation (2024). The key indicators in this regard are utilisation of budget, manpower, medicines and infrastructure according to plan. Although the province is known for its abudant mineral resources and attractive tourist centres, it experiences a large percentage of uemployed youth, inadequate infrastructural development, communicable dieseas, occupational diseases and harmful traditional practice. There is a dire need for health education. The principal plan of action that is used by the provincial Department of Health for health service delivery is a 5-year strategic plan. The plans developed by the national and provincial Departments of Health are aligned with each other (South African National Department of Health, 2024) in terms of the delivery of health services.

HIV and AIDS have undermined the health status of people living in the province since the early 1990s. The health status and economic productivity of people living in the province are also undermined due to tuberculosis, maternal and child mortality and morbidity. Although the province needs to upgrade and expand its health infrastructure and capacity in terms of the recruitment of health professionals and the supply of essential medicines, no significant progress has been achieved in this regard mostly due to lack of sound planning, lack of financial resources and lack of good leadership (Meno, Makhado, & Matsipane, 2019; Van Niekerk, Venter, & Van Der Watt, 2024: 103-131).

The study is based on data gathered from health professionals working in the province. Findings of the survey have the potential to explain how well the province is performing with regards to providing health services with efficiency and complete devotion to the people. Results obtained from the study are helpful for the construction of a framework for minimising the wastage of scarce resources such as money and manpower in the course of service delivery. A few economists and planners have suggested that clear incentives should be provided to private medical aid schemes. Doing so will enable them to identify steps to be taken and the cost of providing medical aid cover to all eligible people in the province. It is worthwhile and strategically beneficial for social entrepreneurs and the private health care sector to be provided with clear socioeconomic incentives so that they share the task of providing quality and affordable health care to people living in the province.

Tlhako, Coetzee, Ajanaku and Fourie (2025) have conducted a survey in the North-West province by gathering data from professional nurses to assess the impact of workplace relationships on nurse-reported quality of care and patient safety. The authors have found that health service delivery plans must be guided by scientific surveys in order to be feasible. Surveys that are used for health care planning must be based on data gathered from people who rely on the services in order to be effective. Until now, very few scientific

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studies have been conducted to empirically and critically assess the views and concerns raised by public health officials working in the North-West Province about health care priorities. A few economists and planners have suggested that clear incentives should be provided to private medical aid schemes so that they play a meaningful role in setting health care priorities. It is worthwhile and strategically beneficial for social entrepreneurs and the private health care sector to be provided with clear socioeconomic incentives. Such a measure will serve as a motivation to private sector companies. The basic fact is that national and provincial governments do not have adequate financial and human resources for meeting all health care needs. They need assistance in terms of talent, skilled manpower and money to enhance the capacity to render decent services to all deserving people (Sebothoma, Peu, Moagi, & Mshunqane, 2024).

The survey conducted by Mouton, Motshabi, Jeje and Henrico (2024) in Dr. Ruth Segomotsi Mompati district municipality in the North-West Province shows that lack of financial, human and infrastructural resources undermines the ability to implement health care services according to plan. The authors have found that it is not possible to provide health coverage to all South Africans unless there are adequate financial resources to pay for health service delivery. The implication is that the private sector must be given a clear motivation and incentive as well as an enabling environment free from red tape and cumbersome bureaucracy to fill the gap. The author has shown that the government alone is not capable of meeting all health care needs. The survey shows that the National Health Insurance (NHI) policy will succeed only when there are adequate financial and human resources at all levels of health service delivery. To achieve this goal, the author has pointed out that good leadership and international best practice are required.

Atim, Bhushan, Blecher, Gandham, Rajan, Daven and Adeyi (2021:2) have shown the requirements for satisfactory health coverage in 5 developing nations. The authors have shown that the need for raising enough money, trained health professionals, logistical requirements, adequate infrastructure and an enabling working environment. Full political commitment, good leadership and recognition of the vital role to be played by business and industry are all necessary. The key requirements are the need for accountability, transparency and total commitment to the people. The requirements indicated by the authors are consistent with health priorities stated in the annual report published by the North-West Provincial Department of Health (2024) for the financial year 2022/2023.

Mambulu-Chikankheni (2023) has identified common causes of malnutrition in rural regions of the North-West province and has found that it is beneficial to promote health awareness education and primary health care principles in rural regions of the province in partnership with community-based health care service providers. The author states that there is a need for community-based awareness programmes in which the youth and their parents are educated about the need to keep personal hygiene and environmental sanitation. There is a need for promoting awareness among young people about reproductive health, sexually transmitted infectious diseases, the burden and consequences of teenage pregnancy, and the benefit of acquiring valuable career-related skills.

Dudley, Selebano and Nathan (2018: 23-24) have reported a people-to-doctor ratio of 5, 500 to 1 for the North-West province. They have also reported a people-to-nurse ratio of 855 to 1.

Gilson and McIntyre (2017: 373-391) have conducted an extensive survey in the province and have found that there is a need for adequate medical aid cover for all eligible people in the province. The qualified audit report published by the South African Auditor-General (2024) for the financial year 2022/2023 has identified various shortcomings that undermine the capability of the province to render quality health care services to all eligible people in the province. There is a dire need for setting up a health care priority plan of action that is informed by the health care needs of people living in the North-West Province. Dudley, Selebano and

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Nathan (2018: 23-24) have shown that the North-West Province lags behind other South African Provinces in terms of people-to-doctor ratio, people-to-nurse ratio, and the total number of health care facilities.

Mothupi, De Man, Tabana and Knight (2021) have constructed a framework for identifying obstacles that undermine the quality of health care services that are delivered to mothers and children in public health care facilities. The framework recommends the use of monitoring and evaluation techniques for ensuring service quality standards and for safeguarding public money and resources. In order to ensure service delivery norms and standards, it is essential to monitor and evaluate the quality of services provided to the people on a regular basis. Decisions must be made based on empirical evidence. Training opportunities must be provided to employees who lack technical skills to get work done. Close supervision and mentoring must be used for ensuring adequate supervision. Due attention must be given to accountability to the people on the line of duty. Gaps in service delivery must be identified promptly and appropriate measures must be taken in order to rectify mistakes. Ngene, Khaliq and Moodley (2023) have assessed the consequences of lack of accountability and failure to adopt good leadership principles in the provision of public health care service delivery. The authors have shown that monitoring and evaluation are essential for minimising the loss and abuse of public resources in all health care facilities. The authors have shown the need for accountability, transparency and a robust regulatory environment.

# **OBJECTIVES OF STUDY**

The overall objective of study was to identify and quantify determinants of satisfactory health service delivery in the North-West province of South Africa. The survey was conducted by using information gathered from 488 health professionals working in the North-West province by Rakau (2020, 2022) to assess and evaluate obstacles to the satisfactory delivery of primary health care services to the population living in the province.

## **RESULTS OF STUDY**

The study uses a conceptual framework adapted from the study conducted by the Principal Agent Structural Model (PASM) proposed by Vera-Hernandez (2018). Mothupi, De Man, Tabana and Knight (2021) have measured the quality of health services by using indicators such as spreading awareness about the importance of personal hygiene, proper sanitation, water purification, the use of toilets, proper disposal of waste, environmental sanitation, vaccination and immunisation services, as well as the benefit of attending maternal and child health services regularly. The study uses similar measurements for quantifying perception. The main finding of study is that 309 of the 488 participants of research (63.32%) were satisfied with the quality of health care services provided to people living in the North-West province. The remaining 179 participants of research (36.68%) were not satisfied with the quality of health care services provided to people living in the province.

The survey found 10 variables that were significantly associated with the ability to provide satisfactory health care services to the population living in the province at the 1% level of significance. Table 1 shows these 10 variables of study.

Table 1: List of 10 significant two-by-two associations (n=488)

List of 10 variables significantly associated with the ability to	Observed chi-	P-value
provide satisfactory health care services	square value	
Availability of health professionals at all times at all designated	21.0100	0.0000
health facilities		
Ability to provide primary health care services to all people who	18.7117	0.0000
need the services at all designated health facilities		

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Availability of enough medical equipment for providing satisfactory	18.5173	0.0000
health care services to all people who need the services at all		
designated health facilities		
Availability of essential medicines and drugs at all times at all	18.2053	0.0000
designated health facilities		
Ability to ensure the quality of maternal and child health care	16.0178	0.0000
services at all designated health facilities		
Ability to provide vaccination and immunisation services according	14.7638	0.0000
to schedule at all designated health facilities		
Ability of health staff to provide friendly health care services to all	14.3245	0.0000
people who need the services at all designated health facilities		
Duration of service of 7 years or longer	11.6908	0.0000
Ability to provide regular health care services according to schedule	11.2053	0.0000
Ability to implement health care services as planned	10.0035	0.0000

Based on results displayed in the table above, it can be concluded that the quality and efficiency of health care services that are provided to the population living and working in the North-West Province is significantly dependent upon the following 10 factors:

- 1. Availability of health professionals at all times at all designated health facilities
- 2. Ability to provide primary health care services to all people who need the services at all designated health facilities
- 3. Availability of enough medical equipment for providing satisfactory health care services to all people who need the services at all designated health facilities
- 4. Availability of essential medicines and drugs at all times at all designated health facilities
- 5. Ability to ensure the quality of maternal and child health care services at all designated health facilities
- 6. Ability to provide vaccination and immunisation services according to schedule at all designated health facilities
- 7. Ability of health staff to provide friendly health care services to all people who need the services at all designated health facilities
- 8. Duration of service of 7 years or longer
- 9. Ability to provide regular health care services according to schedule
- 10. Ability to implement health care services as planned

In Table 1 above, each one of the 10 factors is highly significant at the 0.0001 level as all 10 corresponding P-values are all less than 0.0001. For each one of the 10 two-way associations, the corresponding expected cell frequency was large (a value of 5 or more). This fact confirmed that the list of 10 influential variables shown above is credible enough (Denis, 2021). These 10 influential variables were subsequently used for performing multivariate analysis (ordered logit analysis and structural equations modelling).

Table 2, below, shows 4 variables that are significantly associated with affordability of health care services to the average person living and working in the North-West Province.

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Table 2: List of 4 variables significantly associated with affordability (n=488)

List of 4 variables significantly associated with affordability of	Observed chi-	P-value
health care services to the average person	square value	
Ability to pay for laboratory services	15.0568	0.0000
Ability to pay for health care services that are provided by	15.0191	0.0000
professional nurses		
Ability to pay for health utility services (Ability to pay for essential	13.0100	0.0000
services such as water, electricity, sanitation, waste removal,		
transportation, phone calls, food and clothes)		
Ability to pay for health care services that are provided by medical	12.7847	0.0000
doctors		

Table 2 shows that the ability of people living in the North-West Province is significantly influenced by 4 variables. These are the following:

- 1. Ability to pay for laboratory services
- 2. Ability to pay for health care services that are provided by professional nurses
- 3. Ability to pay for health utility services (Ability to pay for essential services such as water, electricity, sanitation, waste removal, transportation, phone calls, food and clothes)
- 4. Ability to pay for health care services that are provided by medical doctors

#### RESULTS FROM ORDERED LOGIT REGRESSION ANALYSIS

The dependent variable of study (Y) measures or quantifies the perception held by the 488 participants of research about the adequacy of health care services that are provided to the population living and working in the North-West Province. Y=1 if the quality of health service delivery is adequate. Y=2 if the quality of health service delivery is inadequate.

Y: Adequacy of health care services based on a binary scale

The two possible values of variable Y are shown below in binary form:

$$Y = \begin{cases} 1 & if \ adequate \\ 2 & if \ inadequate \end{cases}$$

A composite index developed by Leonard, Friedman and Savage (2018:37-43) was used as a benchmark for measurement. In the process, various indicators that are duly validated and standardised were used for measurement. The outcome variable of study is denoted by Y. This variable is used for quantifying or measuring the level of satisfaction of the 488 participants of survey with the quality and efficiency of health care services that are provided to the population living in the North-West Province. Ordered logit regression analysis is a method of data analysis that is commonly used by health professionals and planners for identifying and quantifying key predictors of health service delivery globally (Hosmer, & Lemeshow, 2013). This method is highly valuable for health economists, epidemiologists and public health researchers as it enables them to generate odds ratios for measuring effects. These odds ratios are said to be significant if they differ from the number 1 significantly (say the number 2.53). The further away these odds ratios are from the number 1, the effect becomes significant.

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Ordered logit regression analysis is based on multivariate analysis. As such, it is more credible and robust than bivariate methods such as Pearson's chi-squared two-way tests of associations (Hosmer, & Lemeshow, 2013).

According to Hosmer and Lemeshow (2013) influential predictor variables are detected by 3 properties. Firstly, the odds ratios differ from the number 1 significantly. Secondly, the P-values corresponding to influential predictor variables are quite small in magnitude (say 0.025 at the 5% level of significance). Thirdly, significant predictor variables have odds ratios for which the corresponding 95% confidence intervals do not contain the number 1. Table 3 shows significant odds ratios that were obtained from ordered logit regression analysis.

Table 3: Estimates obtained from ordered logit regression analysis (n=488)

Variable of study	Odds Ratio	P-value	95% confidence interval of
			odds ratio
Availability of health	6.18	0.000	(4.26, 9.01)
professionals at all times at all			
designated health facilities			
Ability to provide primary health	5.98	0.000	(3.99, 8.75)
care services to all people who			
need the services at all designated			
health facilities			
Availability of essential medicines	4.63	0.000	(2.36, 7.48)
and drugs at all times at all			
designated health facilities			

Measures of effect (Odds ratios) that were obtained from ordered binary logistic regression revealed that satisfaction with the quality of health care services provided to the population living in the North-West Province was significantly influenced by 3 predictors. These 3 predictor variables were the following:

- 1. Availability of health professionals at all times at all designated health facilities
- 2. Ability to provide primary health care services to all people who need the services at all designated health facilities
- 3. Availability of essential medicines and drugs at all times at all designated health facilities

# INTERPRETATION OF 3 INFLUENTIAL MEASURES OF EFFECT (ODDS RATIOS)

The odds ratio of the variable "Availability of health professionals at all times at all designated health facilities (F6)" was equal to 6.18. This indicates that people who seek health care services at designated health facilities in which all health workers are available and ready to serve the people are 6.18 times more satisfied with the quality of health care services that are provided to them in comparison with people who seek health care services at designated health facilities in which health workers are not available for duty.

The odds ratio of the variable "Ability to provide primary health care services to all people who need the services at all designated health facilities (INS4)" was equal to 5.98. This indicates that people who are readily and promptly provided with the health care services they need at designated health facilities are 5.98 times more satisfied with the quality of health care services that are provided to them in comparison with people who are not readily and promptly provided with the health care services they need at designated health facilities.

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The odds ratio of the variable "Availability of essential medicines and drugs at all times at all designated health facilities (P5)" was equal to 4.63. This indicates that a designated health facility in which there are essential medicines and drugs at all times is 4.63 times more successful in providing satisfactory health care services in comparison with a designated health facility in which there is a shortage of essential medicines and drugs.

### DIAGNOSTIC MEASURES

The percentage of accurate classification was high (83.09%). The probability value obtained from the likelihood ratio test was equal to 0.0000. All standard errors of estimation were quite small. The P-value obtained from the Hosmer-Lemeshow goodness-of-fit test was equal to 0.2028 > 0.05. These values confirmed that the results estimated from data analysis were credible enough.

#### RESULTS FROM STRUCTURAL EQUATIONS MODELLING

Results obtained from univariate analysis, bivariate analysis and ordered logit regression analysis were subsequently used for performing Structural Equations Modelling (Mueller, & Hancock, 2019). Structural equations modeling (SEM) is preferable to traditional regression models because it enables the researcher to ascertain the degree of reliability of the fitted model by using highly credible diagnostic procedures or goodness-of-fit tests. The method is commonly used in econometric and public health studies for estimating regression coefficients that are free from confounding or effect modifying variables. The method is highly suitable and convenient for estimating reliable regression coefficients by minimising measurement related errors and bias. The method is highly suitable for estimating unobserved or latent variables by using observed variables. The method is also highly valuable for assessing the degree to which an estimated regression model fits the data by using highly reliable goodness-of-fit statistical tests.

Table 4 shows estimates obtained from Structural Equations Modelling (SEM).

Table 4: Structural equations modelling estimates (n=488)

Predictor variable	Coefficient	Z-Statistic	P-value	OIM Std. Error
Enough health professionals	3.33	6.46	0.0000	0.0108
Dulanca Incilate comment to a	2.01	5.04	0.0000	0.0114
Primary health care services	2.91	5.94	0.0000	0.0114
Essential medicines and	2.62	4.93	0.0000	0.0259
drugs				
Constant	2.53	4.61	0.0027	1.1884

Table 5 shows goodness-of-fit measures for the structural equations model fitted for the data gathered from the survey. The table shows that the model fits the data quite well.

Table 5: Diagnostic measures for structural equations model (n=488)

Diagnostic test used for	Estimates obtained from data	Interpretation of results
assessment	analysis	
P-value from the likelihood	P = 0.000; Observed chi-square	The conceptual model differs
ratio test used for comparing	value = 289.208 (P-value is	significantly from the
conceptual model with	smaller than 0.05; the observed	saturated model at the 5%
saturated model	chi-square value is large)	level of significance

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P-value from the likelihood	P = 0.000; Observed chi-square	The baseline model differs
ratio test used for comparing	value = 52.012 (P-value is smaller	significantly from the
baseline model with saturated	than 0.05; the observed chi-	saturated model at the 5%
model	square value is large)	level of significance
AIC	32.596 (Small)	The fitted model is fairly
		similar to the true model
BIC	33.884 (Small)	The fitted model is fairly
		similar to the true model
CFI	0.98 (Large)	The fitted model is
		theoretically reliable
TLI	0.98 (Large)	The fitted model is
		theoretically reliable
AGFI	0.97 (Large)	Values of AGFI that are
		greater than or equal to 0.95
		indicate that the fitted model
		is theoretically reliable.
SRMSEA	0.0108 (SRMSEA value is	The error of estimation of the
	smaller than 0.05)	fitted model is small
CD	0.7849 = 78.49% (The	The fitted model is good in
	percentage of explained	explaining variability in the
	variation is equal to 78.49%)	viability of businesses

Based on results estimated from structural equations modelling, the following three null hypotheses were accepted at the 0.05 level of significance.

- H1: The adequacy of health care services (Y) is significantly associated with the availability of health professionals
- H2: The adequacy of health care services (Y) is significantly associated with the provision of primary health care services
- H3: The adequacy of health care services (Y) is significantly associated with the availability of essential medicines and drugs

These findings are consistent with findings reported in the literature about factors that affect the quality and efficiency of health care services in developing nations (World Health Organisation, 2024; World Bank, 2024).

#### MAJOR FINDINGS OF STUDY

The survey has led to valuable findings. The first valuable finding is that 309 of the 488 health professionals (63.32%) who participated in the survey believed that the quality of health care services provided to the population living in the North-West Province was good enough by the benchmarks of Leonard, Friedman and Savage (2018:37-43). The second valuable finding is that 179 of the 488 participants in the survey (36.68%) believed that the quality of health care services provided to the population living in the North-West Province were not good enough by the same benchmarks.

The third and most important finding of the survey is that the quality of health care services in designated health facilities in the North-West Province is influenced by 3 factors. These were the availability of enough number of suitably qualified health professionals at all designated health facilities, the ability to provide

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primary health care services to all people who need the services at all designated health facilities, and the availability of essential medicines and drugs at all times at all designated health facilities. These findings were obtained from ordered logit regression analysis and structural equations modelling.

The survey has identified the availability of enough number of suitably qualified health professionals as the most influential predictor variable. The results have shown that people who seek health care services at designated health facilities in which all health workers are available and ready to serve the people are 6.18 times more satisfied with the quality of health care services that are provided to them in comparison with people who seek health care services at designated health facilities in which health workers are not available for duty.

The survey has identified the ability to provide primary health care services to all people who need the services at all designated health facilities as the second most influential predictor variable. People who are readily and promptly provided with the health care services they need at designated health facilities are 5.98 times more satisfied with the quality of health care services that are provided to them in comparison with people who are not readily and promptly provided with the health care services they need at designated health facilities.

The survey has identified the availability of essential medicines and drugs at all times at all designated health facilities as the third most influential predictor variable. A designated health facility in which there are essential medicines and drugs at all times is 4.63 times more successful in providing satisfactory health care services in comparison with a designated health facility in which there is a shortage of essential medicines and drugs.

Quantitative results of data analyses obtained from the survey are quite similar to findings reported in the public health literature by Vera-Hernandez (2018: 670-693). The study is being conducted against the background of the acute need to provide affordable and quality health care services to people living in the North-West Province. The study assesses the extent to which the Principal Agent Structural Model (Vera-Hernandez, 2018: 670-693) is suitable for setting health care priorities for people living in the North-West Province. As such, the study has the potential for making a meaningful contribution to the relevant literature about how health care priorities should be set in the North-West Province.

## **IMPLICATIONS OF STUDY**

The public health research carried out in this study has shown that about 63.32% of participants were happy with the quality of health care services provided to the population living in the North-West Province was good enough by WHO (2024) standards, whereas the remaining 179 of the 488 participants in the survey (36.68%) believed that the quality of health care services provided to the population living in the North-West Province were not good enough by the same standards. Results obtained from structural equations modelling (SEM) showed that the quality of health care services in designated health facilities in the North-West Province was influenced by 3 factors. These were the availability of enough number of health professionals at all designated health facilities, the ability to provide primary health care services to all people who need the services at all designated health facilities, and the availability of essential medicines and drugs at all times at all designated health facilities.

According to the World Health Organisation (2024), all sovereign nations of the world must ensure the provision of essential health care services to their populations at all times by making the necessary resources available. There is no excuse for the disruption of essential health care services and lack of capacity to provide adequate health care to desperate segments of society. Such problems become unbearable when essential services are disrupted due to the theft of essential medicines and ambulances or due to the absence of suitably qualified health professionals at designated health care facilities. According to Molato, Moloko-Phiri, Koen and Matsipane (2025), these challenges are leadership issues that require political commitment.

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Mouton, Motshabi, Jeje and Henrico (2024) have shown that the ability of national governments to provide satisfactory primary health care services to their populations is a measure of respect for basic human rights. The constitutional mandate of the North-West Provincial Department of Health is to ensure the provision of adequate primary health care services to all deserving people efficiently and with no interruption. The key aspect of the strategic plan is to provide quality health care services to all South Africans. The strategic and operational plans of the North-West Provincial Department of Health are based on the plan drawn up by the South African National Department of Health. Surveys conducted by Rakau (2020, 2022) and Ricci, Kruger, Kruger, Breet, Moss, Van Oort, and Pieters (2024) have found that public health care facilities in the North-West Province are currently experiencing a shortage of budgets, suitably qualified health professionals and medicines. Barron, Mahomed, Masilela, Vallabhjee and Schneider (2023) have shown that the health infrastructure of the North-West Province needs to be upgraded in order to be able to provide satisfactory health care services to all people. The authors have cited lack of funds as the main reason for failure to purchase essential medicines from suppliers. Some of the designated health care facilities had to suspend essential health care services due to lack of essential medicines and drugs (Spotlight, 2021; Mail & Guardian Newspaper of 24 April 2018).

#### **CONCLUSION**

The research has shown that about 63% of participants were happy with the quality of health care services that are provided to the population living in North-West Province by the standards of the World Health Organisation (2024). About 37% of participants were not happy with the quality of health care services that are provided to the population living in the North-West Province by the same standards. The study has identified barriers to quality health service delivery that are similar to those reported in the literature by Benschop, Chironda-Chikanya, Naidoo, Jafta, Ramsay and Naidoo (2024: 333-355).

The research has also shown that the quality of health care services in designated health facilities in the North-West Province was influenced by 3 factors. These were the availability of enough number of suitably qualified health professionals at all designated health facilities, the ability to provide primary health care services to all people who need the services at all designated health facilities, and the availability of essential medicines and drugs at all times at all designated health facilities.

#### RECOMMENDATIONS

Based on results obtained from the survey, the following recommendations are made to the North-West Provincial Department of Health.

- It is essential to alleviate the acute shortage of suitably qualified health professionals by recruiting
  additional people so that they can start working in designated health care facilities with no further
  delay:
- It is essential to alleviate the acute shortage of essential medicines and drugs that are needed at the various designated health care facilities with no further delay;
- It is highly beneficial to provide rewards and incentives to hardworking health workers and professionals in order to show appreciation;
- It is highly beneficial to take appropriate action against employees and managers and administrators who abuse resources;
- Awareness education must be provided to all employees and managers on the importance of accountability to the people, good ethical conduct and good leadership; and
- Strategic partnerships and collaborations should be forged with private sector institutions with a view to improve the current health coverage rate in the North-West Province.

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