District Hospital Performance Assessment

Mpumalanga Province

2008-2010

Kathryn Chu, Sizulu Moyo, Catherine Ogunmefun, Thokozani Mbatha, Peter Bock, Rene English

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Contents

Introduction

Health system strengthening is a key objective in both the Negotiated Service Delivery Agreement and the Re-engineered Primary Health Care approach. Effective utilisation of routine data is crucial for improving the effectiveness of service delivery as well as for improvement of health information systems. There remains considerable scope for improved utilisation of routine data for quality improvement.

This report aims to provide health managers at all levels within the health services, with a useful screening tool for assessing District Hospital management performance. It provides managers with a snap shot of how a facility is performing in key areas of hospital management. It focuses on individual facilities and assesses seven key hospital performance indicators listed in Table 1. Data on these seven indicators is retrieved primarily from the DHIS. Individual facility data is compared to the national and provincial indicator average values. The hospitals are assessed over a period of three financial years: 2008/2009; 2009/2010 and 2010/2011. These are depicted as 2008, 2009 and 2010 respectively in the graphs and text in the report. The data presented should be viewed with an awareness of problems common to routine data, namely incorrect and missing data, as well as specific contextual factors.

The report should be considered in conjunction with a number of other published documents including; Key District Health Indicators in Primary Health Care- Volume 1,- 2007, The Guidebook for District Hospital Managers- Health Systems Trust-2006, A District Hospital Service Package for South Africa – The South African National Department of Health – 2002, and the Negotiated Service Delivery Agreement.

Table 1: Selected Hospital performance indicators: definitions and description

Indicator	Definition	Description	Numerator	Denominator	Unit of reporting
Average length of stay (ALOS)	How long on average each patient spends in hospital	The average length of time inpatients spend in hospital	Inpatients days + 1/2 Day patients	Separations: - Discharges + Deaths + Transfers out + Day patients	Day
Cost per patient day equivalent (CpPDE)	The average cost per patient day seen in a hospital	The average cost per patient per day seen in a hospital	Total expenditure on health per hospital	Total patient day equivalent	Rand
Usable bed utilisation rate (BUR)	The proportion of beds in hospital that were utilised or occupied	The number of patient days during the reporting period, expressed as a percentage of the sum of the daily number of useable beds.	Total patient days - (Inpatient days + 1/2 Day patients) x 100	Total usable bed days	Percent (%)
Caesarean section rate (CS rate)	The proportion deliveries in which a caesarean section is performed	The number of caesarean section deliveries, expressed as a percentage of all deliveries	Caesarean section deliveries	All deliveries in the facility	Percent (%)
Facility crude death rate (FCDR):	The proportion of all inpatient separations that are deaths	The number of all inpatient deaths expressed as a percentage of all inpatient separations	Total inpatient deaths	Total inpatient separations- Includes - inpatient transfers out, day patients, inpatient deaths and inpatient discharges.	Percent (%)
Perinatal mortality rate (PNMR)	The number of perinatal deaths per 1000 births. The perinatal period starts at the beginning of foetal viability (28 weeks gestation or 1000g) and ends at the end of the 7th day after delivery	The sum of still births + those babies dying within 7 days of life per 1000 births	Still births and inpatient early neonatal deaths in facility	Total births in facility	Perinatal deaths/ 1000 births
Still birth rate (SBR):	The number of still births per 1000 births	The number of babies who are “born dead” per 1000 births	The number of still births	The total number of births	Still births/ 1000 births

Background

The Mpumalanga Province is divided into three District Municipalities demarcated as shown in Figure 1. In 2010, the province had 23 District Hospitals serving an estimated population of 3, 365,188 people. Table 2 gives a list of District Hospitals in the province by District and sub-district location. The number of useable beds per facility is also listed in Table 2.

Figure 1: Map of the Mpumalanga province depicting District boundaries

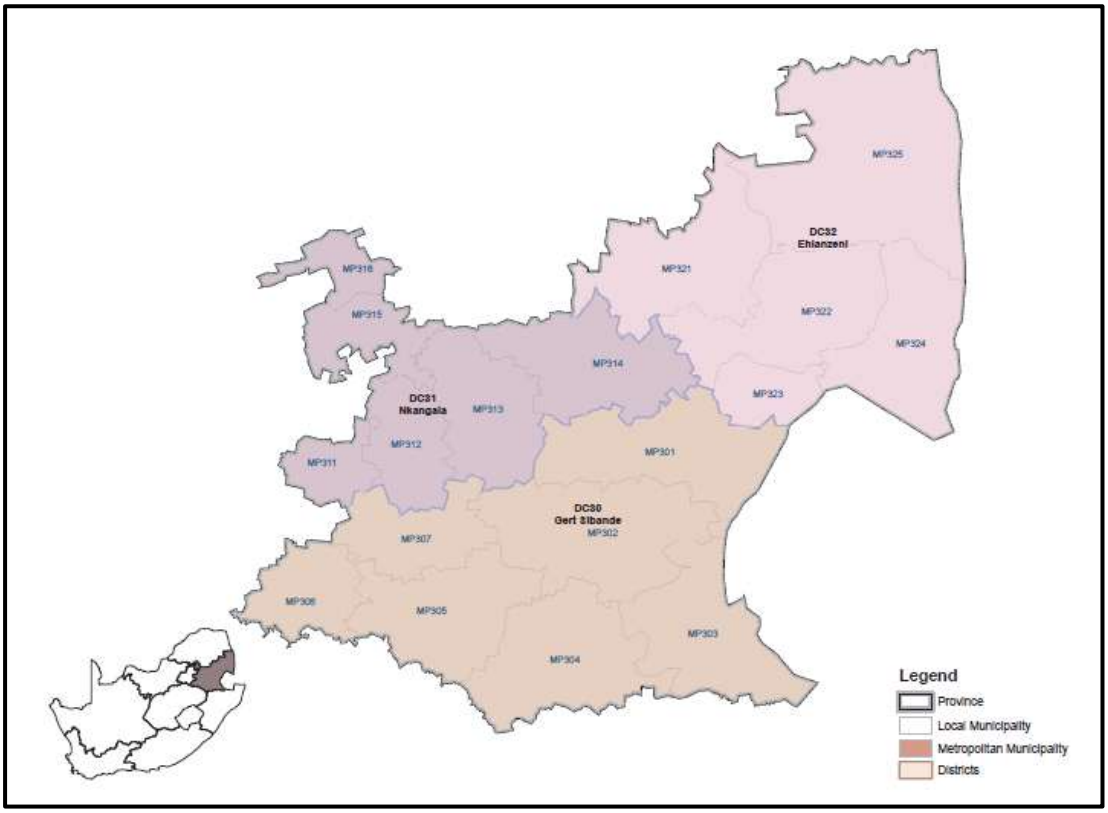


Table 2: District hospitals in Mpumalanga Province: Location by District and local municipality

District Name	Sub-district	Hospital	Usable hospital Beds
Gert Sibande – DC30	Albert Luthuli	Carolina Hospital	79
		Embhuleni Hospital	189
	Govan Mbeki	Bethal Hospital	187
		Evander Hospital	112
	Lekwa	Standerton Hospital	171
	Mkhondo	Piet Retief Hospital	171
	Pixley Ka Seme	Amajuba Memorial Hospital	95
		Elsie Ballot Hospital	22
Nkangala- DC 31	Delmas	Bernice Samuels Hospital	29
	Dr. JS Moroka	Mmametlhake Hospital	60
	Emakhazeni	HA Grove Hospital	12
		Waterval Boven Hospital	12
	Emalahleni	Impungwe Hospital (Wolwekrans)	66
	Steven Tshwete	Middelburg Hospital	218
	Thembisile	KwaMhlanga Hospital	148
Ehlanzeni –DC 32	Bushbuckridge	Matikwana Hospital	178
		Tintswalo Hospital	329
	Barberton	Barberton Hospital	155
	Thaba Chweu	Lydenburg Hospital	90
		Sabie Hospital	83
		Matibidi Hospital	50
	Nkomazi	Shongwe Hospital	183
		Tonga Hospital	143

A Gert Sibande – DC30

Gert Sibande District had a population of approximately 943,137 people in 2010. It has 8 district hospitals, 56 clinics, 16 CHCs (Community Health Centres), 24 mobile services, 1 regional hospital and 1 specialised hospital.

1. Carolina Hospital

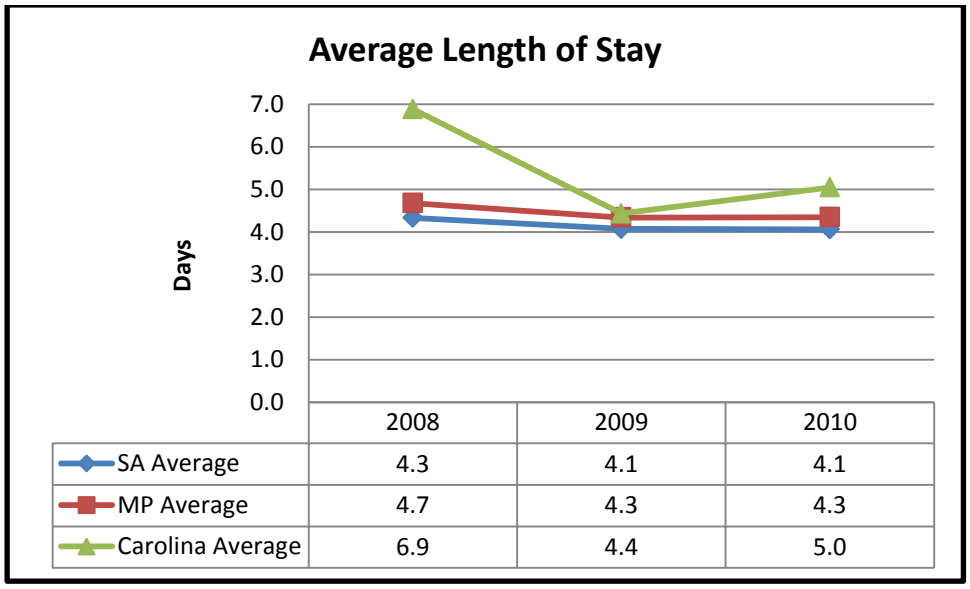
i: Description

Carolina District Hospital has 79 beds and lies in the Albert Luthuli sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

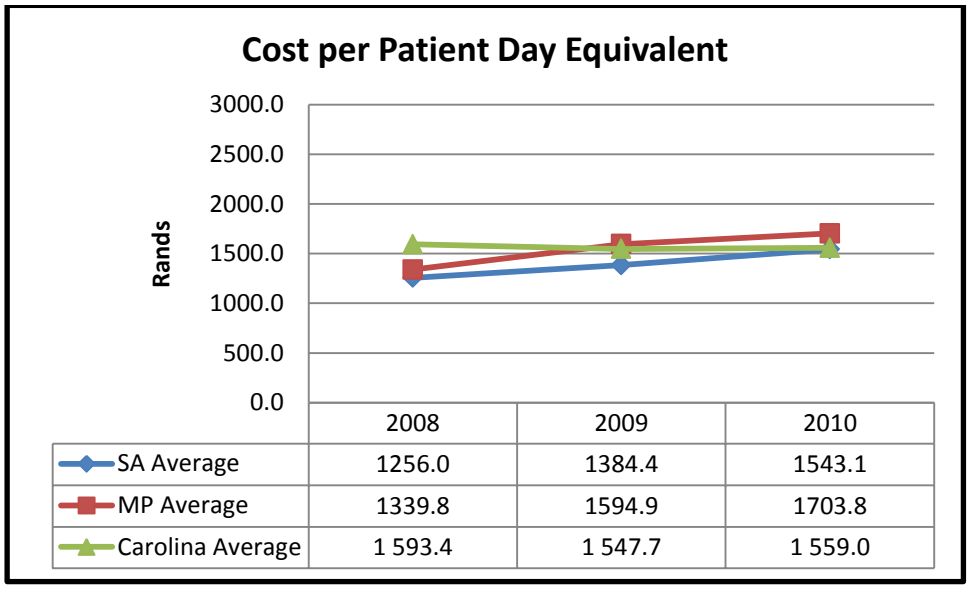
The ALOS decreased sharply between 2008 and 2009(a 43% decrease), before increasing again in 2010. It was higher than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Carolina Average	6.9	4.4	5.0

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

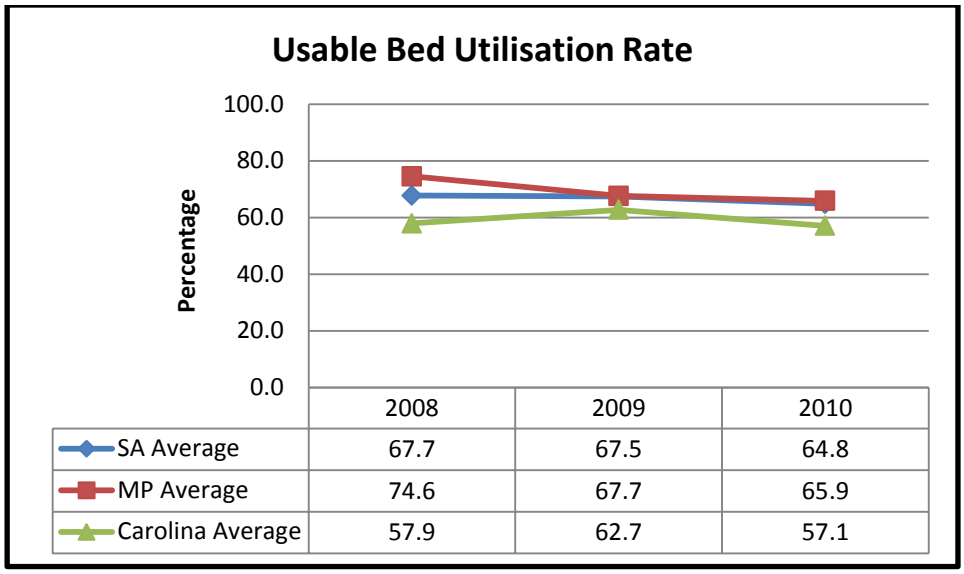
The CpPDE declined marginally between 2008 and 2010. The 2010 value (R1559) was in line with the national average and both were lower than the provincial average.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Carolina Average	1 593.4	1 547.7	1 559.0

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR increased to 63% in 2009 before decreasing to its previous (2008) level in 2010. It was lower than the national and provincial averages throughout the reporting period. The reasons for the low BUR should be ascertained.

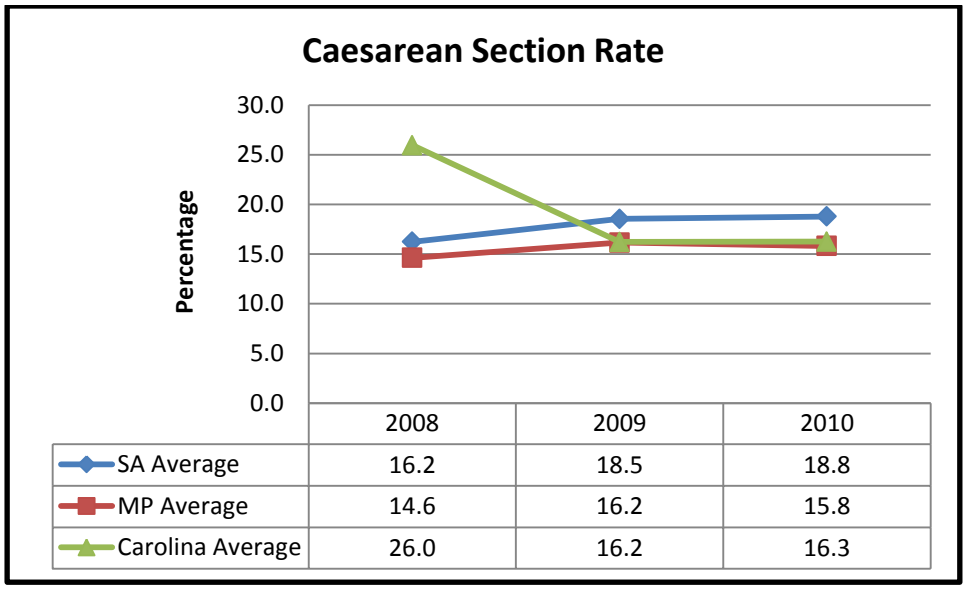


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Carolina Average	57.9	62.7	57.1

iii: Outcome indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate decreased sharply between 2008 and 2009 and remained unchanged in 2010. It was in line with the provincial averages in 2009 and 2010, but was lower than the national averages throughout the reporting period.

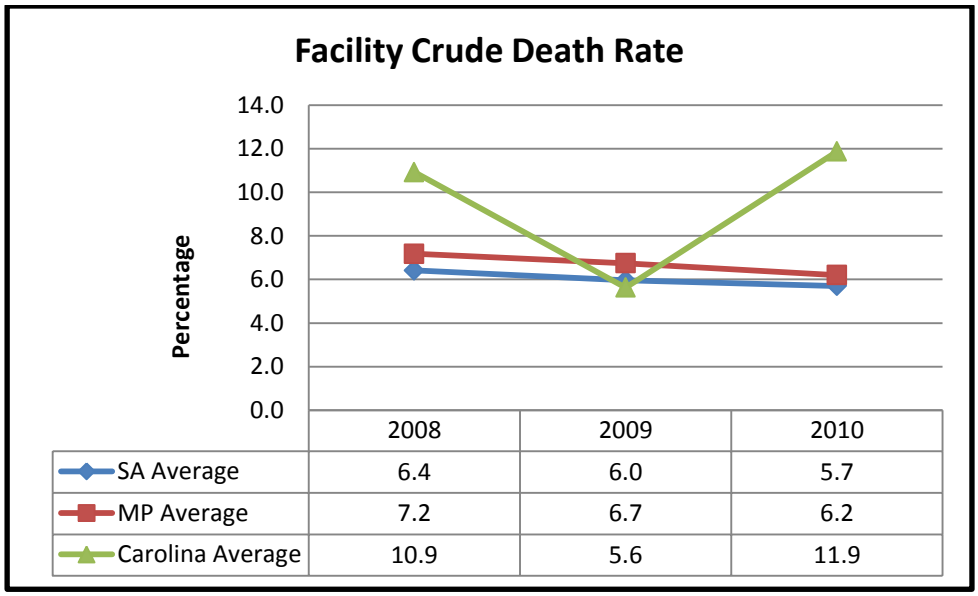


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Carolina Average	26.0	16.2	16.3

iv: Impact indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

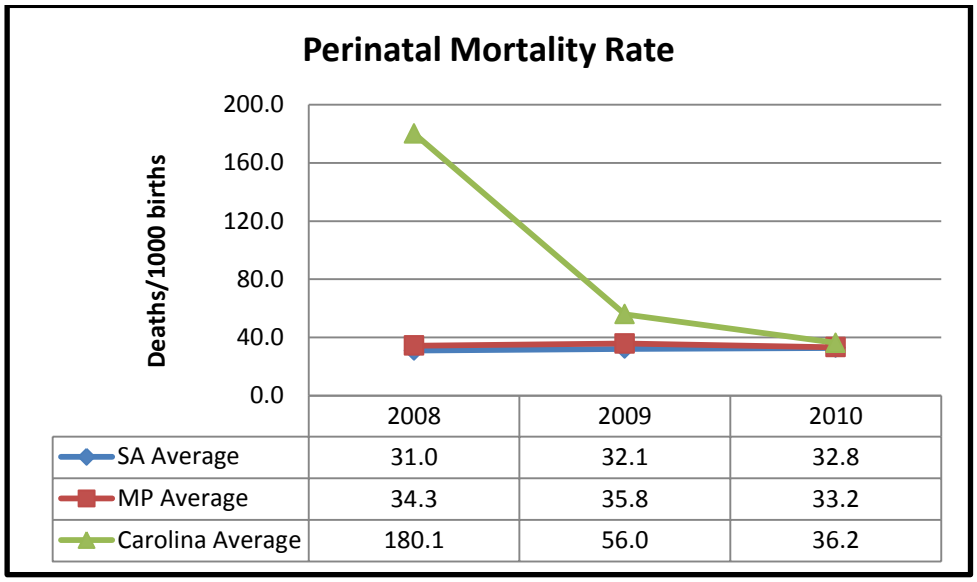
The FCDR fluctuated, declining to a low rate in 2009 before increasing again in 2010. It was significantly higher than the national and provincial averages except in 2009 and 2010. These data should be reviewed and the reasons for the fluctuation observed and the high FCDR ascertained.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Carolina Average	10.9	5.6	11.9

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

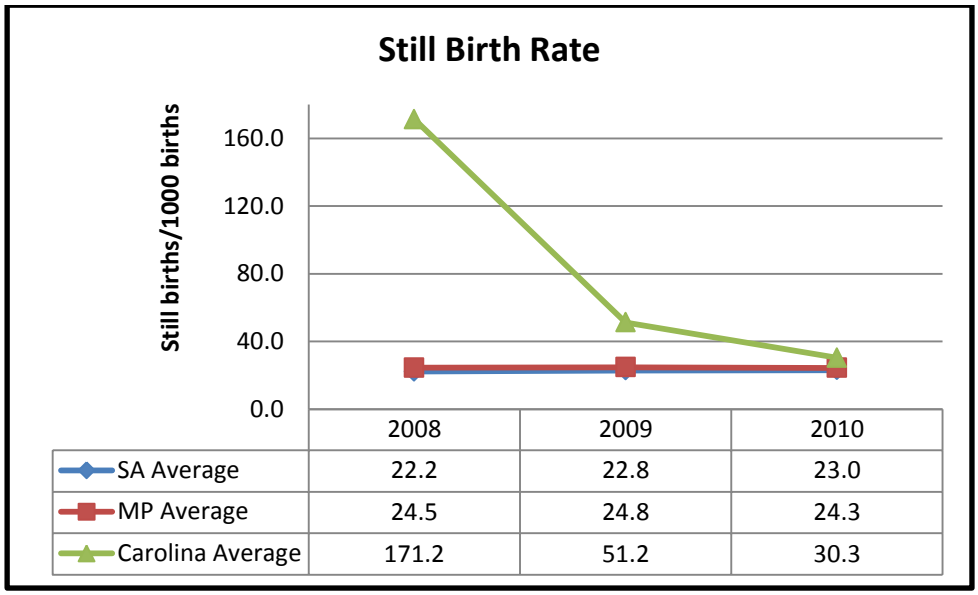
The PNMR decreased significantly over the reporting period. The 2010 rate was closer to the national and province should be reviewed and the reasons for the extremely high rate in 2008 ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Carolina Average	180.1	56.0	36.2

3. Still birth rate (SBR): number of babies born dead/1000 births

Similar to the PNMR, the SBR decreased significantly over the reporting period and was closer to the national and provincial averages in 2010.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Carolina Average	171.2	51.2	30.3

v: Conclusions

The reasons for the high ALOS and the low BUR should be ascertained. The FCDR data should be reviewed and the reasons for the fluctuation and the high rates observed ascertained. The PNMR and SBR data should also be reviewed to ascertain the reasons for the extremely high rates observed in 2008 and to exclude data error.

2. *Embhuleni Hospital*

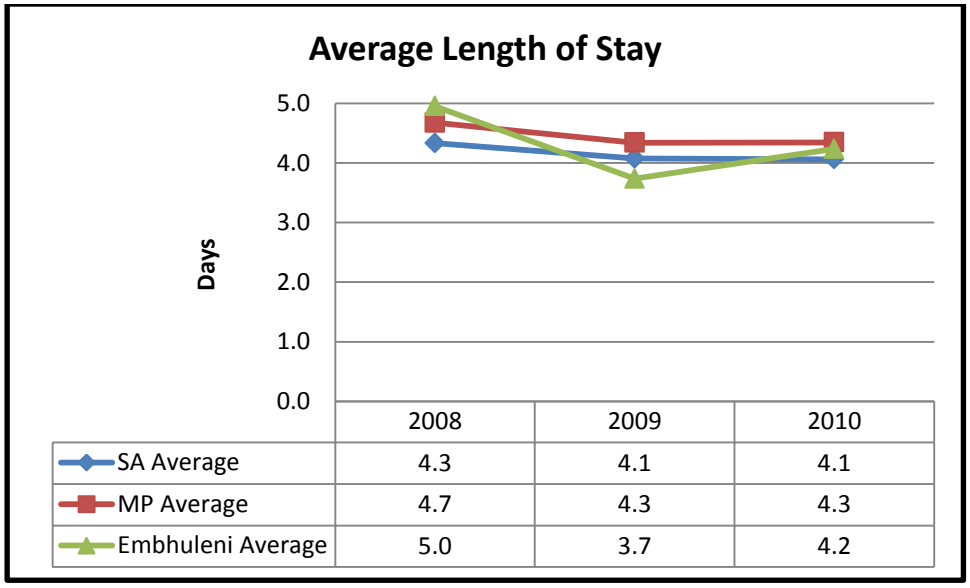
i: Description

Embhuleni District Hospital has 189 beds and lies in the Albert Luthuli sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

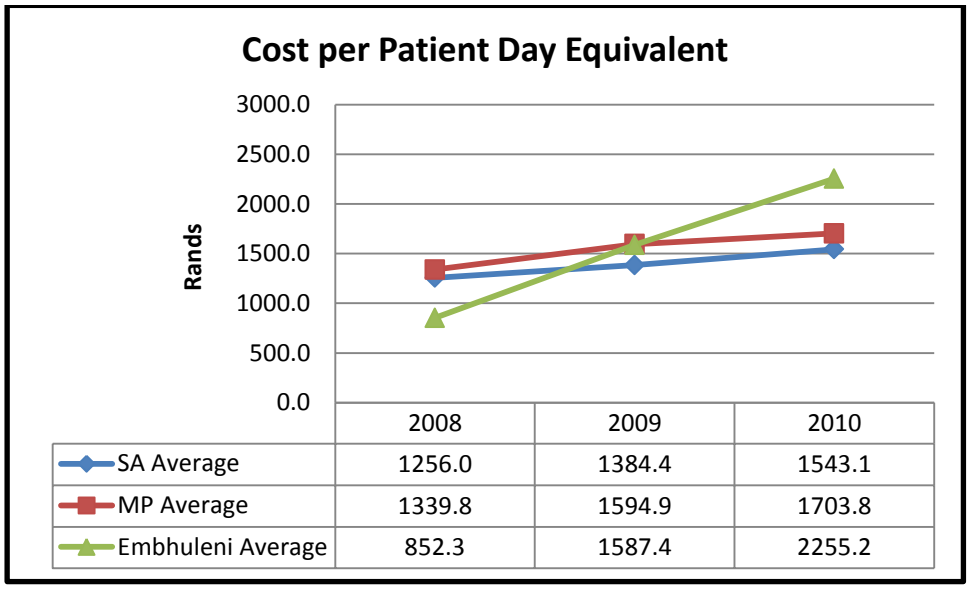
The ALOS decreased to 3.7 days in 2009 before increasing again in 2010, when it was then in line with the national and provincial averages.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Embhuleni Average	5.0	3.7	4.2

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

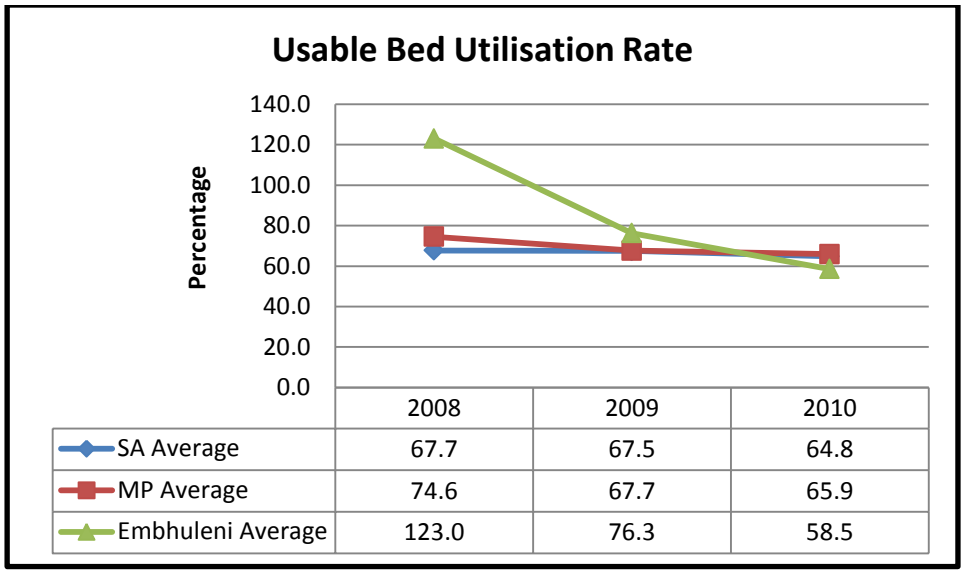
The CpPDE increased significantly (2.6 times) over the reporting period. It was significantly higher than both the national and provincial averages in 2010. The reasons for this rapid large increase should be ascertained.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Embhuleni Average	852.3	1587.4	2255.2

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR decreased steadily over the reporting period (a decline of 52%), and was lower than the national and provincial averages in 2010. These data should be reviewed to ascertain the reasons for the very high rate in 2008.

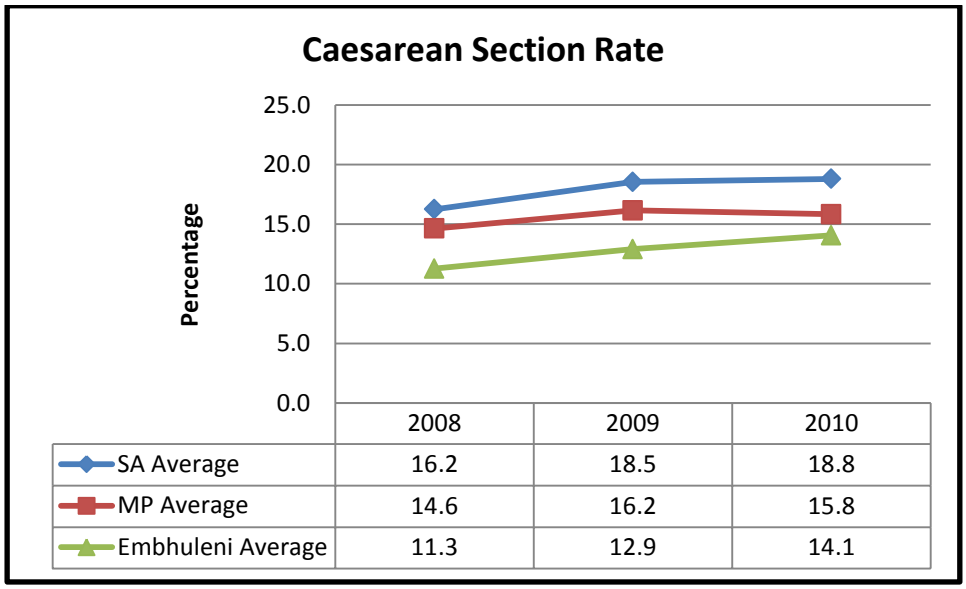


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Embhuleni Average	123.0	76.3	58.5

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate increased steadily over the reporting period. It was lower than the national and provincial averages throughout this period.

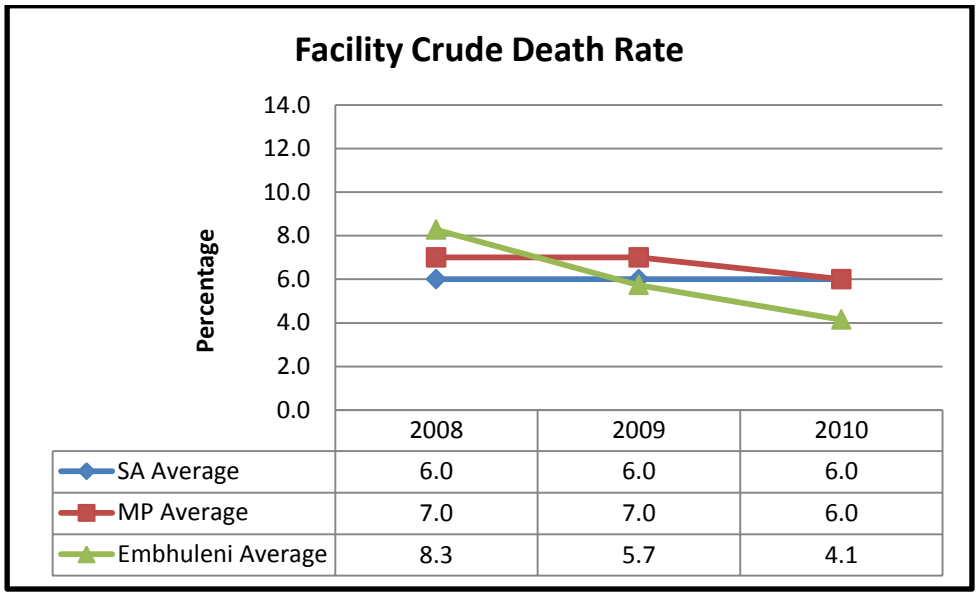


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Embhuleni Average	11.3	12.9	14.1

iv: Impact indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

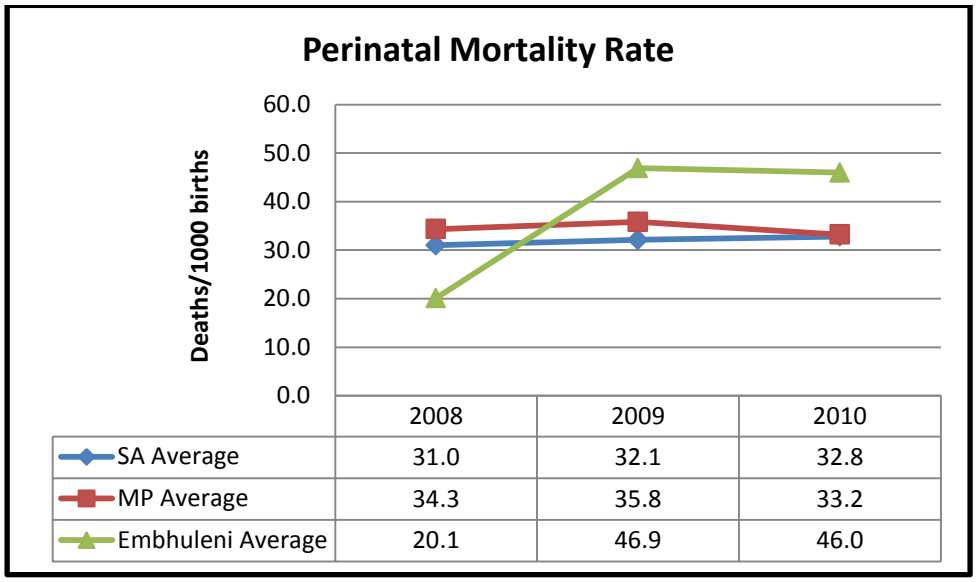
The FCDR decreased significantly over the reporting period and was lower than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	6.0	6.0	6.0
MP Average	7.0	7.0	6.0
Embhuleni Average	8.3	5.7	4.1

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

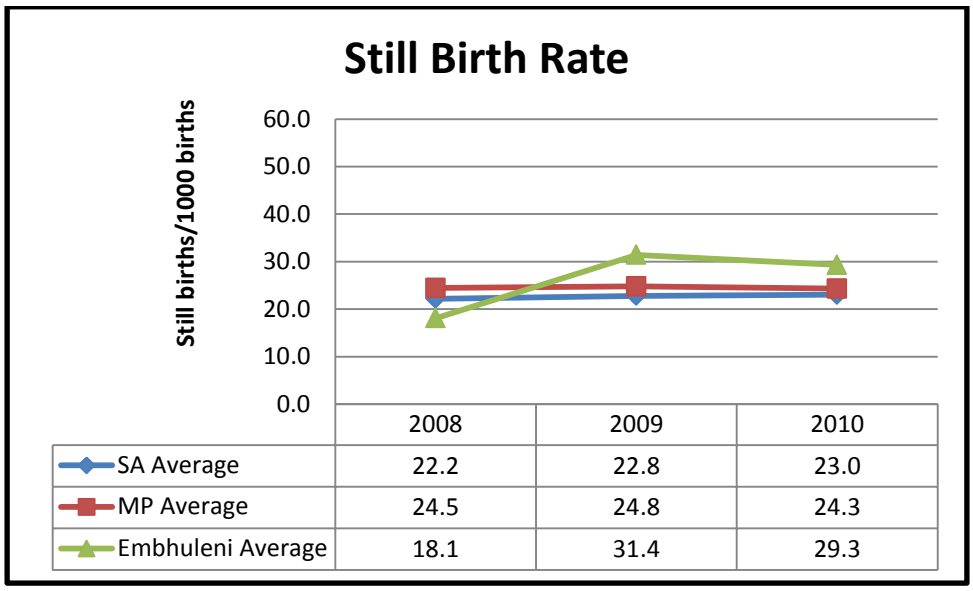
The PNMR increased significantly between 2008 and 2010. It was higher than the national and provincial averages in 2009 and 2010. The reasons for the increase in the rate should be ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Embhuleni Average	20.1	46.9	46.0

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR increased significantly between 2008 and 2009, and then decreased slightly in 2010. It was higher than the national and provincial averages in 2009 and 2010. The reasons for this should be ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Embhuleni Average	18.1	31.4	29.3

v: Conclusions:

The input and process indicators (the high CpPDE and low BUR) point to inefficiency at this hospital; the reasons for the rates observed should be ascertained. The high PNMR and SBR in 2009 and 2010 are concerning and the reasons for this should also be ascertained.

3. *Bethal Hospital*

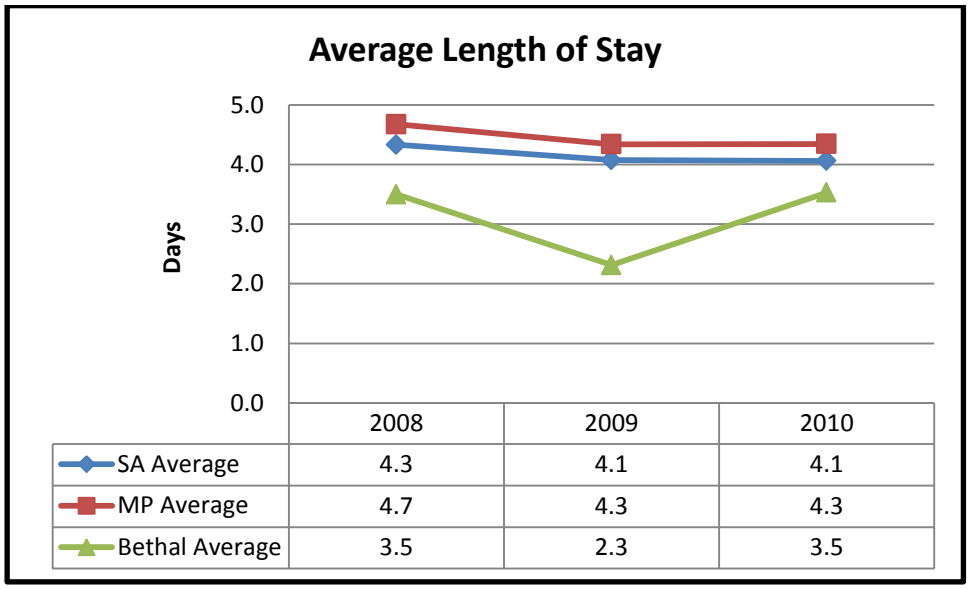
i: Description

Bethal District Hospital has 187 beds and lies in the Govan Mbeki sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

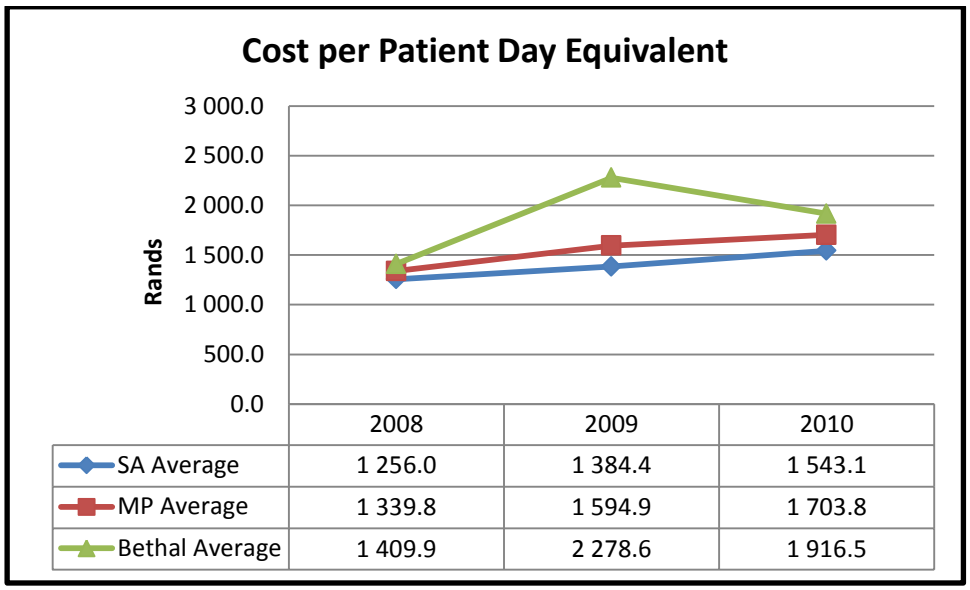
The ALOS declined between 2008 and 2009 before increasing in 2010. It was lower than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Bethal Average	3.5	2.3	3.5

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

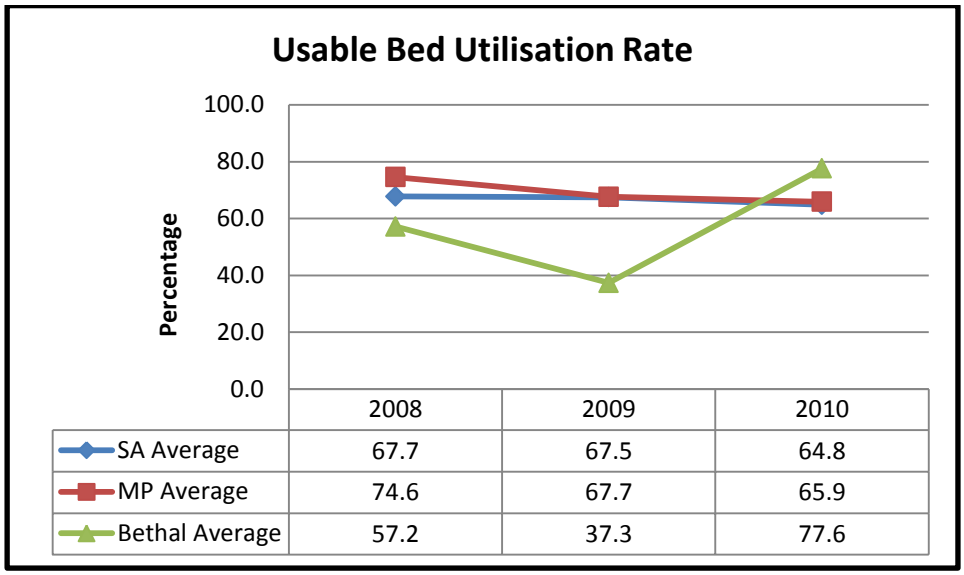
The CpPDE increased significantly between 2008 and 2009 and then declined slightly in 2010. It was higher than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	1 256.0	1 384.4	1 543.1
MP Average	1 339.8	1 594.9	1 703.8
Bethal Average	1 409.9	2 278.6	1 916.5

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR fluctuated significantly, decreasing to a very low rate in 2009 and then increasing in 2010. It was higher than the national and provincial averages in 2010.These data should be reviewed to ascertain the reasons for the fluctuation observed and the true rates for the hospital.

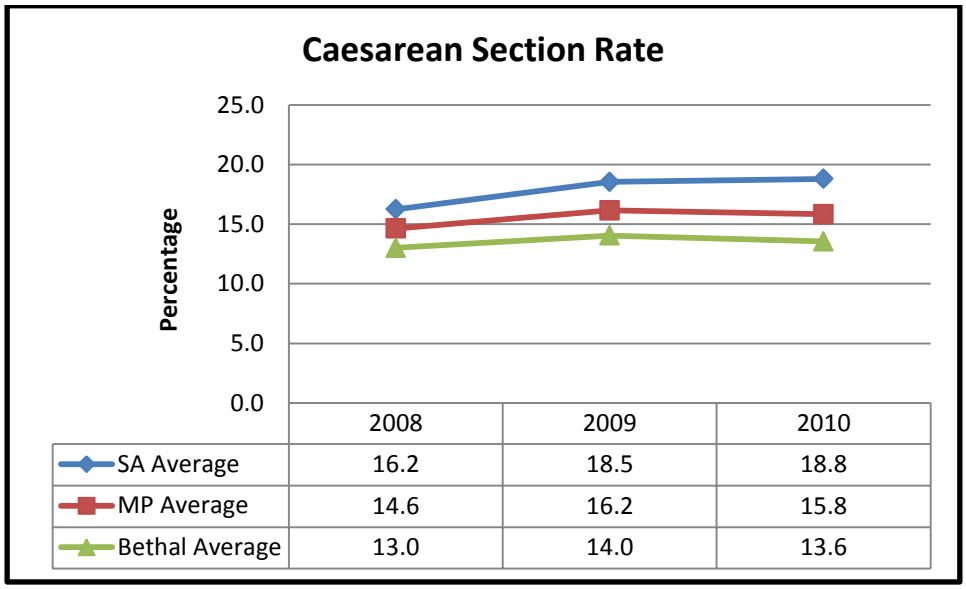


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Bethal Average	57.2	37.3	77.6

iii: Outcome indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate was relatively constant over the reporting period and was lower than the national and provincial averages.

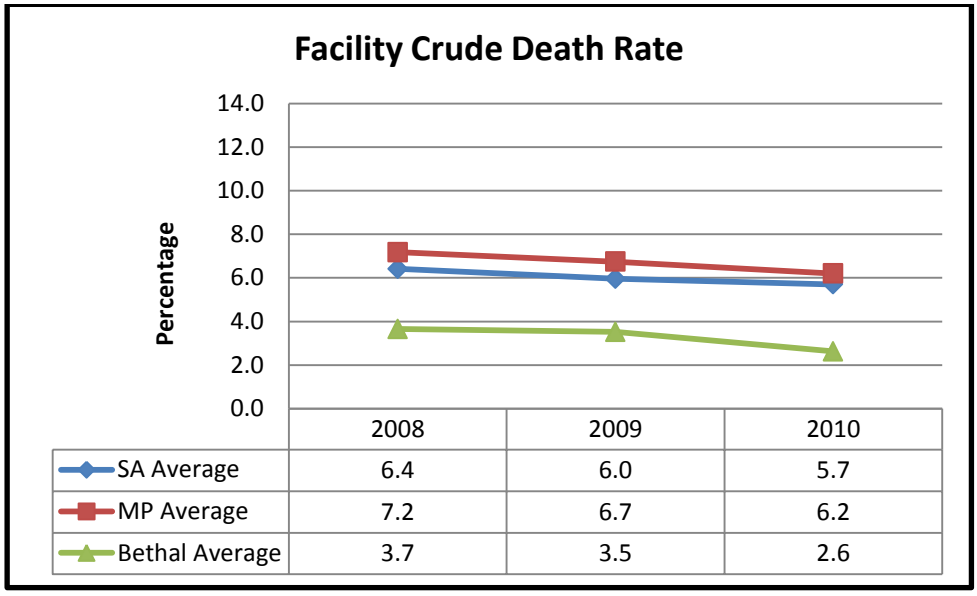


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Bethal Average	13.0	14.0	13.6

iv: Impact indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

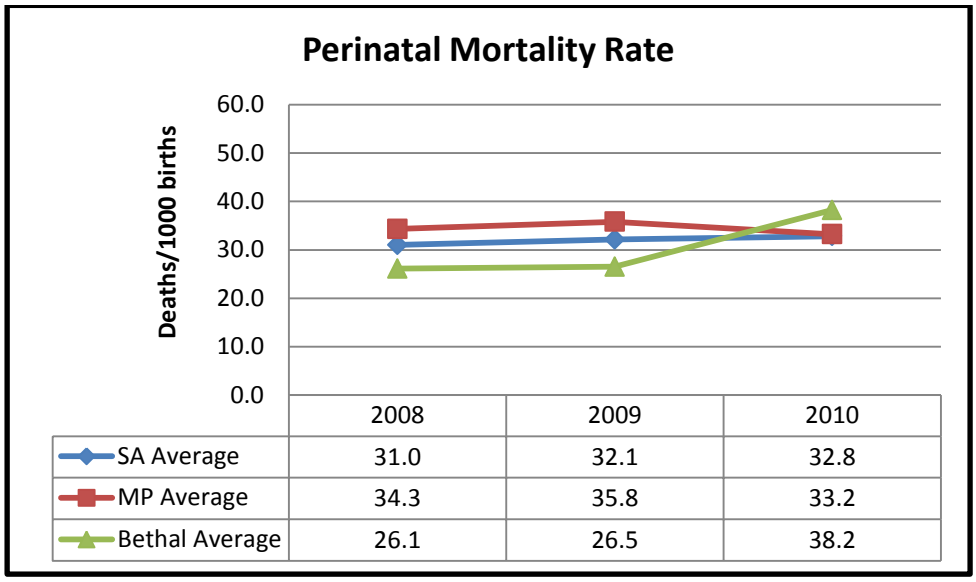
The FCDR declined over the reporting period reaching a level of 2.6% in 2010. It was well below the national and provincial averages throughout the reporting period



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Bethal Average	3.7	3.5	2.6

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

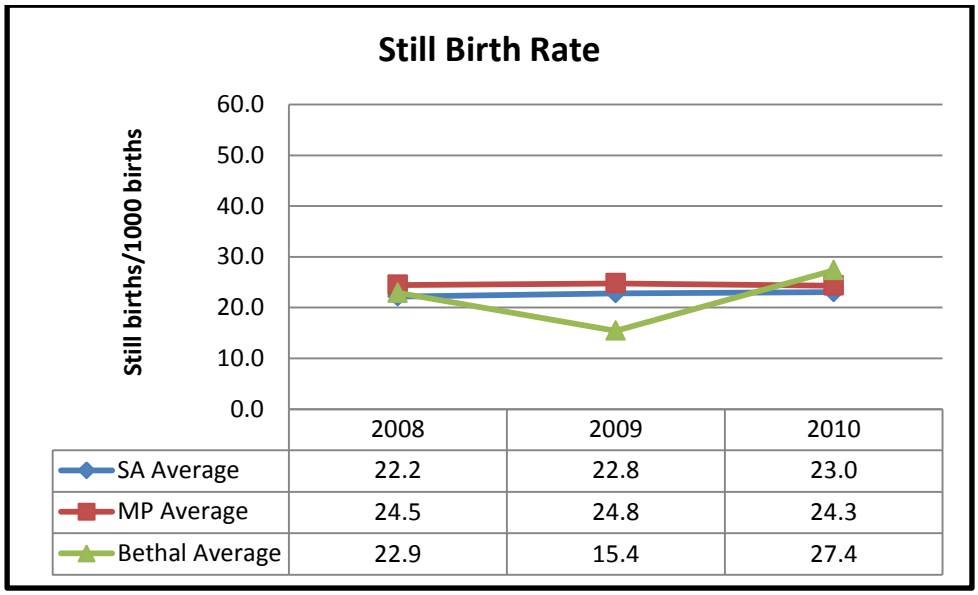
The PNMR was unchanged between 2008 and 2009 and increased to 38/1000 births in 2010, when it was then higher than the national and provincial averages.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Bethal Average	26.1	26.5	38.2

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR fluctuated over the reporting period, decreasing between 2008 and 2009 and then increasing in 2010. The 2010 rate was higher than the national and provincial averages in the same year.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Bethal Average	22.9	15.4	27.4

v: Conclusions

The reasons for the low ALOS and the high CpPDE should be ascertained. The BUR data should be reviewed to ascertain the reasons for the fluctuation observed and the true rates for the hospital. The high PNMR and SBR also require investigation.

4. *Evander Hospital*

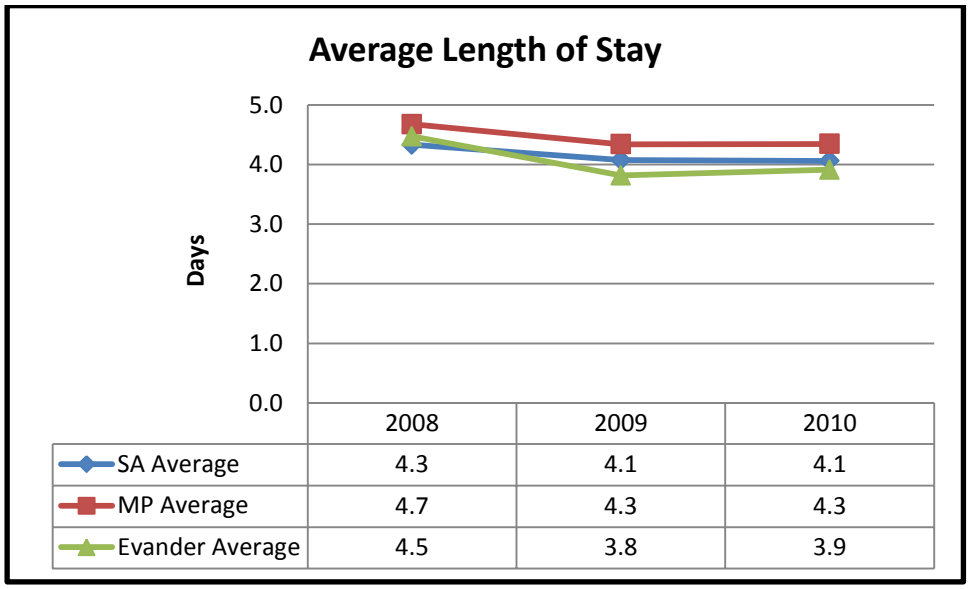
i: Description

Evander District Hospital has 112 beds and lies in the Govan Mbeki sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

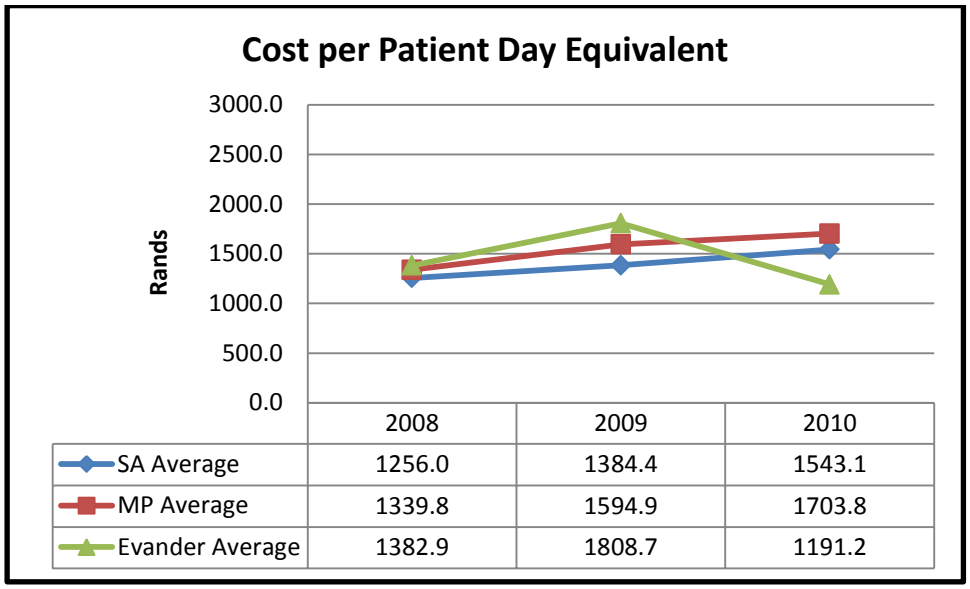
The ALOS decreased between 2008 and 2009 and was unchanged in 2010. It was lower than the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Evander Average	4.5	3.8	3.9

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

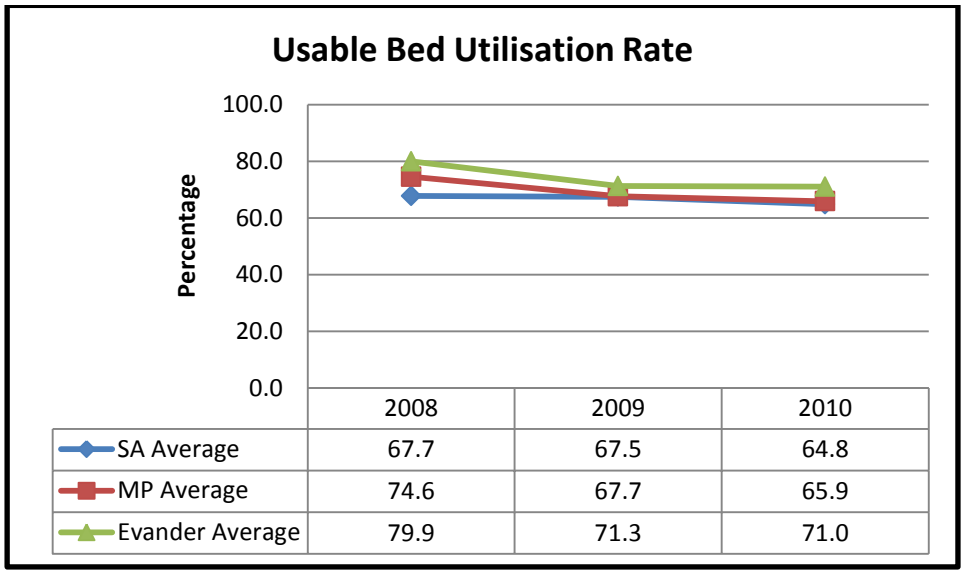
The CpPDE fluctuated, increasing between 2008 and 2009 and then decreasing sharply in 2010, when it was then much lower than the national and provincial averages. The data should be reviewed to ascertain the reasons for the fluctuation and the true rates for the hospital.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Evander Average	1382.9	1808.7	1191.2

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR decreased between 2008 and 2009 and was unchanged in 2010. It was higher than the national and provincial averages throughout the reporting period.

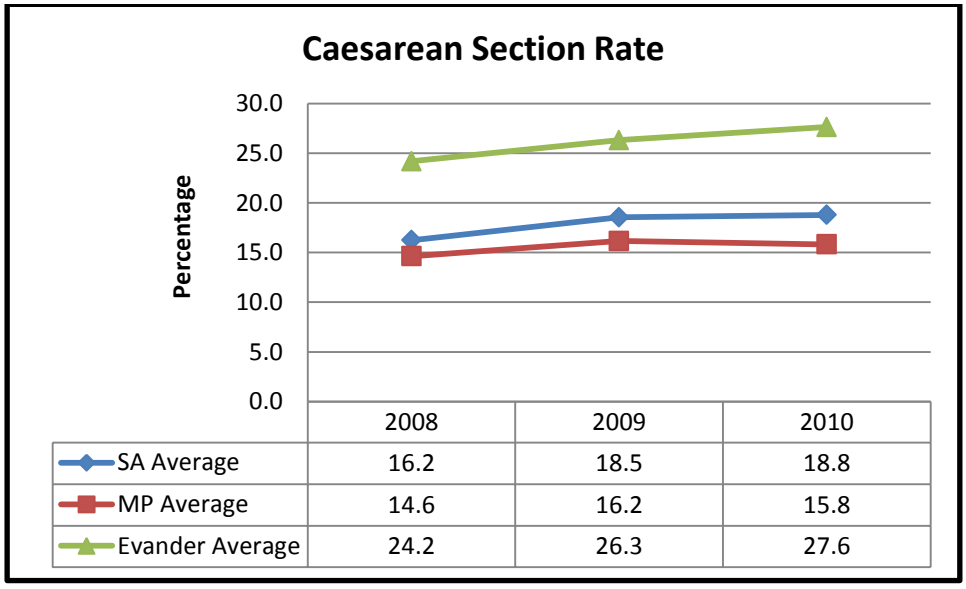


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Evander Average	79.9	71.3	71.0

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate increased slightly over the reporting period. It was significantly higher than the national and provincial averages throughout this period. The reasons for the high rates should be ascertained.

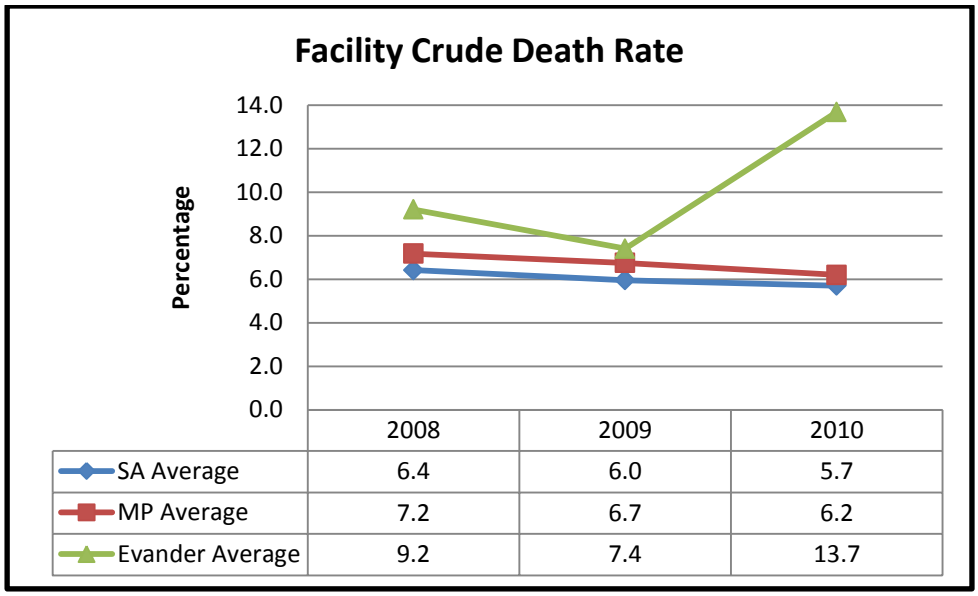


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Evander Average	24.2	26.3	27.6

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

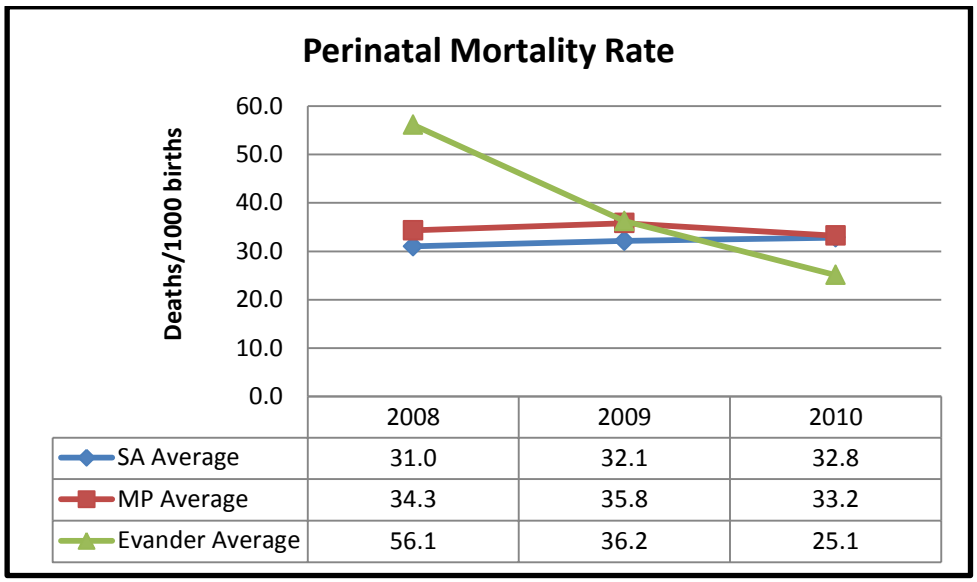
The FCDR fluctuated, decreasing between 2008 and 2009 and then increasing sharply to 14% in 2010. The 2010 rate was much higher than the national and provincial averages. The reasons for this should be ascertained.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Evander Average	9.2	7.4	13.7

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

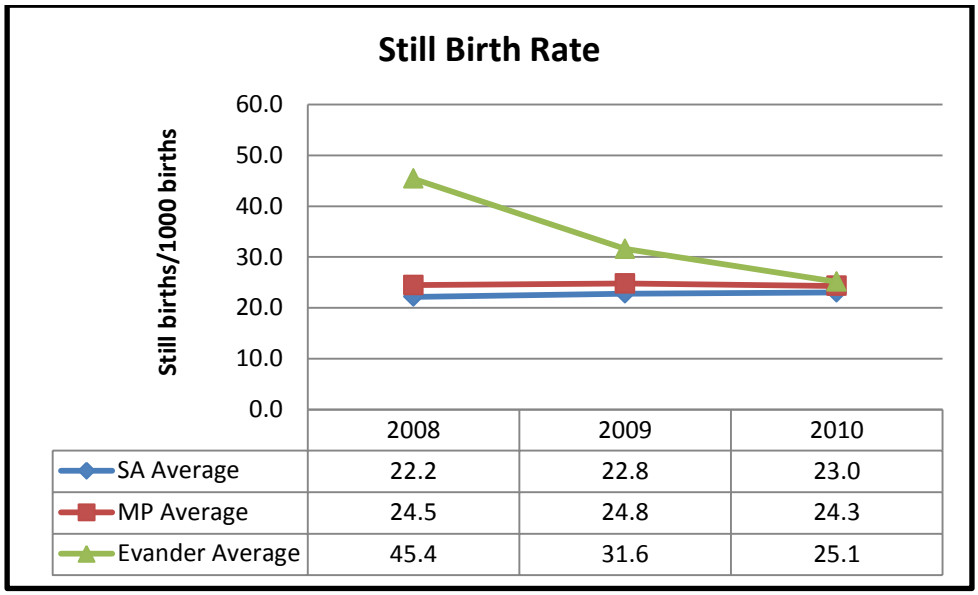
The PNMR decreased significantly between 2008 and 2010. It was well below the national and provincial averages in 2010.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Evander Average	56.1	36.2	25.1

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR decreased significantly over the reporting period. It was in line with national and provincial averages in 2010.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Evander Average	45.4	31.6	25.1

v: Conclusion:

The CpPDE data should be reviewed to ascertain the reasons for the fluctuation observed and the true rates for the hospital. The reasons for the high CS rate and the high FCDR should also be ascertained as should the changes in the SBR and PNMR.

5. *Standerton Hospital*

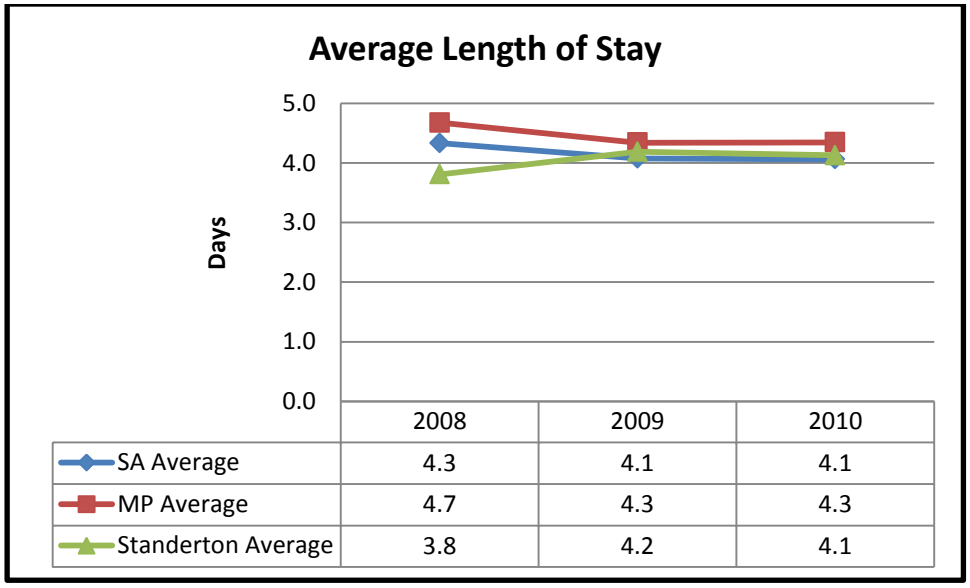
i: Description

Standerton District Hospital has 171 beds and lies in the Lekwa sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

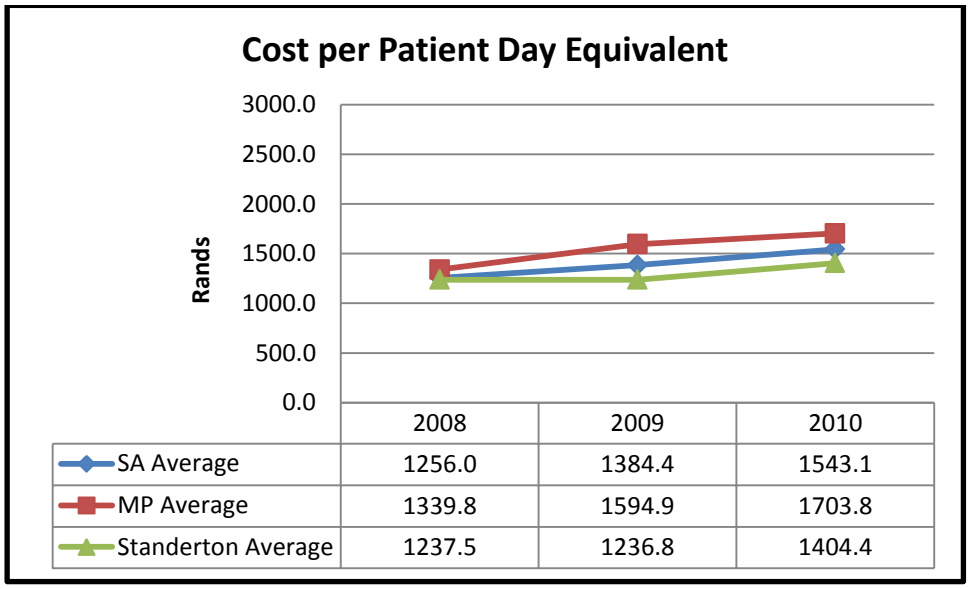
The ALOS increased to 4.2 days in 2008 and was unchanged in 2010. It was in line with the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Standerton Average	3.8	4.2	4.1

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

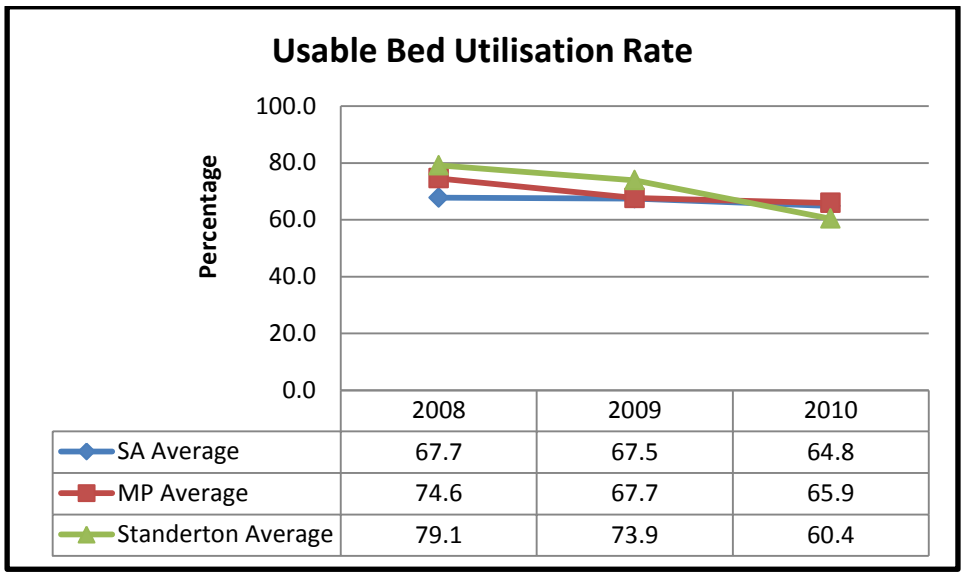
The CpPDE was constant in 2008 and 2009 and increased to R1404 in 2010. It was lower than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Standerton Average	1237.5	1236.8	1404.4

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR decreased steadily over the reporting period, and was lower than the national and provincial averages in 2010.

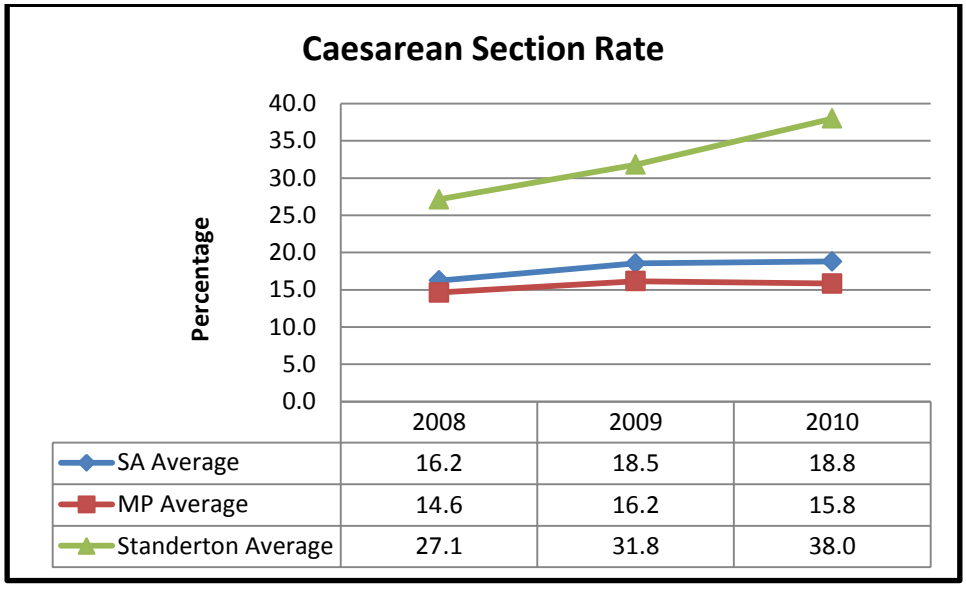


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Standerton Average	79.1	73.9	60.4

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate was high and increased steadily over the reporting period. It was significantly higher than the national and provincial averages throughout this period.

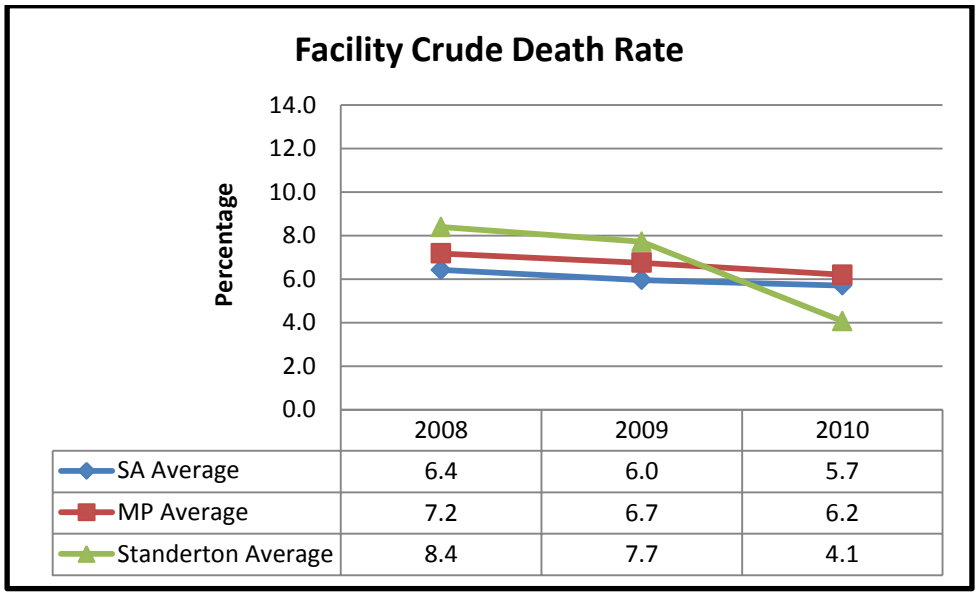


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Standerton Average	27.1	31.8	38.0

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

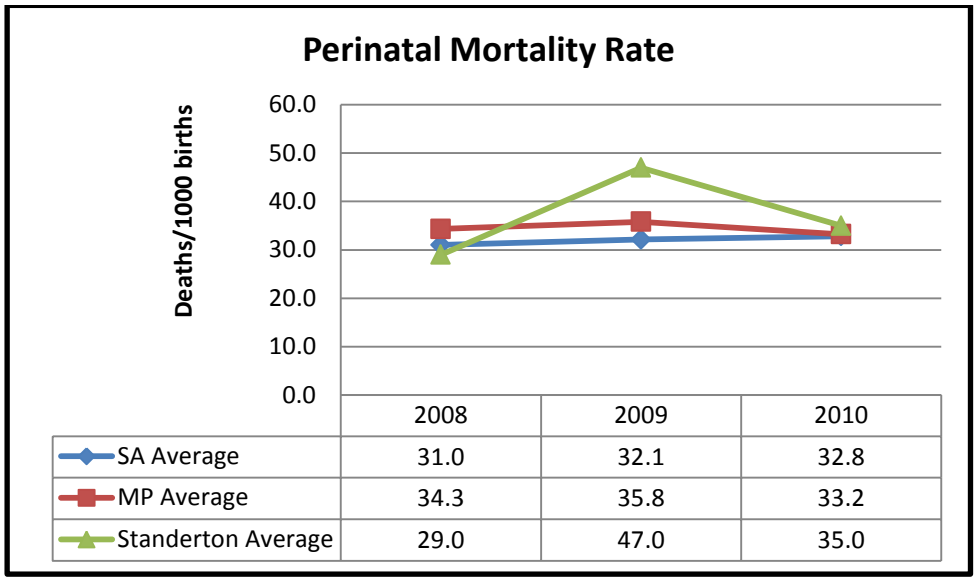
The FCDR decreased significantly between 2008 and 2010, and was much lower than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Standerton Average	8.4	7.7	4.1

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

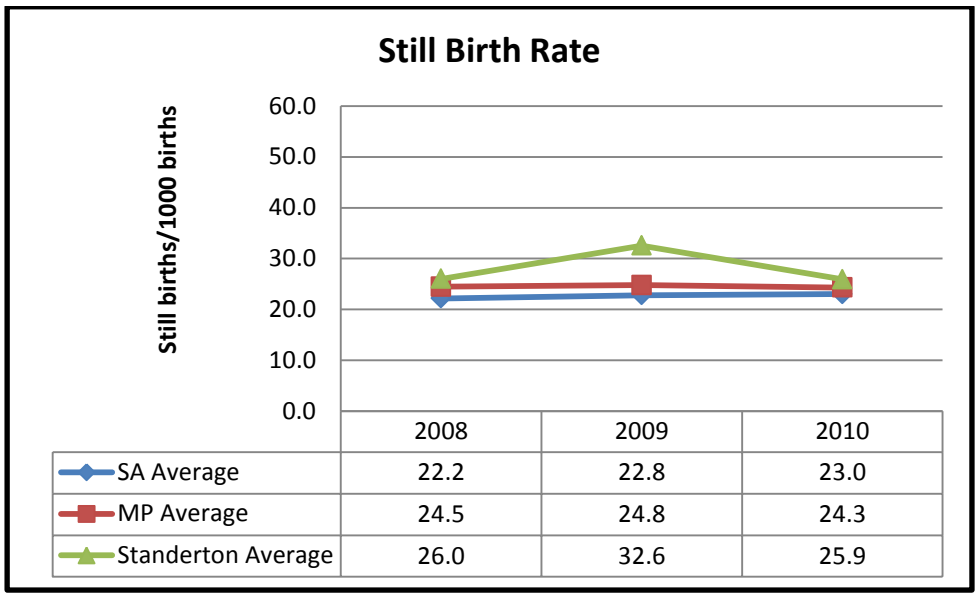
The PNMR fluctuated, increasing between 2008 and 2009 and then decreasing in 2010. It was higher than the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Standerton Average	29.0	47.0	35.0

3. Still birth rate (SBR): number of babies born dead/1000 births

As with the PNMR, the SBR fluctuated, increasing between 2008 and 2009 and then decreasing in 2010.It was higher than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Standerton Average	26.0	32.6	25.9

v: Conclusions:

The reasons for the high CS rate should be ascertained. The PNMR and SBR data should be reviewed to ascertain the reasons for the fluctuations observed and the high rates (higher than the national and provincial averages) in 2010.

6. *Piet Retief Hospital*

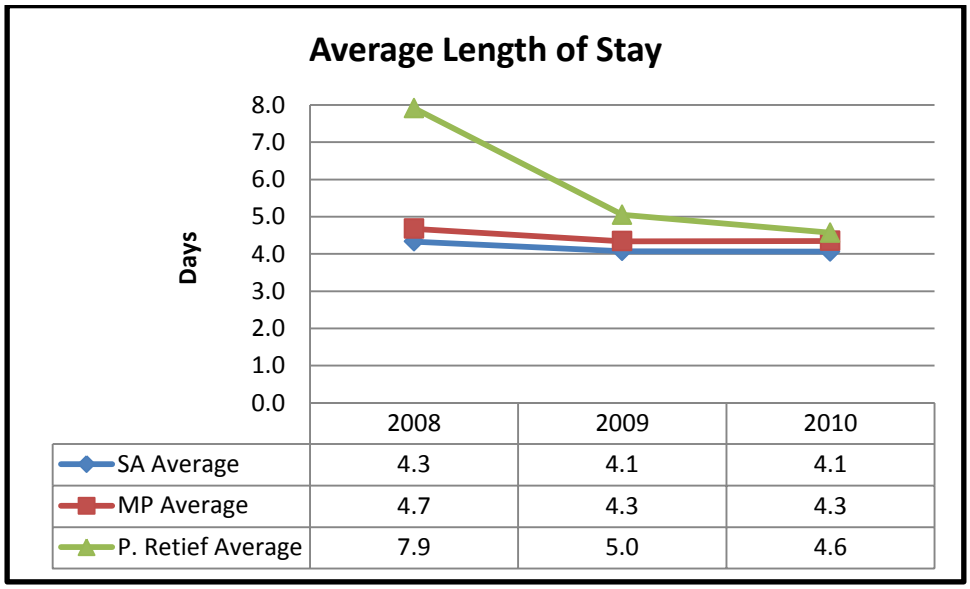
i: Description

Piet Retief District Hospital has 171 beds and lies in the Mkondo sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

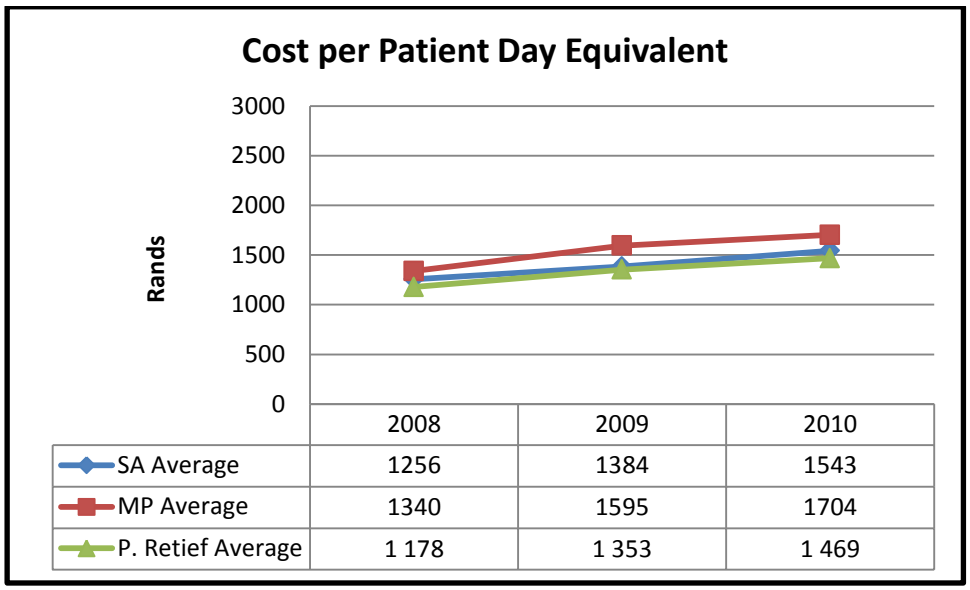
The ALOS decreased significantly between 2008 and 2009, and with a further marginal decrease in 2010. It closer to the national and provincial averages in 2010



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
P. Retief Average	7.9	5.0	4.6

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

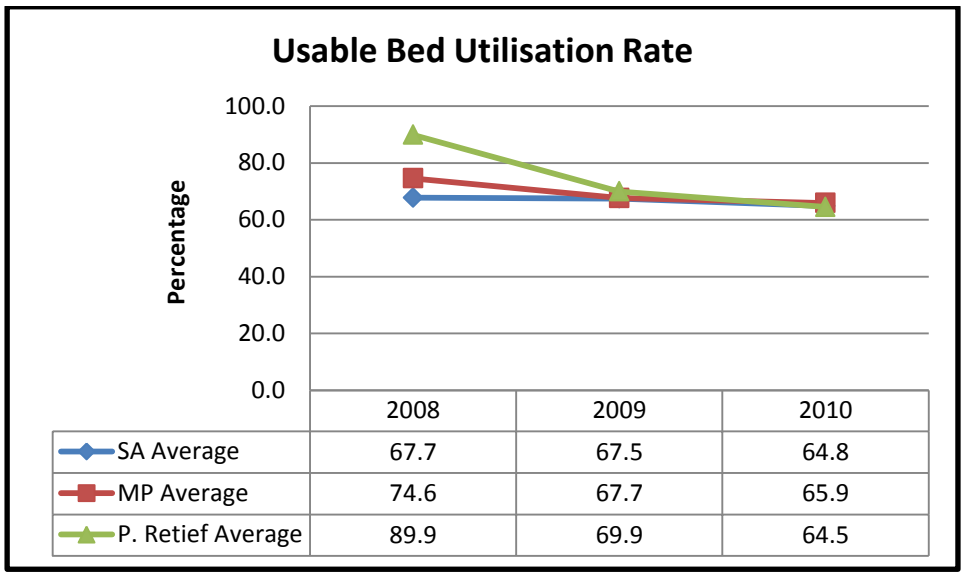
The CpPDE increased over the reporting period. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	1256	1384	1543
MP Average	1340	1595	1704
P. Retief Average	1 178	1 353	1 469

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR declined from a high level (90% in 2008) to 64% in 2010, a level in line with the national and provincial averages.

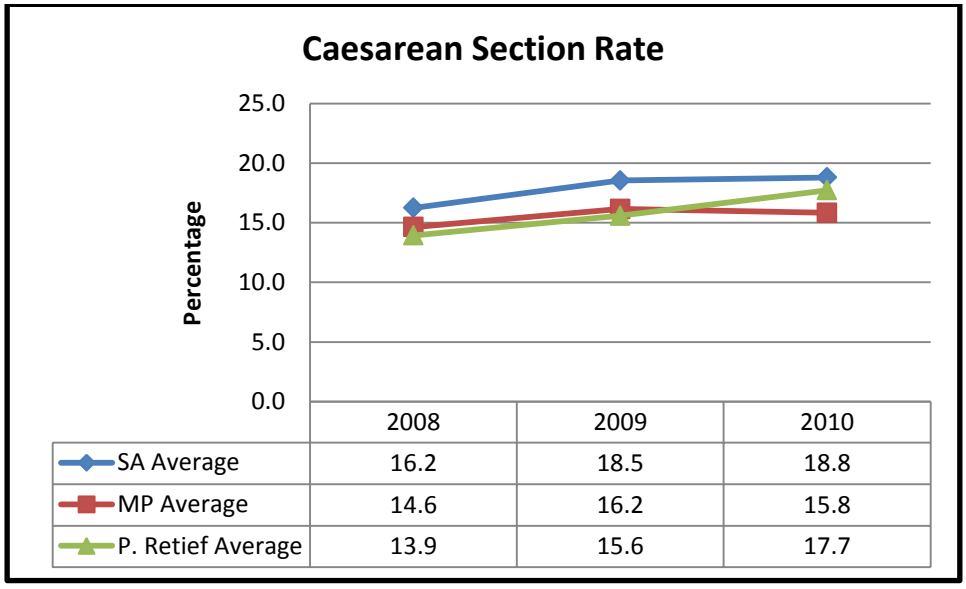


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
P. Retief Average	89.9	69.9	64.5

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate increased steadily over the reporting period. It was higher than the provincial average in 2010, and was lower than the national average throughout the reporting period.

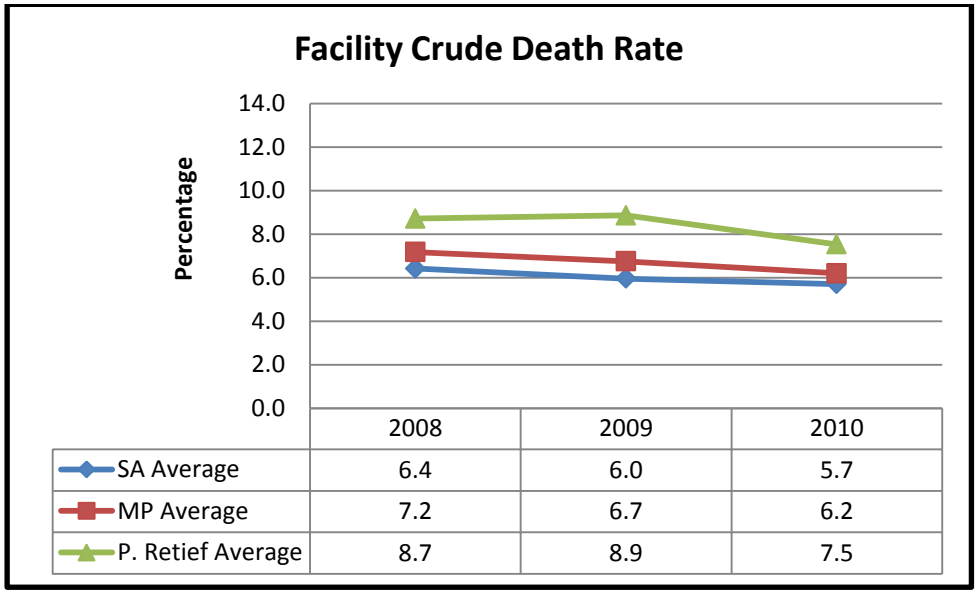


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
P. Retief Average	13.9	15.6	17.7

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

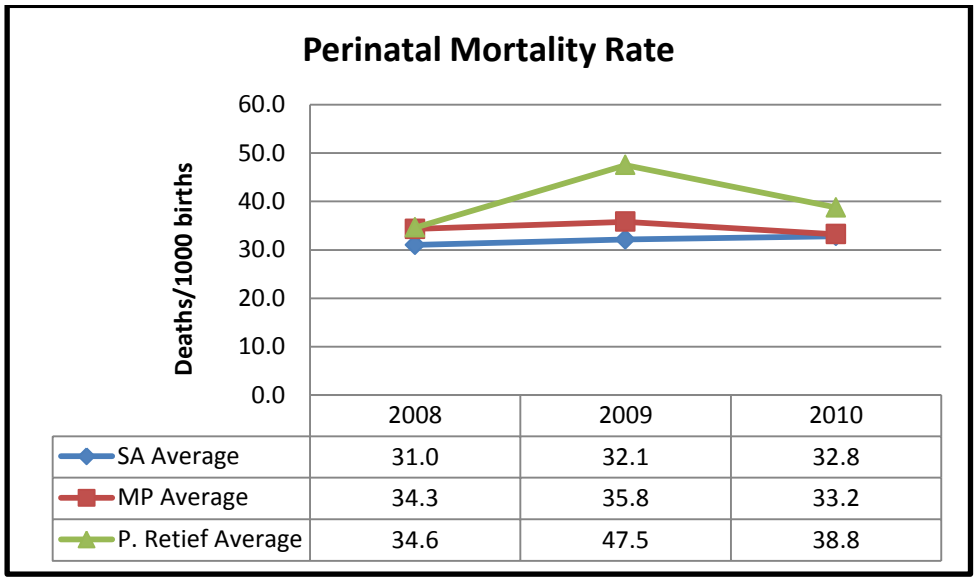
The FCDR was relatively constant in 2008 and 2009, and declined in 2010. It was higher than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
P. Retief Average	8.7	8.9	7.5

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

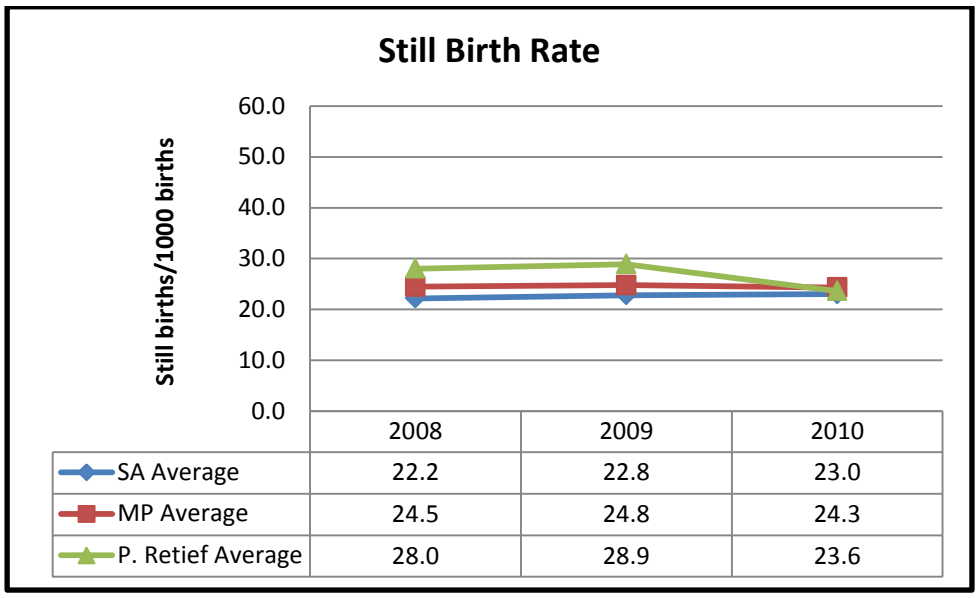
The PNMR fluctuated, increasing to a high level in 2009 and then decreasing in 2010. It was higher than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
P. Retief Average	34.6	47.5	38.8

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR was largely unchanged between 2008 and 2009 and decreased in 2010. The 2010 rate was in line with the national and provincial averages.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
P. Retief Average	28.0	28.9	23.6

v: Conclusions:

The reason for the high FCDR should be ascertained. The PNMR data should be reviewed to ascertain the reasons for the fluctuation and the high rates observed.

7. Amajuba Memorial Hospital

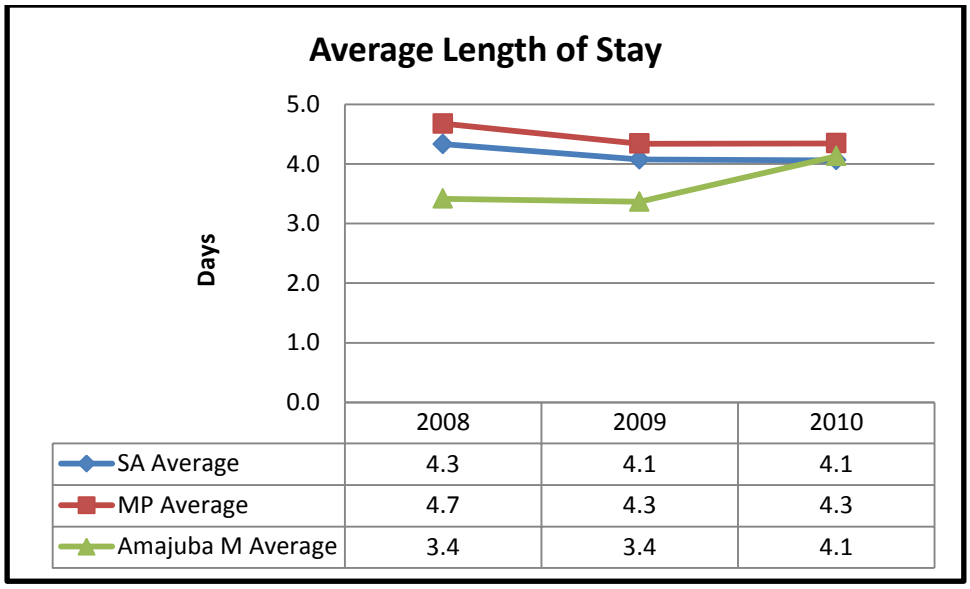
i: Description

Amajuba Memorial District Hospital has 95 beds and lies in the Pixley Ka Seme sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

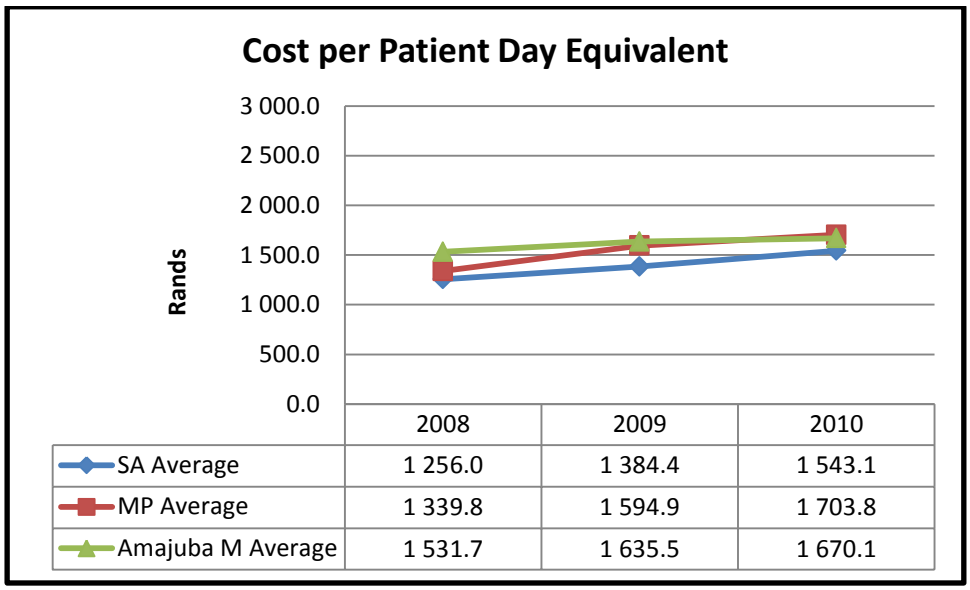
The ALOS was constant in 2008 and 2009 and increased to 4.1 days in 2010. The 2010 value was in line with the national and provincial averages in the same year.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Amajuba M Average	3.4	3.4	4.1

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

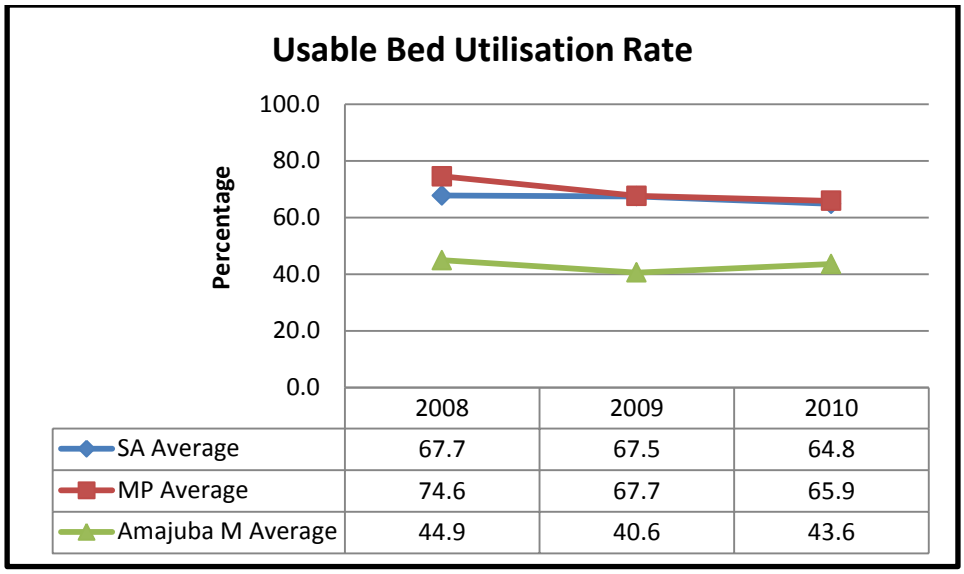
The CpPDE increased steadily over the reporting period. It was lower than the provincial average in 2010.



	2008	2009	2010
SA Average	1 256.0	1 384.4	1 543.1
MP Average	1 339.8	1 594.9	1 703.8
Amajuba M Average	1 531.7	1 635.5	1 670.1

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR was very low. It fluctuated slightly, decreasing between 2008 and 2009 before increasing in 2010. It was significantly lower than the national and provincial averages throughout the reporting period .The reasons for these very low rates should be ascertained.

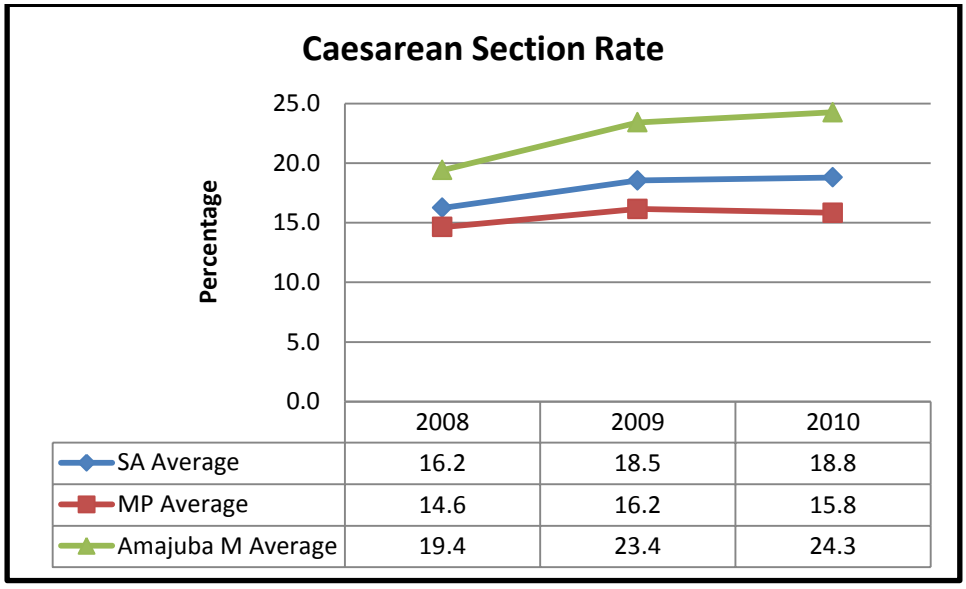


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Amajuba M Average	44.9	40.6	43.6

iii: Outcome indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate increased during the reporting period. It was much higher than the national and provincial averages throughout this period. The reasons for these high rates should be ascertained.

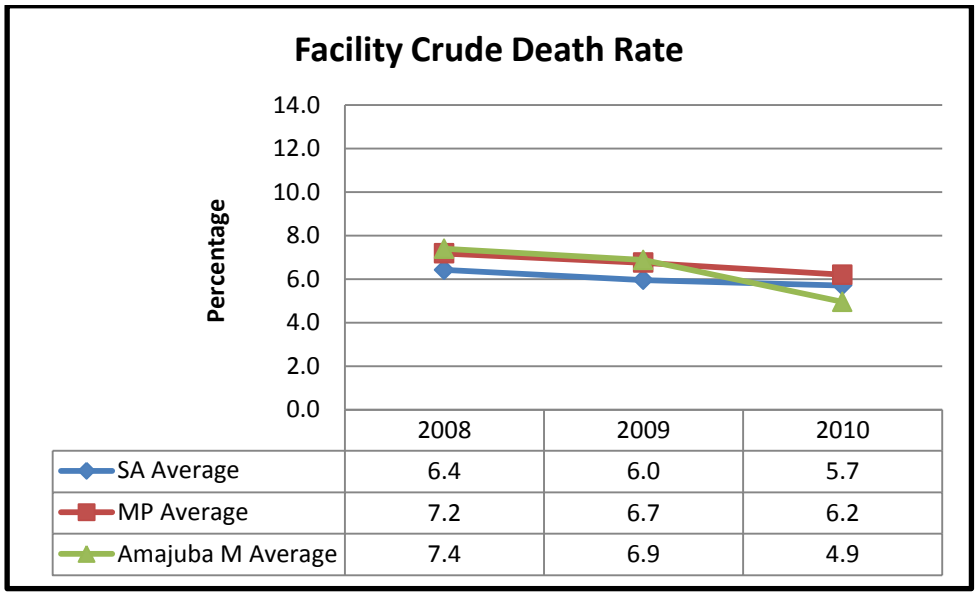


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Amajuba M Average	19.4	23.4	24.3

iv: Impact indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

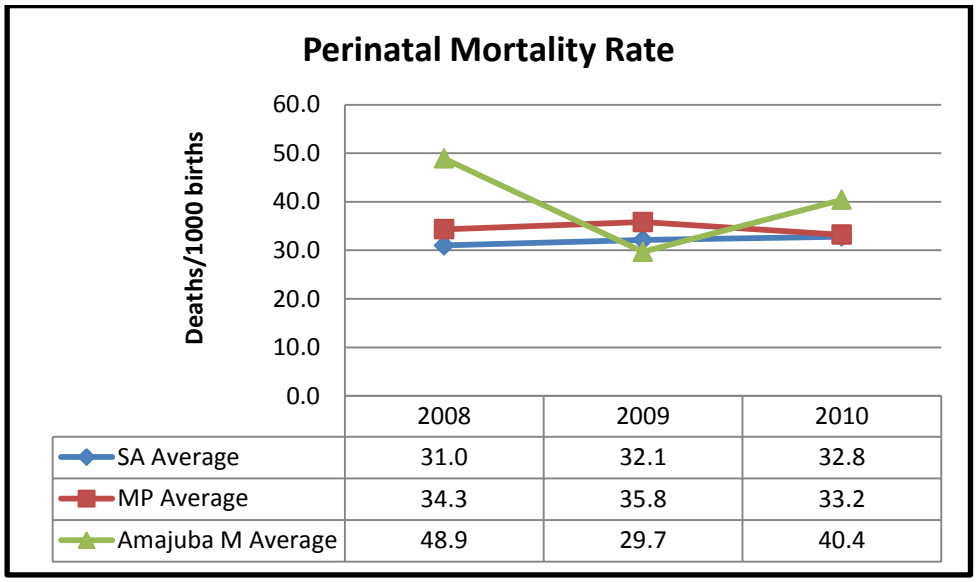
The FCDR decreased steadily between 2008 and 2010. The 2010 rate of 4.9% was lower than both the national and provincial averages.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Amajuba M Average	7.4	6.9	4.9

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

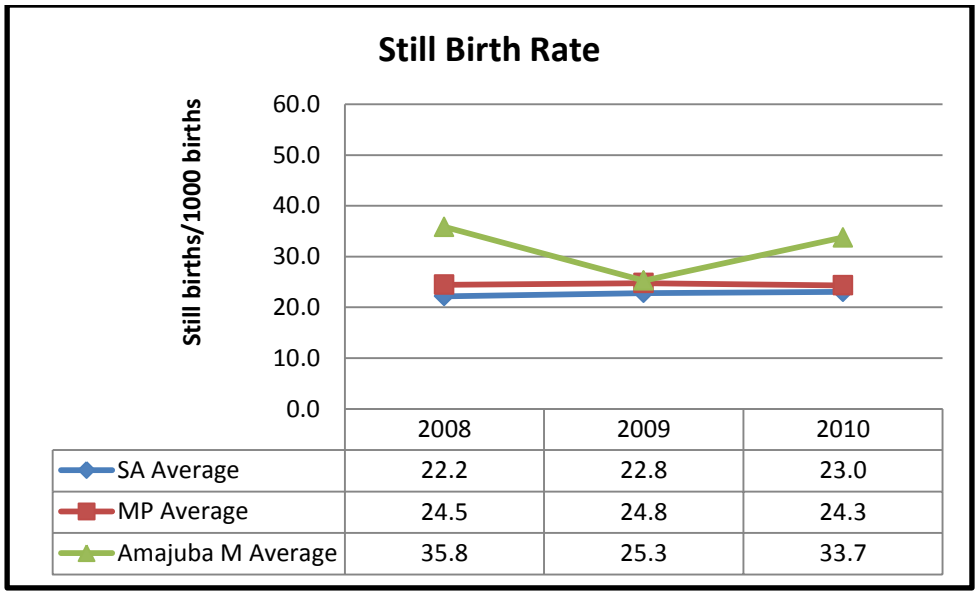
The PNMR fluctuated, decreasing significantly between 2008 and 2009 before increasing in 2010. It was higher than the national and provincial averages in 2008 and 2010. These data should be reviewed and the reasons for the fluctuation observed and the high rates (in 2008 and 2010) ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Amajuba M Average	48.9	29.7	40.4

3. Still birth rate (SBR): number of still births/1000 births

The SBR shows a trend similar to that of the PNMR. It fluctuated, reaching a low rate in 2009 before increasing in 2010. It was much higher than the national and provincial averages in 2010. These data should be reviewed and the reasons for the fluctuation observed and the high rates ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Amajuba M Average	35.8	25.3	33.7

v: Conclusions

The reasons for the very low BUR should be ascertained. The CpPDE data should also be reviewed since it has remained rather low despite the very low BUR. The reasons for the high CS rates should also be ascertained. The PNMR and SBR data should be reviewed and the reasons for the fluctuation and the high rates observed ascertained.

8. *Elsie Ballot Hospital*

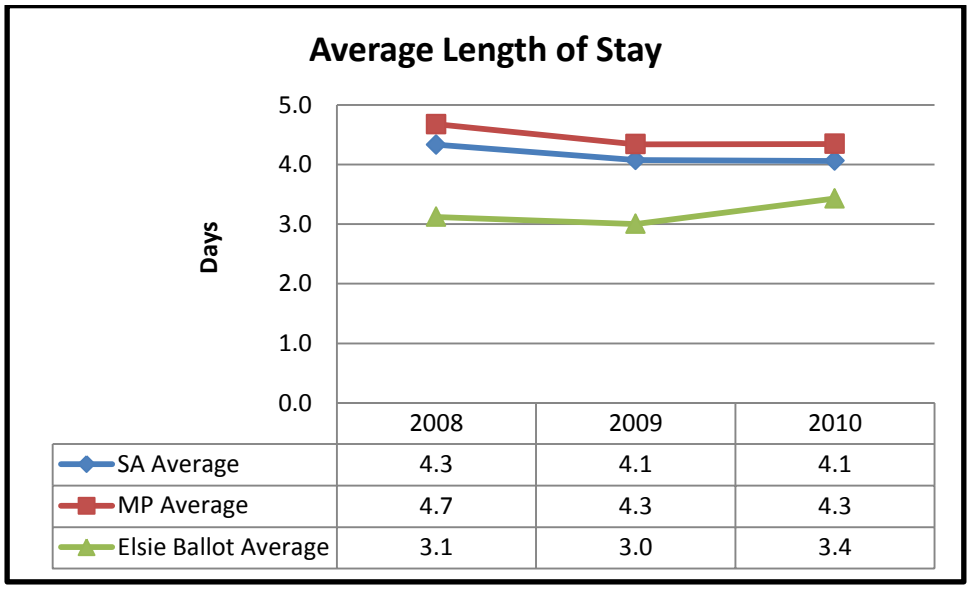
i: Description

Elsie Ballot District Hospital has 22 beds and lies in the Pixley Ka Seme sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

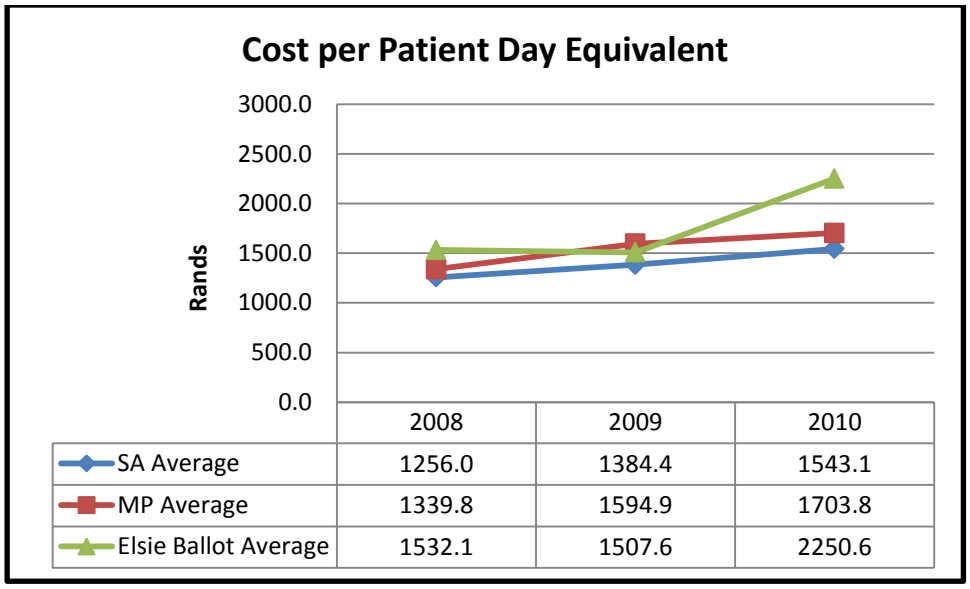
The ALOS was relatively stable and was lower than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Elsie Ballot Average	3.1	3.0	3.4

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

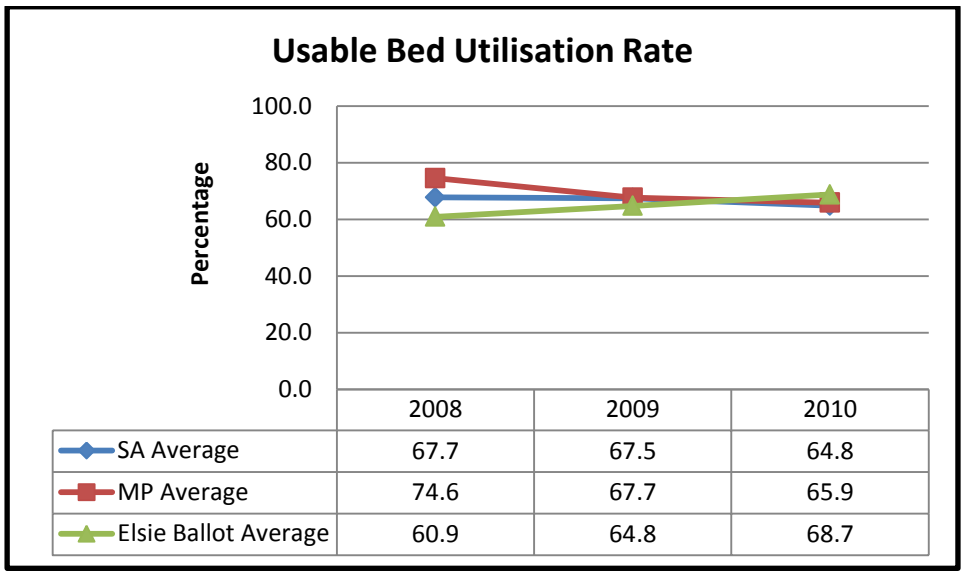
The CpPDE was stable between 2008 and 2009 and increased sharply in 2010. It was significantly higher than the national and provincial averages in 2010. The reasons for the sharp increase should be ascertained.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Elsie Ballot Average	1532.1	1507.6	2250.6

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR increased steadily over the reporting period, and was higher than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Elsie Ballot Average	60.9	64.8	68.7

iii: Outcomes indicators

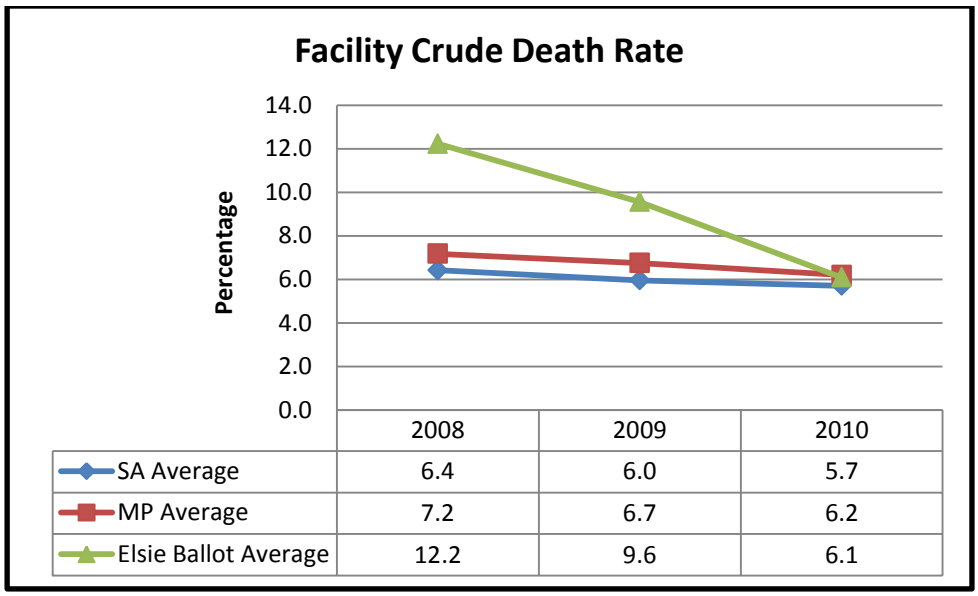
Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

Data on the CS rate were not available for the period 2008-2010. This requires urgent investigation.

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

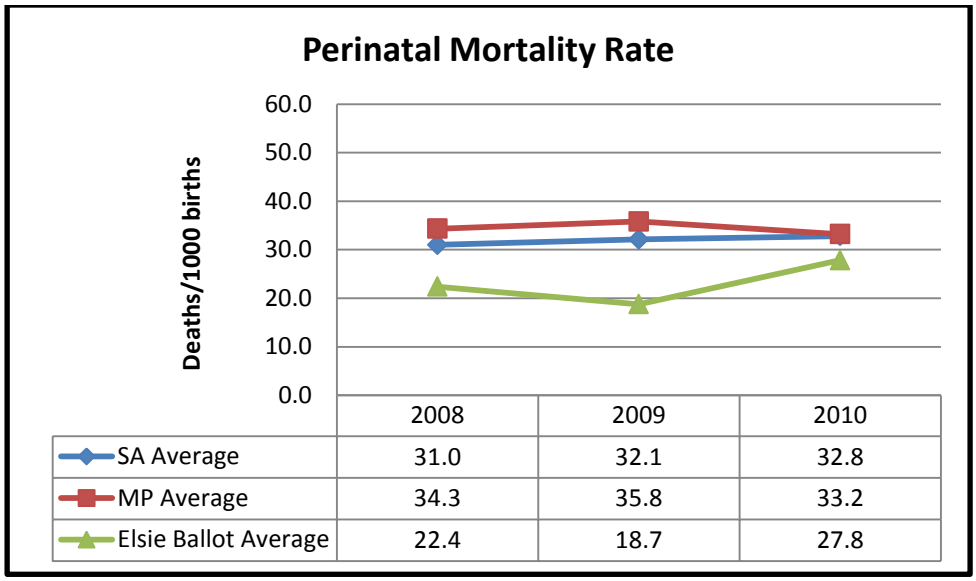
The FCDR decreased significantly over the reporting period, and was in line with the provincial average in 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Elsie Ballot Average	12.2	9.6	6.1

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

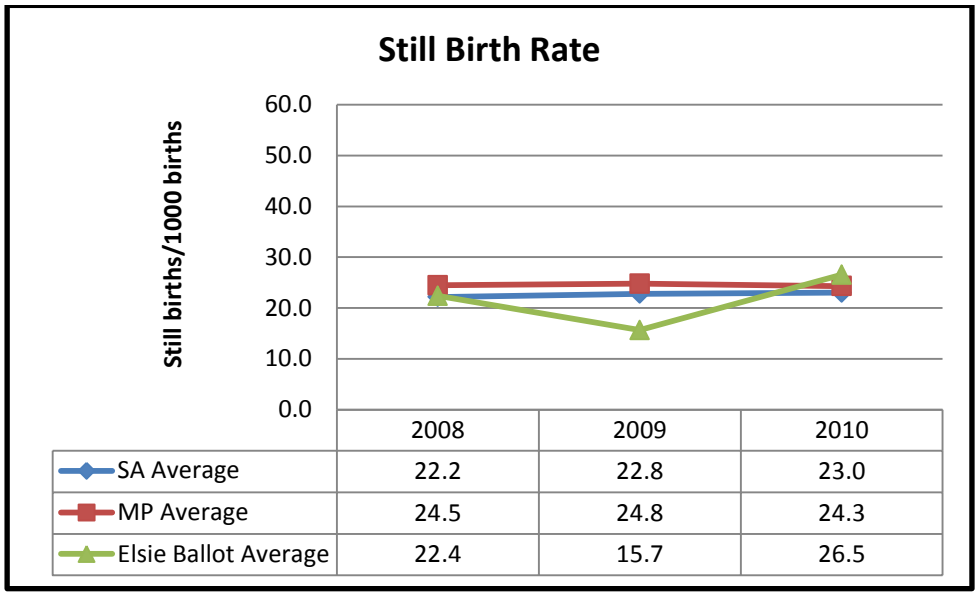
The PNMR fluctuated, decreasing between 2008 and 2009 and then increasing in 2010. It was lower than the national and provincial averages throughout this period. The data should be reviewed and the reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Elsie Ballot Average	22.4	18.7	27.8

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR also fluctuated, decreasing to a low rate in 2009, and then increasing in 2010. The 2010 rate was higher than the national and provincial averages. The data should be reviewed and the reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Elsie Ballot Average	22.4	15.7	26.5

v: Conclusions:

The CpPDE data should be reviewed and the reasons for the sharp increase in 2010 ascertained. The absence of CS rate data requires urgent investigation. If the hospital is unable to perform Caesarean sections then by definition it is no longer a hospital and should be re-classified as a CHC. The PNMR and SBR data should be reviewed and the reasons for the fluctuations observed ascertained.

B Nkangala – DC31

Nkangala District had a population of approximately 1,128,194 people in 2010. It has 7 district hospitals, 68 clinics, 18 CHCs, 22 mobile services and 1 provincial tertiary hospital.

1. Bernice Samuels Hospital

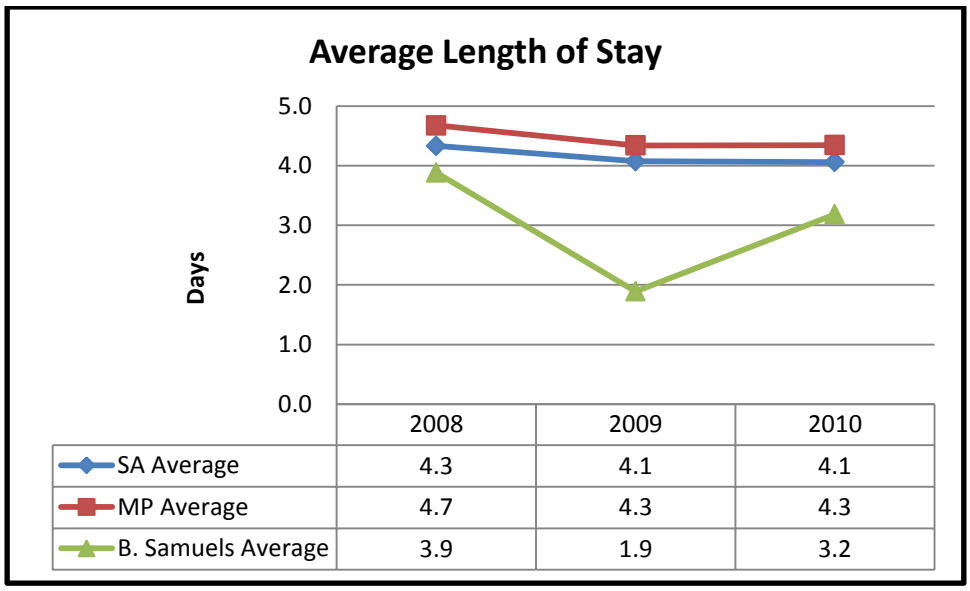
i: Description

Bernice Samuels District Hospital has 29 beds and lies in the Delmas sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

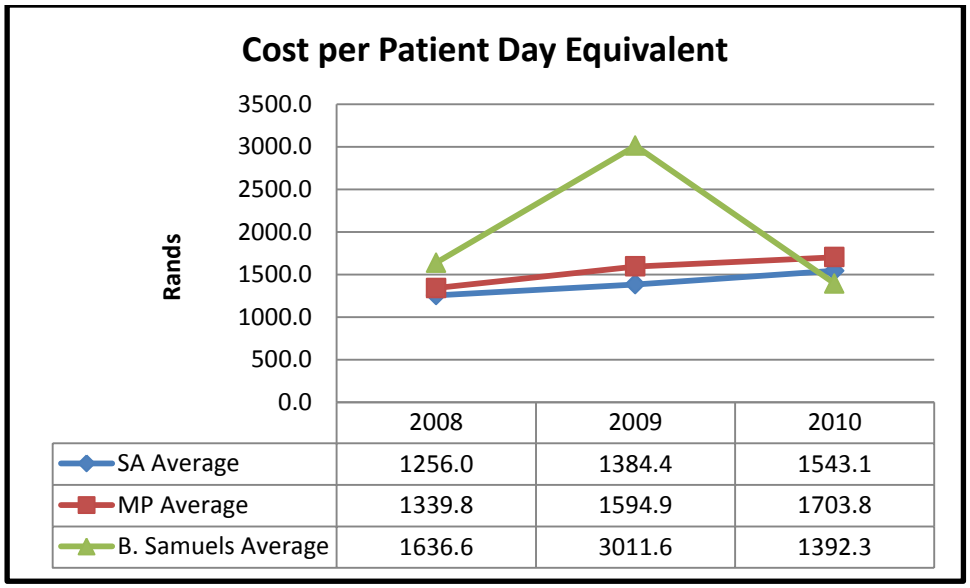
The ALOS fluctuated, decreasing to 1.9 days in 2009 before increasing in 2010. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
B. Samuels Average	3.9	1.9	3.2

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

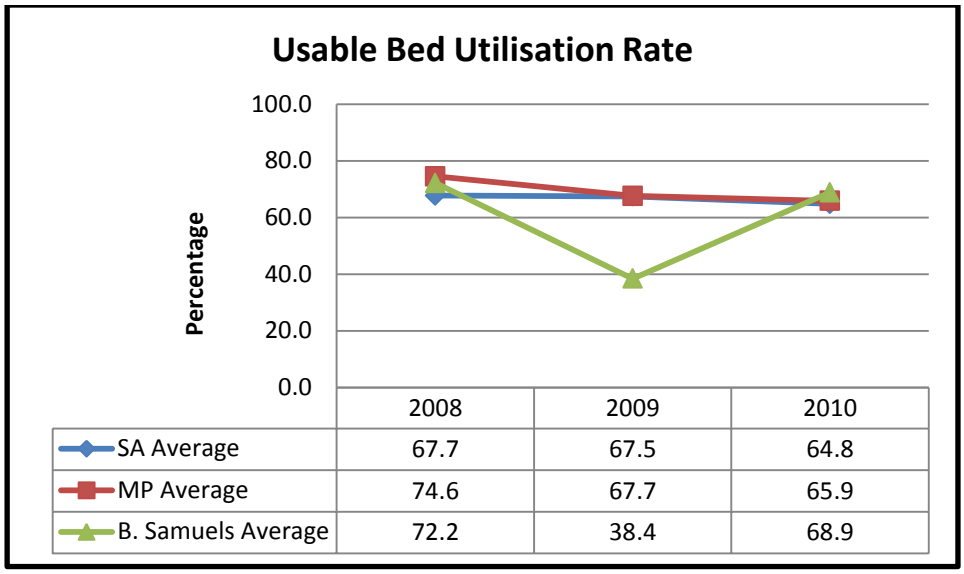
The CpPDE fluctuated increasing significantly (by 84%) between 2008 and 2009 before declining to a level below the 2008 average in 2010. These data should be reviewed and reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
B. Samuels Average	1636.6	3011.6	1392.3

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR fluctuated, decreasing significantly (by almost 50%) between 2008 and 2009, before increasing again in 2010. In 2010 it was higher than the national and provincial averages. These data should be reviewed and reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
B. Samuels Average	72.2	38.4	68.9

iii: Outcomes indicators

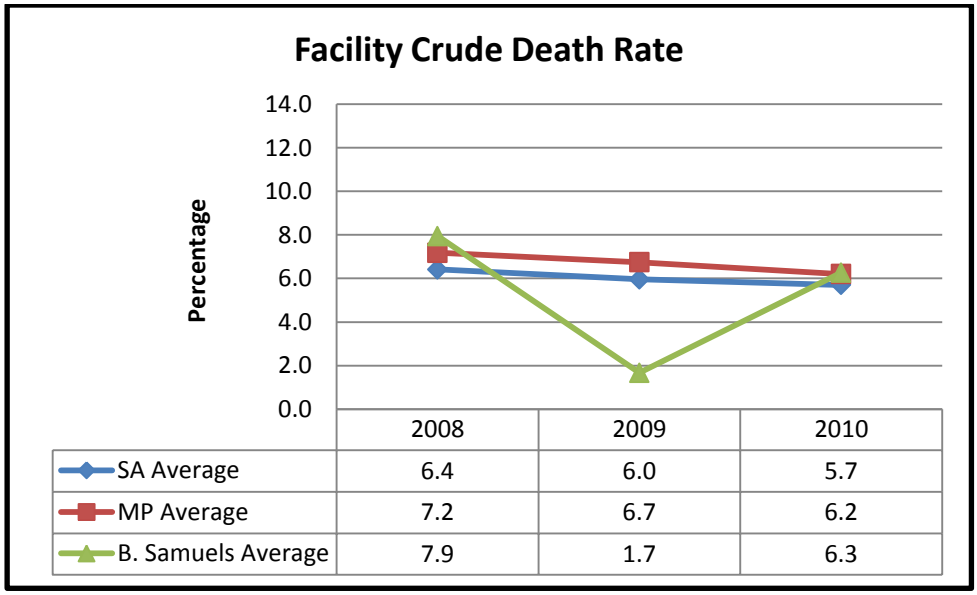
Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

Data on the CS rate were not available for the period 2008-2010. This requires urgent investigation.

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

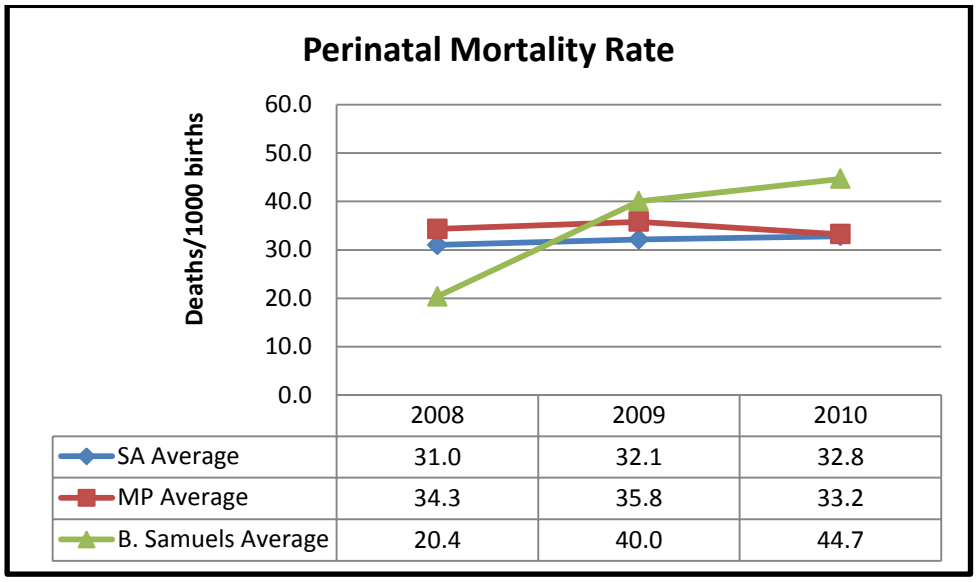
The FCDR fluctuated, decreasing significantly to a very low rate on 1.7% in 2009 before increasing in 2010. It was in line with the provincial average in 2010. These data should be reviewed to ascertain the reasons for the fluctuation observed.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
B. Samuels Average	7.9	1.7	6.3

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

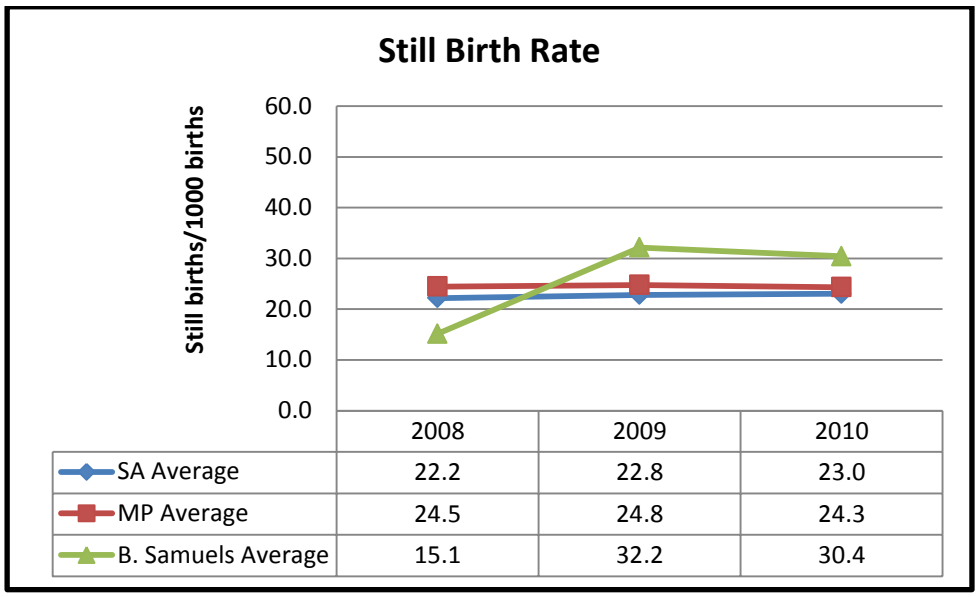
The PNMR increased significantly (more than two-fold), between 2008 and 2010. It was higher than the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
B. Samuels Average	20.4	40.0	44.7

3. Still birth rate (SBR): number of babies born dead/1000 births

As with the PNMR, the SBR increased significantly during the reporting period. It was higher than the national and provincial averages in 2009 and 2010. The reasons for the high SBR should be ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
B. Samuels Average	15.1	32.2	30.4

v: Conclusions:

The ALOS, CpPDE, BUR, FCDR data should be reviewed to ascertain the reasons for the fluctuations observed. The absence of CS rate data requires urgent investigation. If the hospital is unable to perform Caesarean sections then by definition it is no longer a hospital and should be re-classified as a CHC. The reasons for the SBR and PNMR values that are above the national and provincial averages should be ascertained

2. *Mmametlhake Hospital*

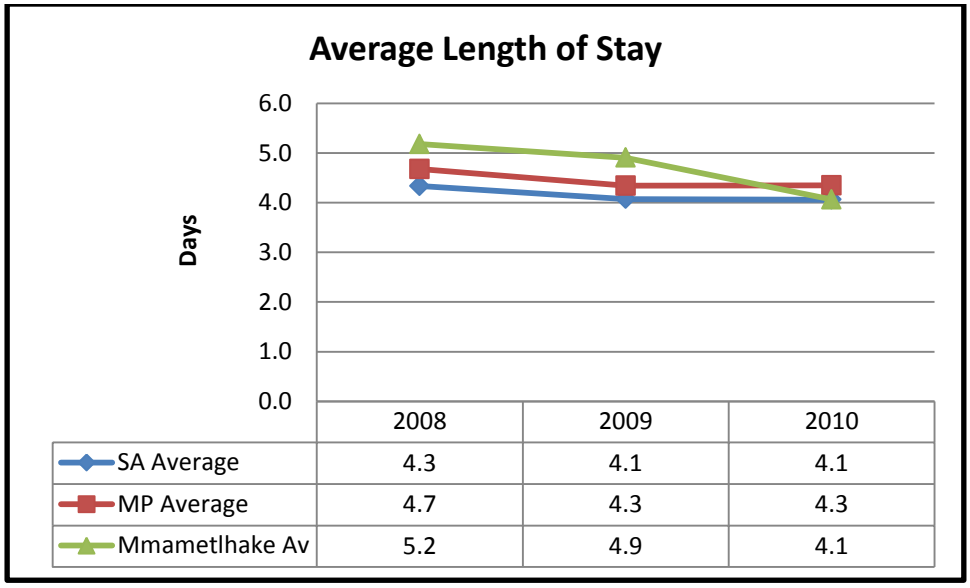
i: Description

Mmametlhake District Hospital has 60 beds and lies in the Dr JS Moroka sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

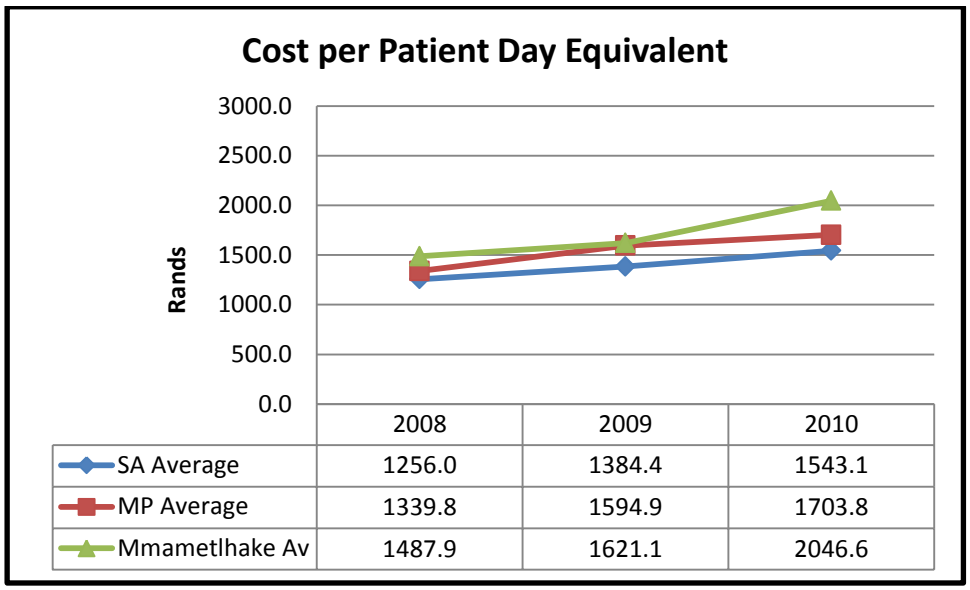
The ALOS decreased during the reporting period, and was in line with the national and provincial averages in 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Mmametlhake Av	5.2	4.9	4.1

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

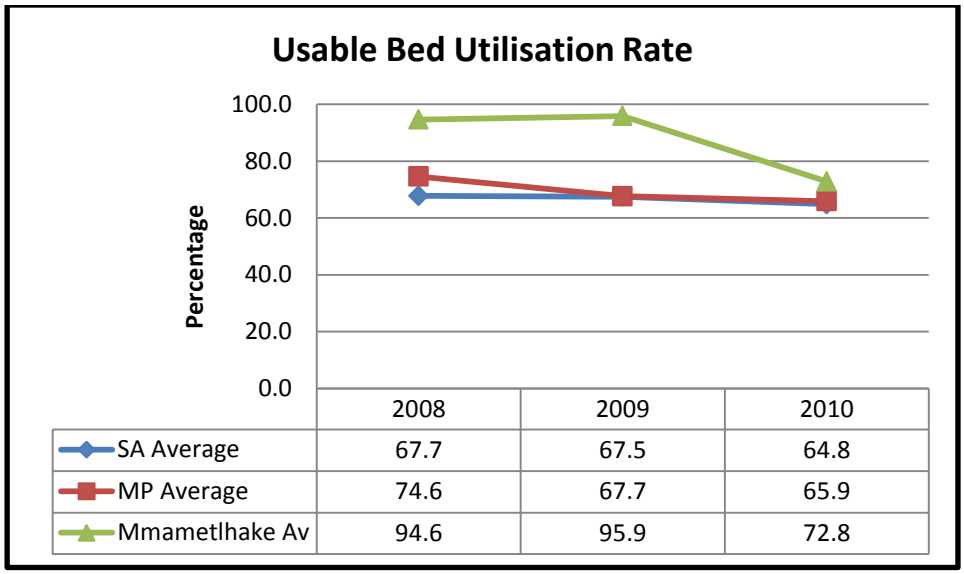
The CpPDE increased steadily over the reporting period. It was higher than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Mmametlhake Av	1487.9	1621.1	2046.6

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR was very high in 2008 and 2009, and was much higher than the national and provincial averages during this period. It decreased substantially in 2010, but remained higher than the national and provincial averages.

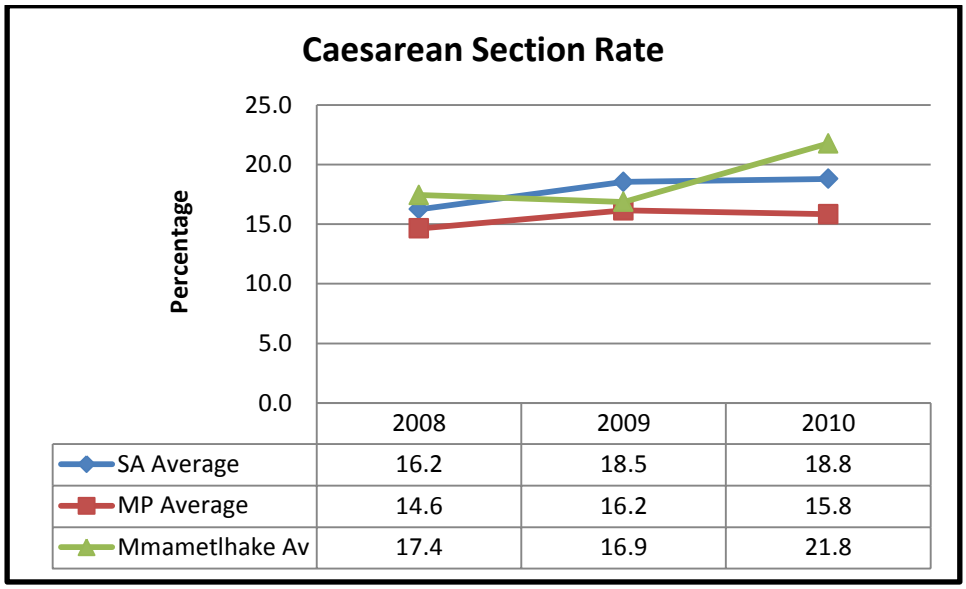


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Mmametlhake Av	94.6	95.9	72.8

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate decreased between 2008 and 2009 and then increased in 2010. It was higher than the national and provincial averages in 2010.

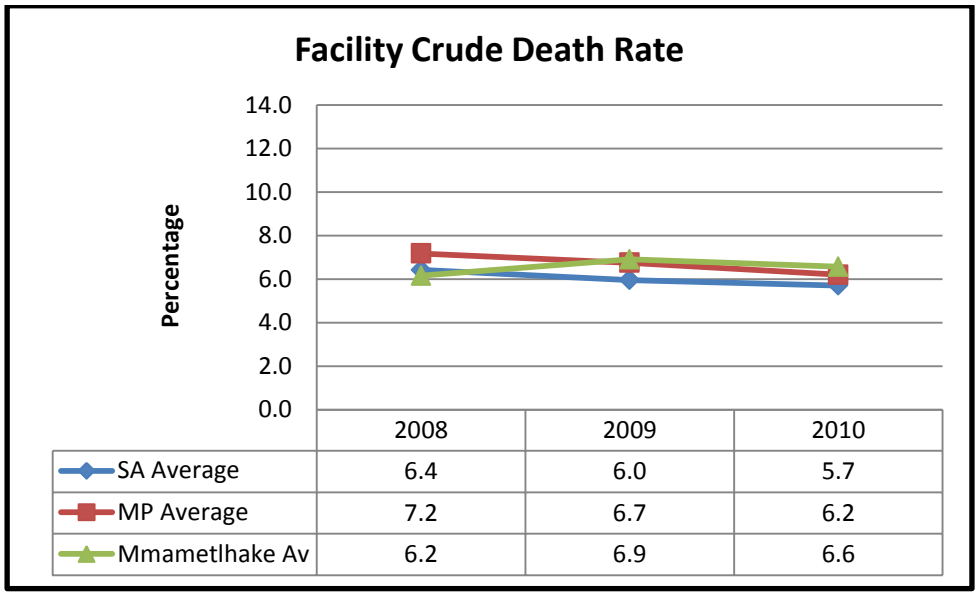


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Mmametlhake Av	17.4	16.9	21.8

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

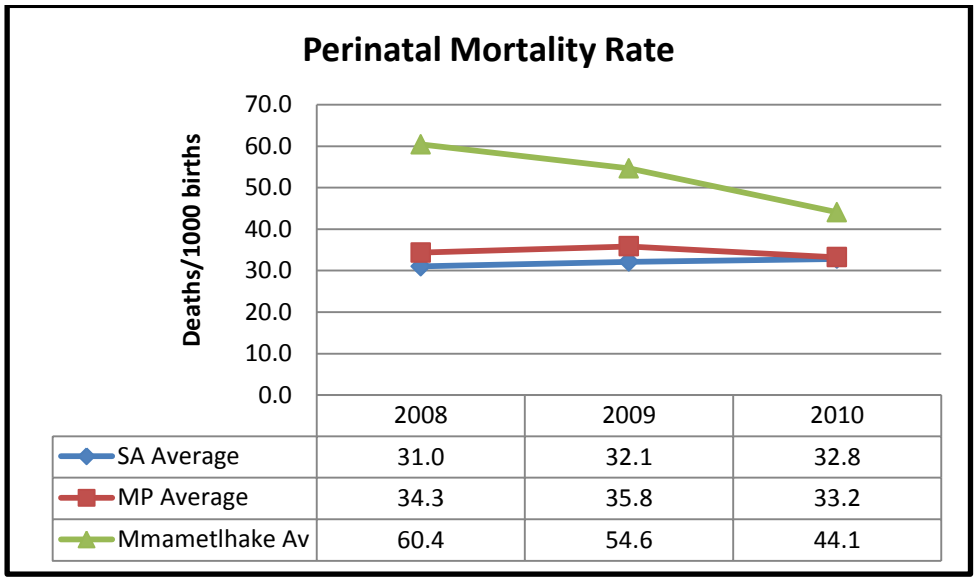
The FCDR fluctuated marginally between 2008 and 2010. It was higher than the national and provincial averages in 2009 and 2010



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Mmametlhake Av	6.2	6.9	6.6

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

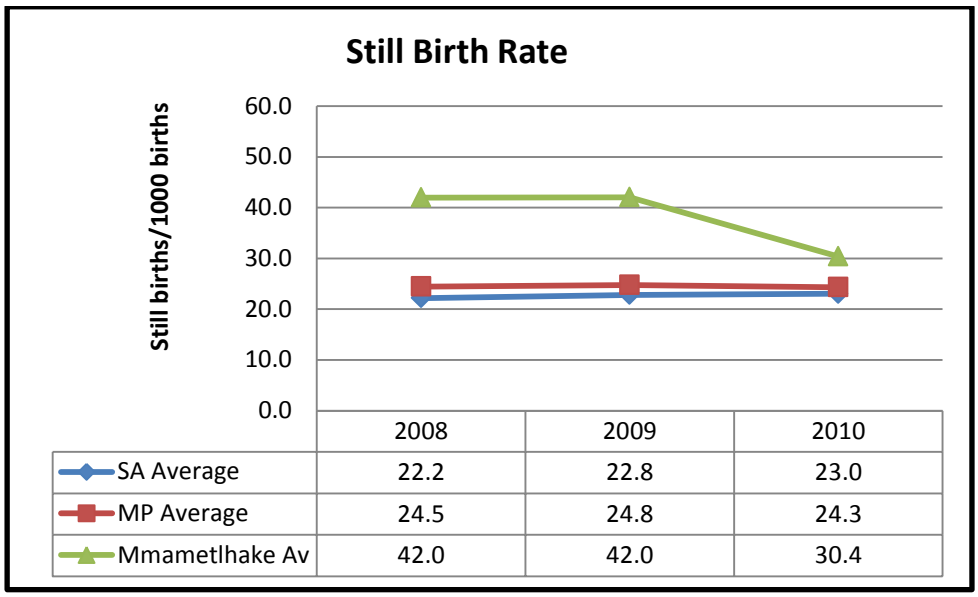
The PNMR decreased steadily over the reporting period. It was significantly higher than the national and provincial averages throughput this period. The reasons for the very high PNMR should be ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Mmametlhake Av	60.4	54.6	44.1

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR was constant in 2008 and 2009 and decreased in 2010. It was higher than the national and provincial averages throughout the reporting period. The reasons for the high SBR should be ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Mmametlhake Av	42.0	42.0	30.4

v: Conclusions:

The reasons for the high CpPDE and the high CS rate should be ascertained. The declining trend of the PNMR and SBR should be maintained.

3. HA Grove Hospital

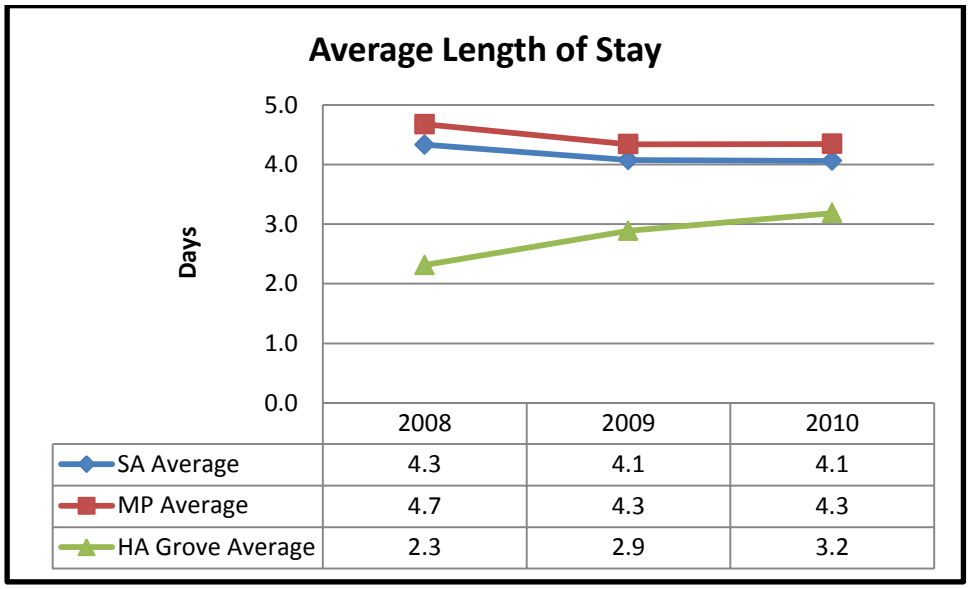
i: Description

HA Grove District Hospital has 12 beds and lies in the Emakhazeni sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

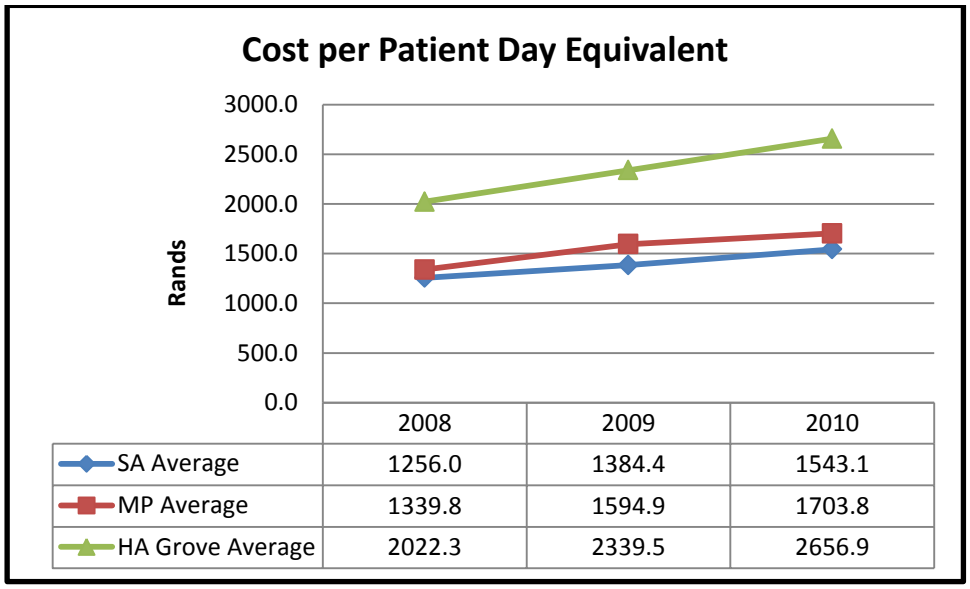
The ALOS increased steadily between 2008 and 2010. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
HA Grove Average	2.3	2.9	3.2

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

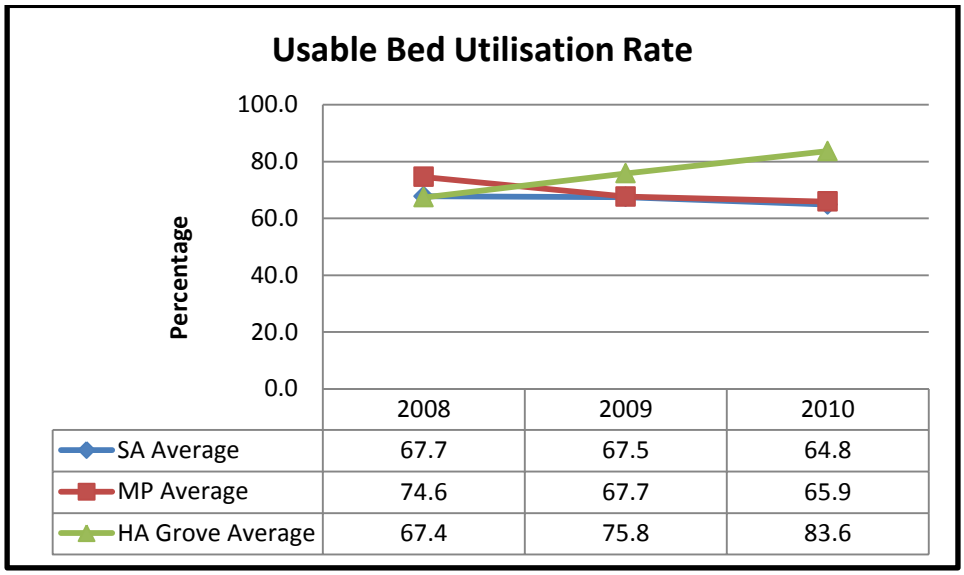
The CpPDE increased between 2008 and 2010. It was significantly higher than the national and provincial averages throughout this period. The reasons for the high CpPDE should be ascertained.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
HA Grove Average	2022.3	2339.5	2656.9

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR increased over the reporting period, and was higher than the national and provincial averages in 2009 and 2010. The reasons for the high BUR should be ascertained.



	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
HA Grove Average	67.4	75.8	83.6

iii: Outcomes indicators

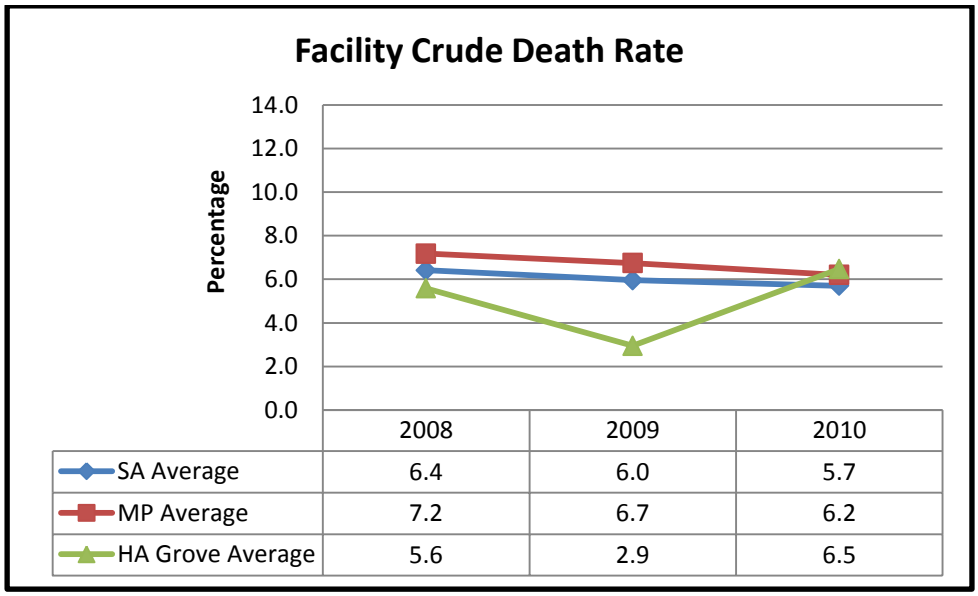
Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

Data on the CS rate were not available for the period 2008-2010. This requires urgent investigation.

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

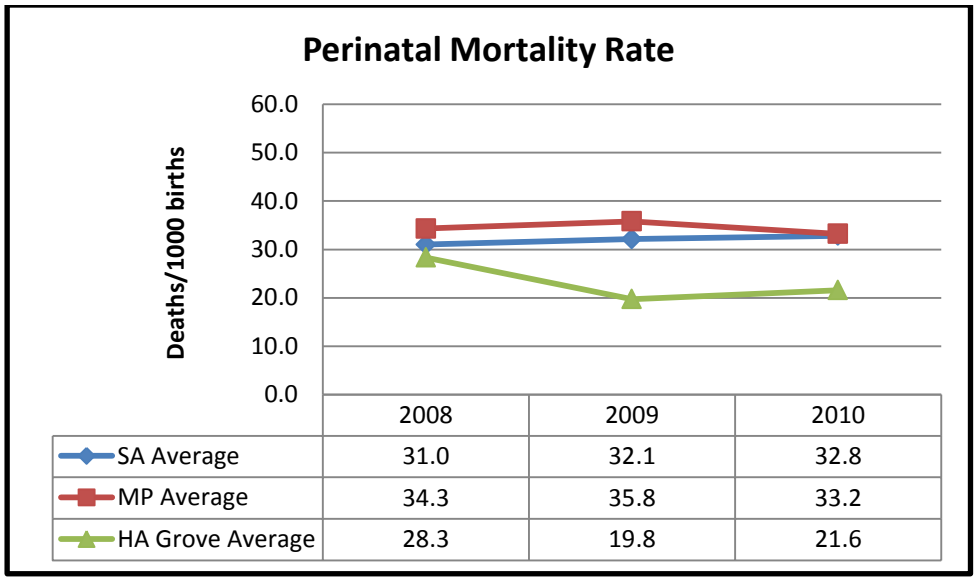
The FCDR fluctuated; it decreased to a low rate of 2.9% in 2009 before increasing in 2010. The 2010 rate was in line with the provincial average. The data should be reviewed and the reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
HA Grove Average	5.6	2.9	6.5

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

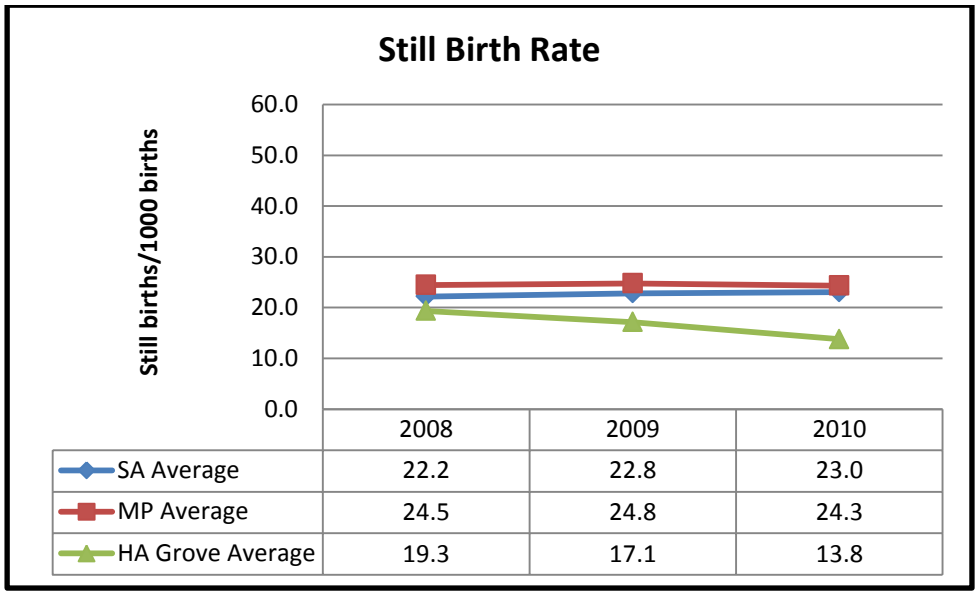
The PNMR decreased between 2008 and 2009 before increasing in 2010. It was lower than the national and provincial averages throughout the reporting period. The data should be reviewed and the reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
HA Grove Average	28.3	19.8	21.6

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR decreased over the reporting period. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
HA Grove Average	19.3	17.1	13.8

v: Conclusions:

The reasons for the high CpPDE and the BUR should be ascertained. The absence of CS rate data requires urgent investigation. If the hospital is unable to perform Caesarean sections then by definition it is no longer a hospital and should be re-classified as a CHC. The FCDR and PNMR data should be reviewed and the reasons for the fluctuations observed ascertained.

4. *Waterval Boven Hospital*

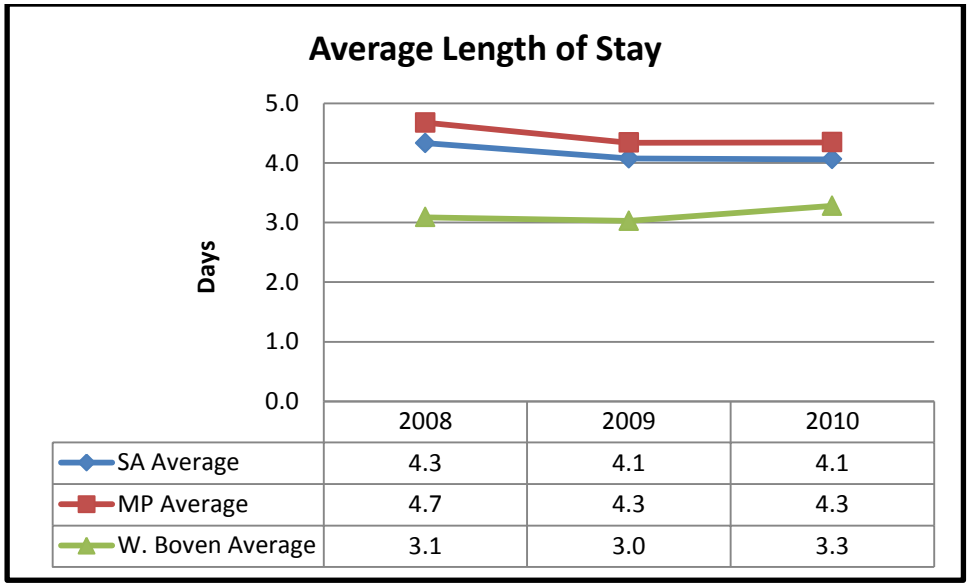
i: Description

Waterval Boven District Hospital has 12 beds and lies in the Emakhazeni sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

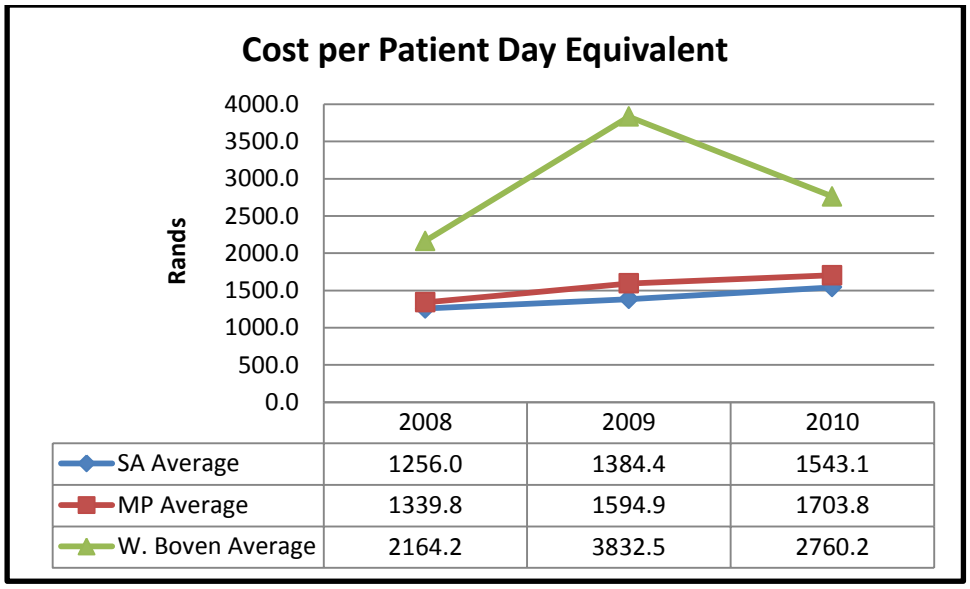
The ALOS was relatively constant over the reporting period, and was lower than the national and provincial averages.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
W. Boven Average	3.1	3.0	3.3

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

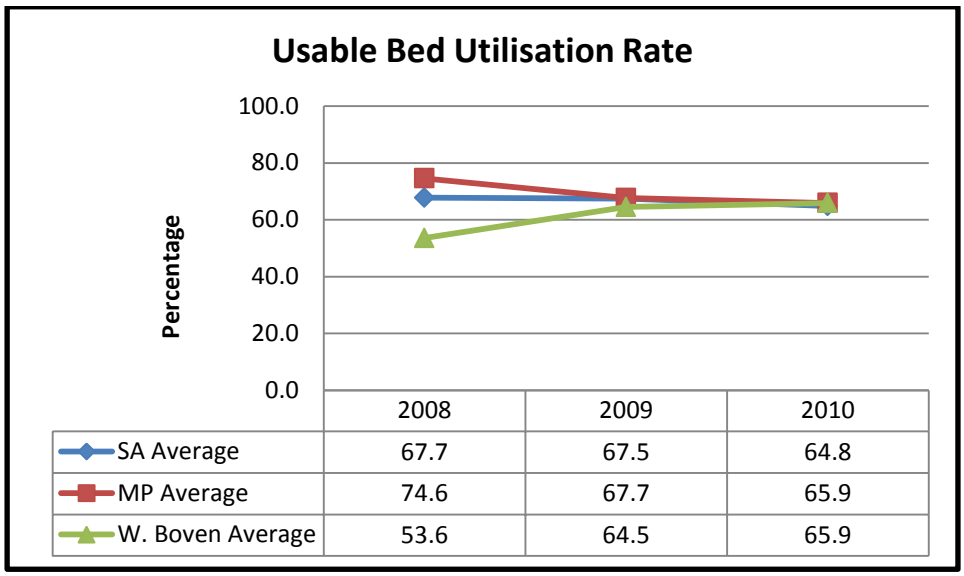
The CpPDE fluctuated, increasing between 2008 and 2009 before decreasing in 2010. It was much higher than the national and provincial averages throughout the reporting period. The data should be reviewed to ascertain reasons for the high CpPDE and the fluctuation observed.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
W. Boven Average	2164.2	3832.5	2760.2

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR increased between 2008 and 2010. It was in line with the national and provincial averages in 2010.



	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
W. Boven Average	53.6	64.5	65.9

iii: Outcomes indicators

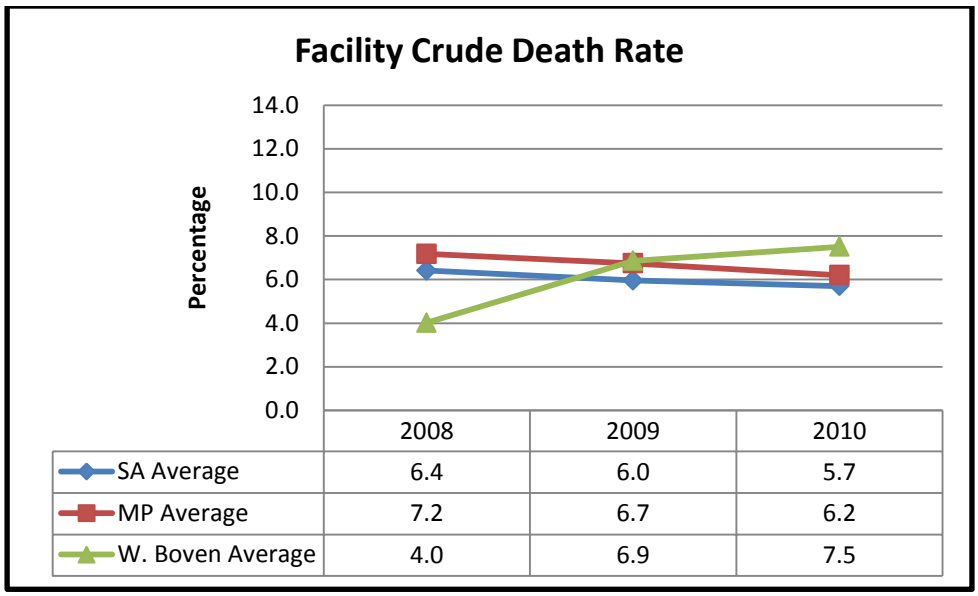
Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

Data on the CS rates were not available for the period 2008-2010. This requires urgent investigation.

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

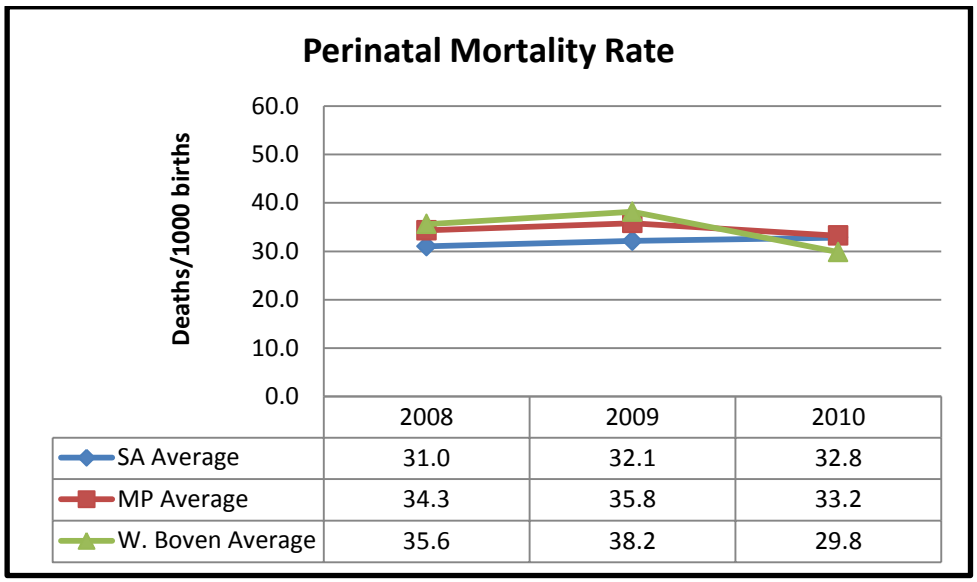
The FCDR increased steadily between 2008 and 2010. It was higher than the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
W. Boven Average	4.0	6.9	7.5

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

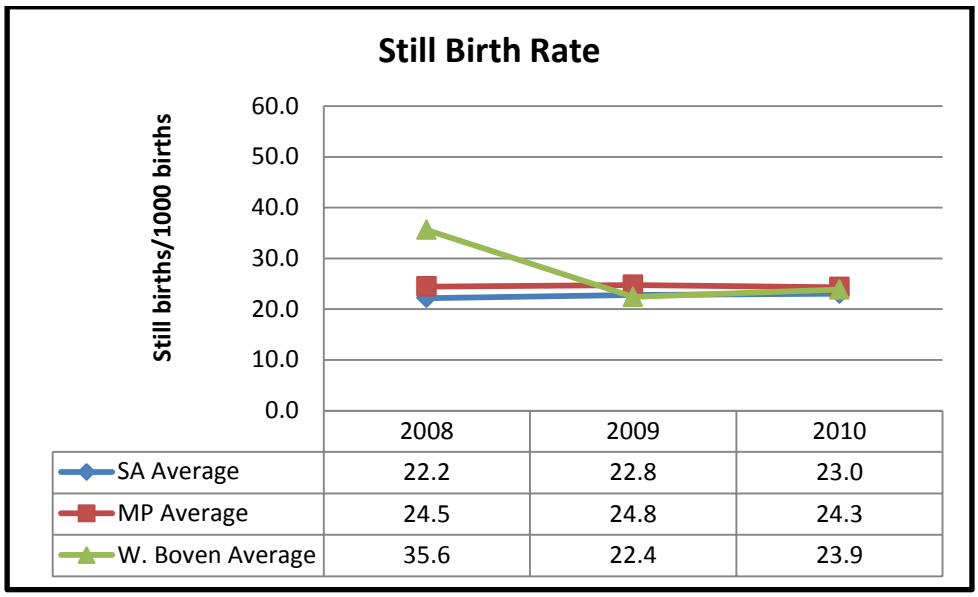
The PNMR decreased between 2008 and 2010. It was lower than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
W. Boven Average	35.6	38.2	29.8

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR decreased significantly between 2008 and 2009, and increased marginally in 2010. It was in line with the national and provincial averages in 2010.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
W. Boven Average	35.6	22.4	23.9

v: Conclusions:

The CpPDE data should be reviewed to ascertain the reasons for the high values and the fluctuation observed. The absence of CS rate data requires urgent investigation. If the hospital is unable to perform Caesarean sections then by definition it is no longer a hospital and should be re-classified as a CHC. The increasing FCDR also requires attention.

5. *Impungwe Hospital*

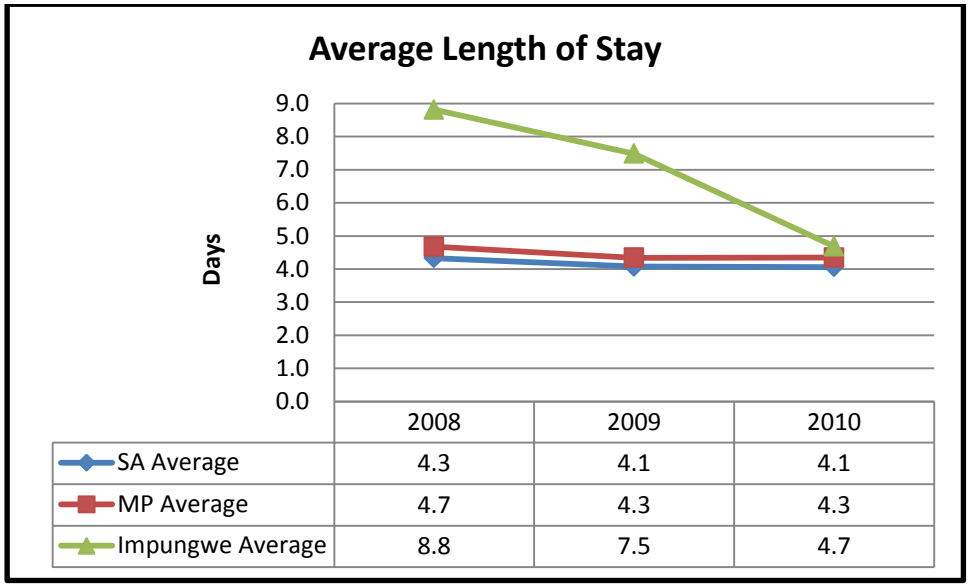
i: Description

Impungwe District Hospital has 66 beds and lies in the Emalahleni sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

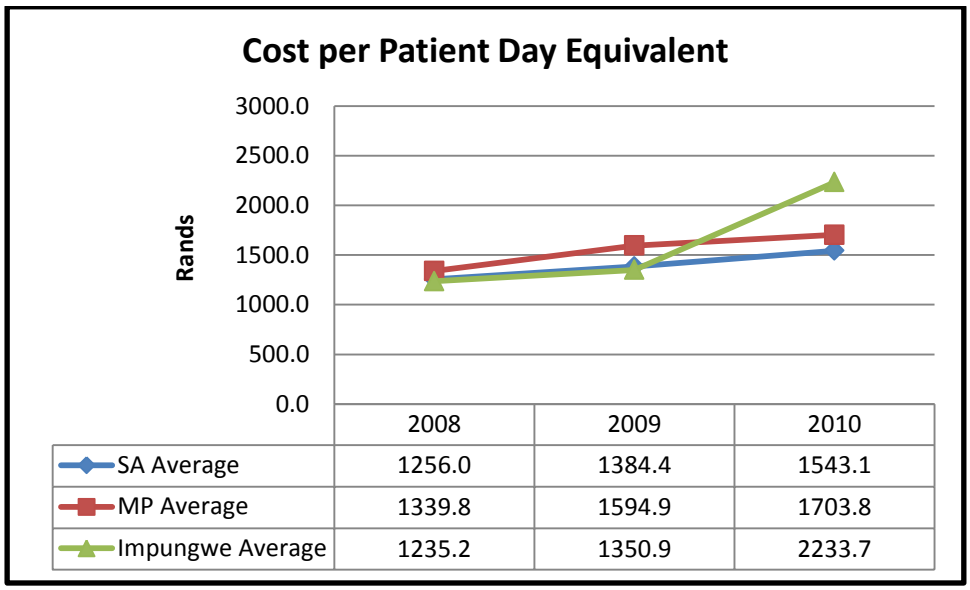
The ALOS was very high and was significantly higher than the national and provincial averages in 2008 and 2009. It decreased steadily over the reporting period and was closer to the national and provincial averages in 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Impungwe Average	8.8	7.5	4.7

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

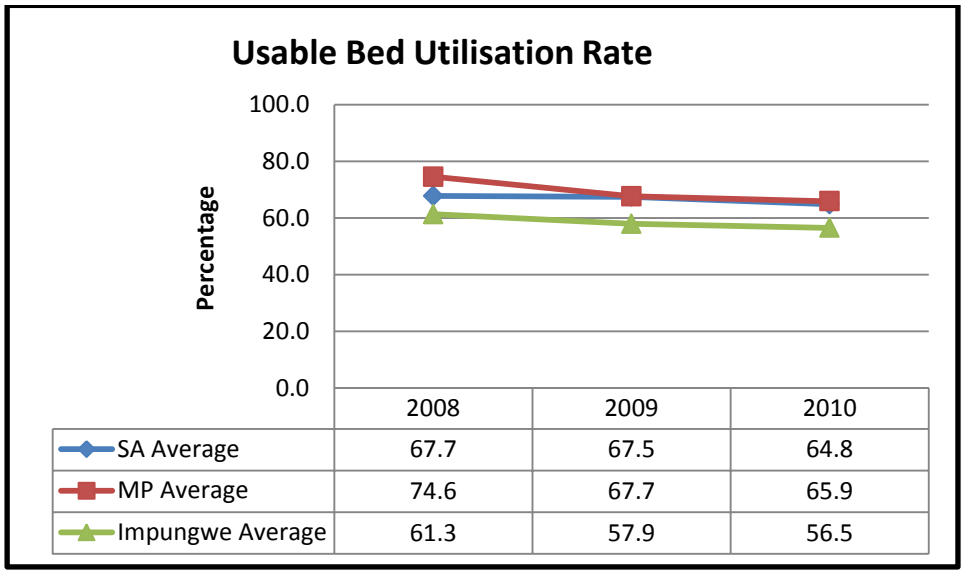
The CpPDE increased over the reporting period and was significantly higher than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Impungwe Average	1235.2	1350.9	2233.7

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR decreased substantially between 2008 and 2009, with a further smaller decrease in 2010. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Impungwe Average	61.3	57.9	56.5

iii: Outcomes indicators

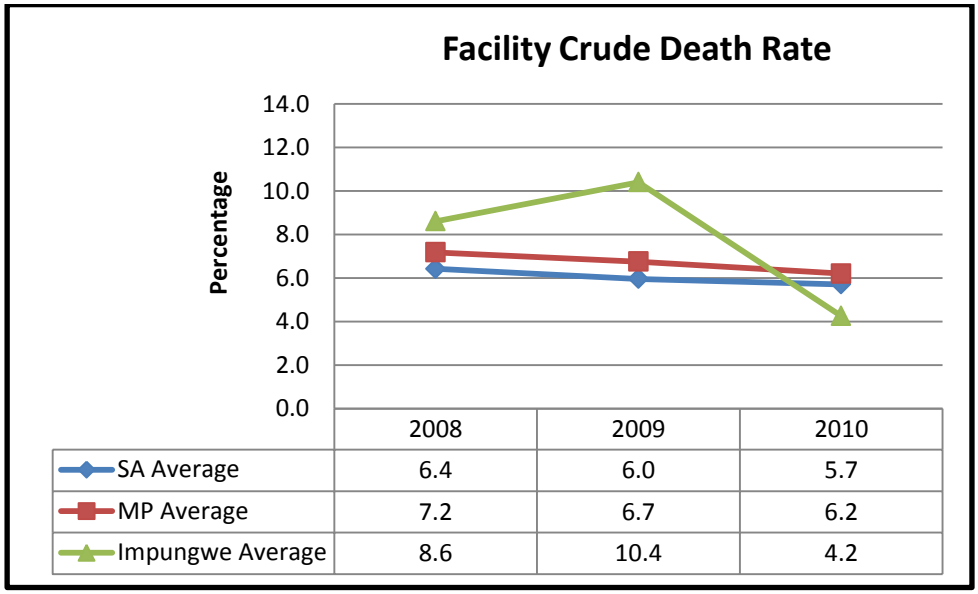
Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

Data on the CS rates were not available for the period 2008-2010. This requires urgent investigation.

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

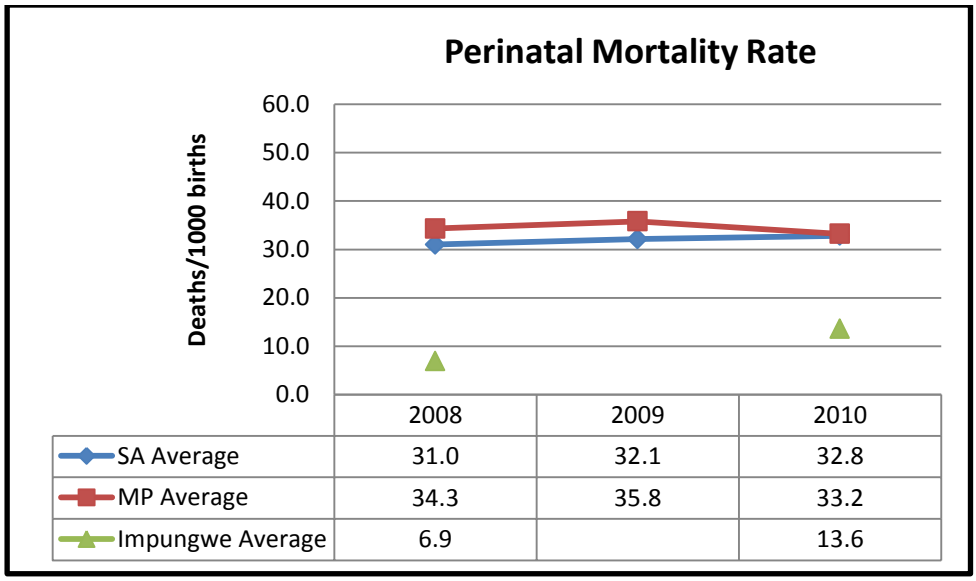
The FCDR increased between and 2008 and 2009 and then decreased significantly in 2010. These data should be reviewed to ascertain the reasons for the fluctuation observed.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Impungwe Average	8.6	10.4	4.2

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

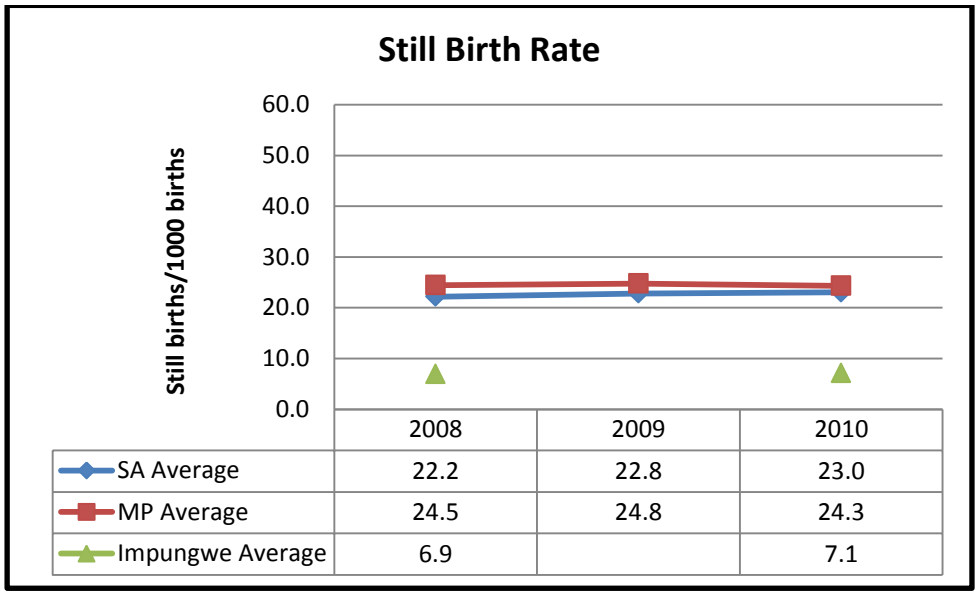
There were no PNMR data in 2009. The rates in 2008 and 2010 were significantly lower than the national and provincial averages. These data should be reviewed to confirm the 2008 and 2010 rates and to ascertain the reasons for the absence of data in 2009.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Impungwe Average	6.9		13.6

3. Still birth rate (SBR): number of babies born dead/1000 births

As with the PNMR there were no data for 2009. The rate in 2010 was unchanged from that in 2008. These data should be reviewed to confirm the 2008 and 2010 rates and to ascertain the reasons for the absence of data in 2009.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Impungwe Average	6.9		7.1

v: Conclusions:

The reasons for the high CpPDE and the low BUR should be ascertained. The absence of CS rate data requires urgent investigation. If the hospital is unable to perform Caesarean sections then by definition it is no longer a hospital and should be re-classified as a CHC. The FCDR data should be reviewed to ascertain the reasons for the fluctuation observed. The PNMR and SBR data should also be reviewed to confirm the rates observed in 2008 and 2010 and to ascertain the reasons for the absence of data in 2009.

6. *Middleburg Hospital*

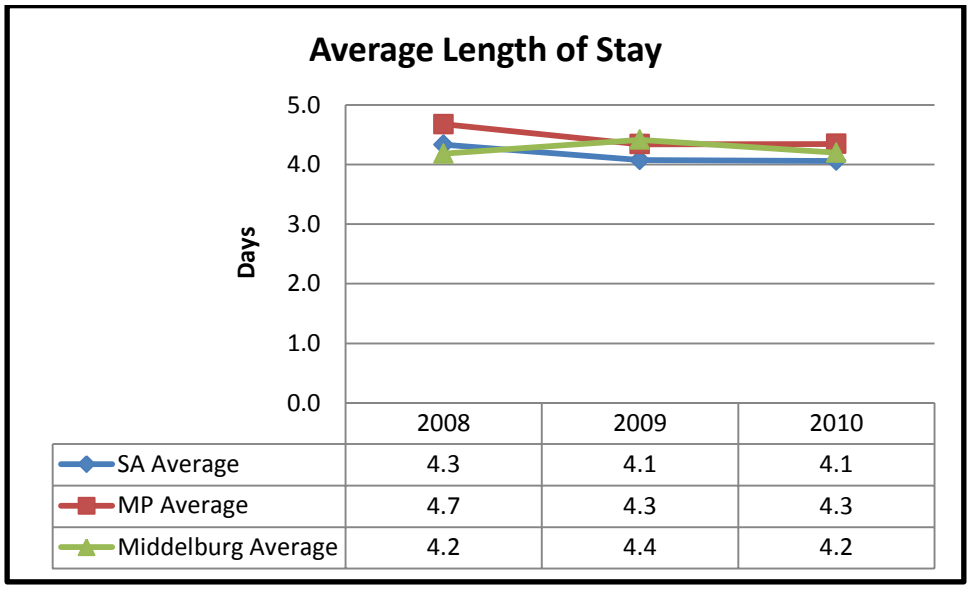
i: Description

Middleburg District Hospital has 218 beds and lies in the Steven Tshwete sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

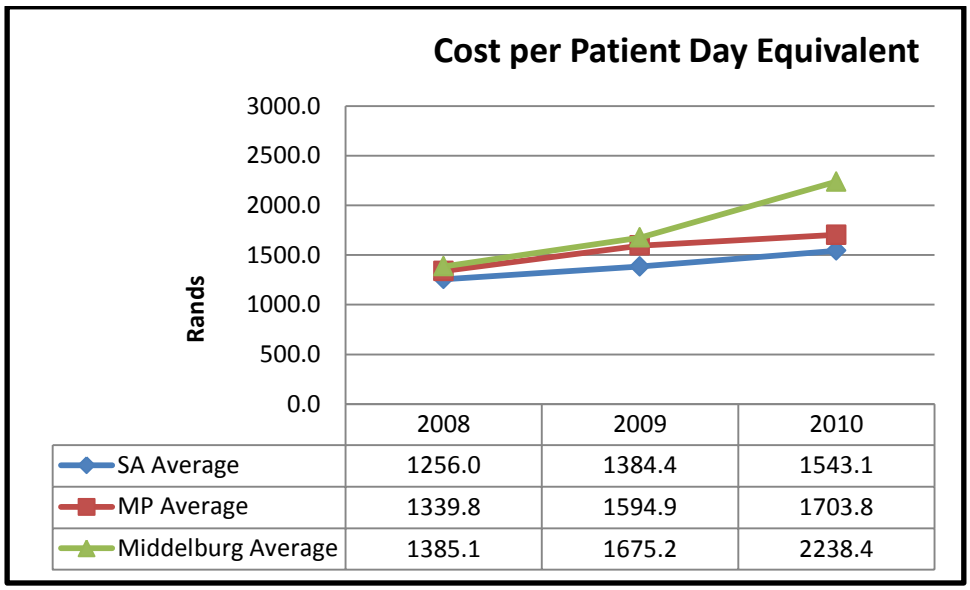
The ALOS was largely unchanged at about 4 days throughout the reporting period, and was in line with the national and provincial averages in 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Middelburg Average	4.2	4.4	4.2

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

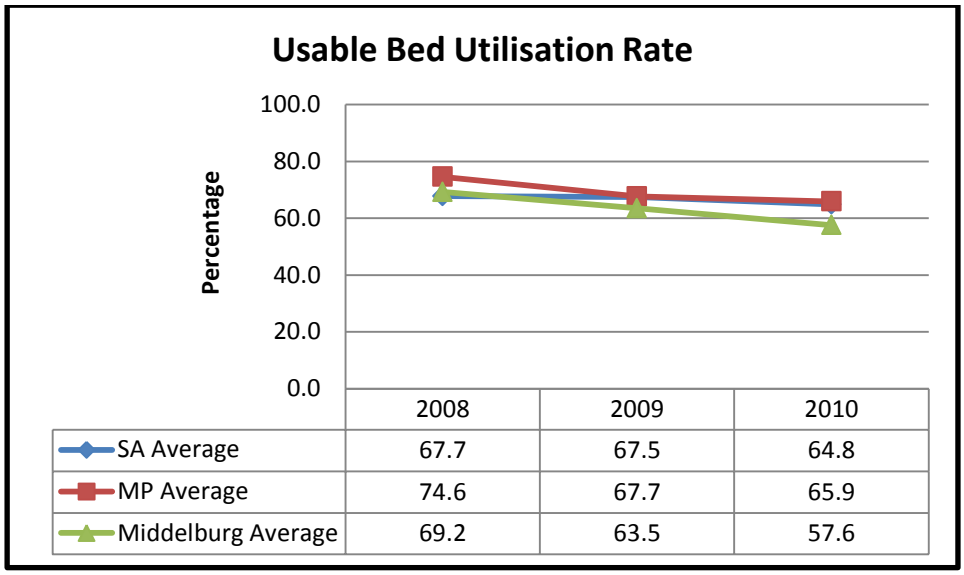
The CpPDE increased substantially between 2008 and 2010. It was much higher than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Middelburg Average	1385.1	1675.2	2238.4

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR decreased steadily between 2008 and 2010. It was lower than the national and provincial averages in 2009 and 2010.

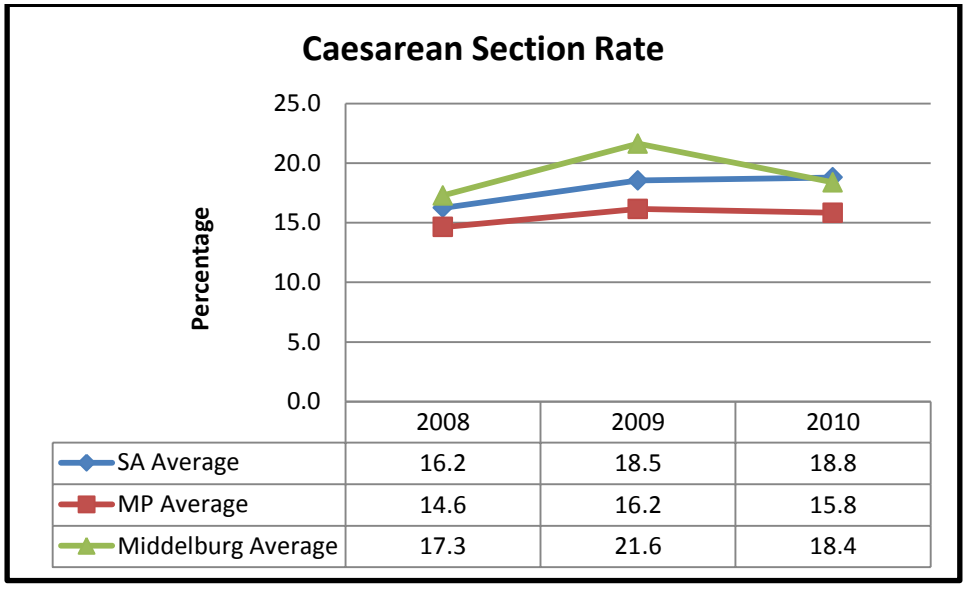


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Middelburg Average	69.2	63.5	57.6

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate fluctuated slightly between 2008 and 2010. It increased between 2008 and 2009 and decreased in 2010. It was higher than the provincial average in 2010.

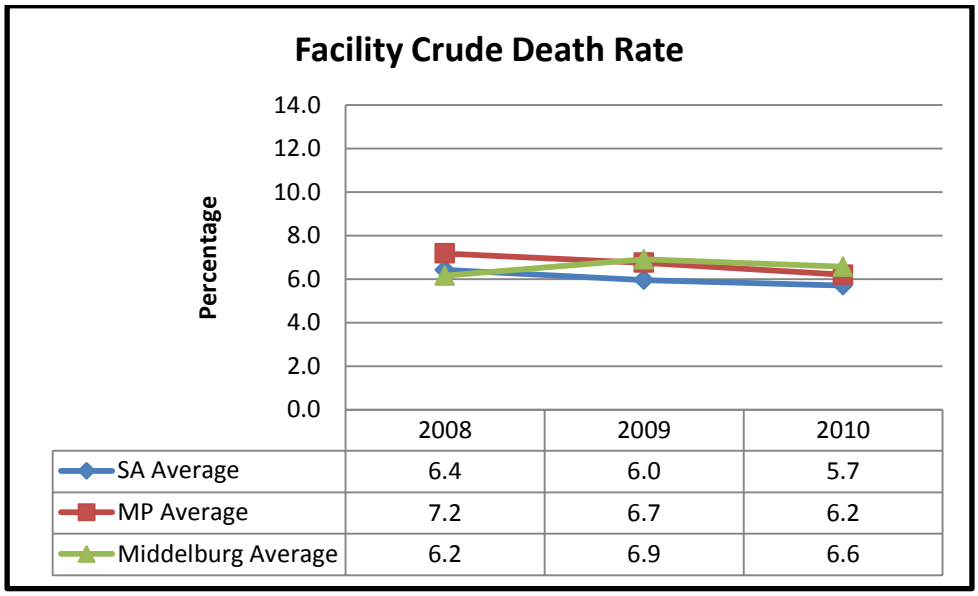


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Middelburg Average	17.3	21.6	18.4

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

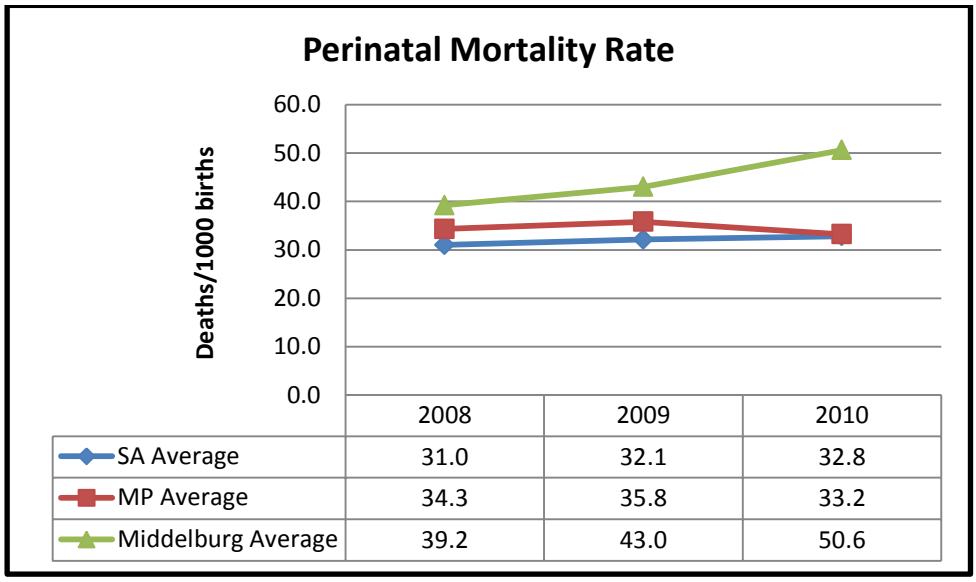
The FCDR increased marginally between 2008 and 2010. It was higher than the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Middelburg Average	6.2	6.9	6.6

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

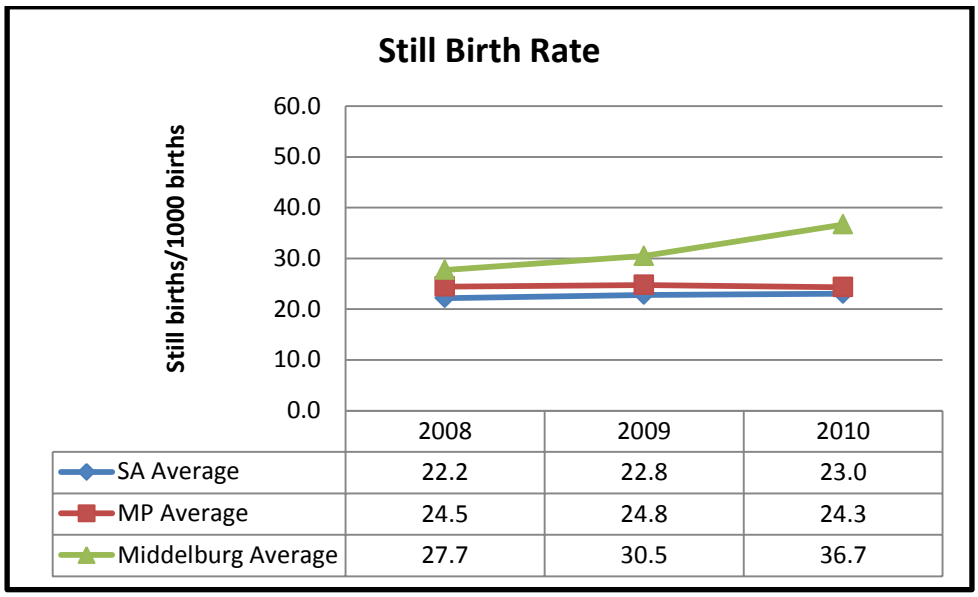
The PNMR increased over the reporting period. It was higher than the national and provincial averages throughout this period. The reasons for the high PNMR should be ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Middelburg Average	39.2	43.0	50.6

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR increased over the reporting period. It was higher than the national and provincial averages throughout this period. The reasons for the high SBR should be ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Middelburg Average	27.7	30.5	36.7

v: Conclusions:

The reasons for the high CpPDE should be ascertained. The declining BUR requires investigation. The reasons for the high PNMR and SBR should also be ascertained.

7. *KwaMhlanga Hospital*

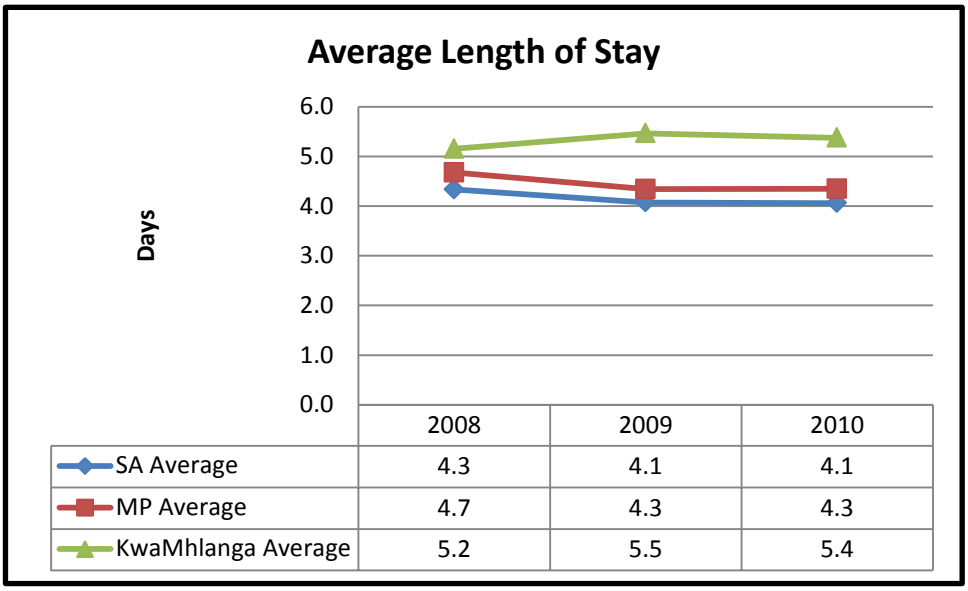
i: Description

KwaMhlanga District Hospital has 148 beds and lies in the Thembisile sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

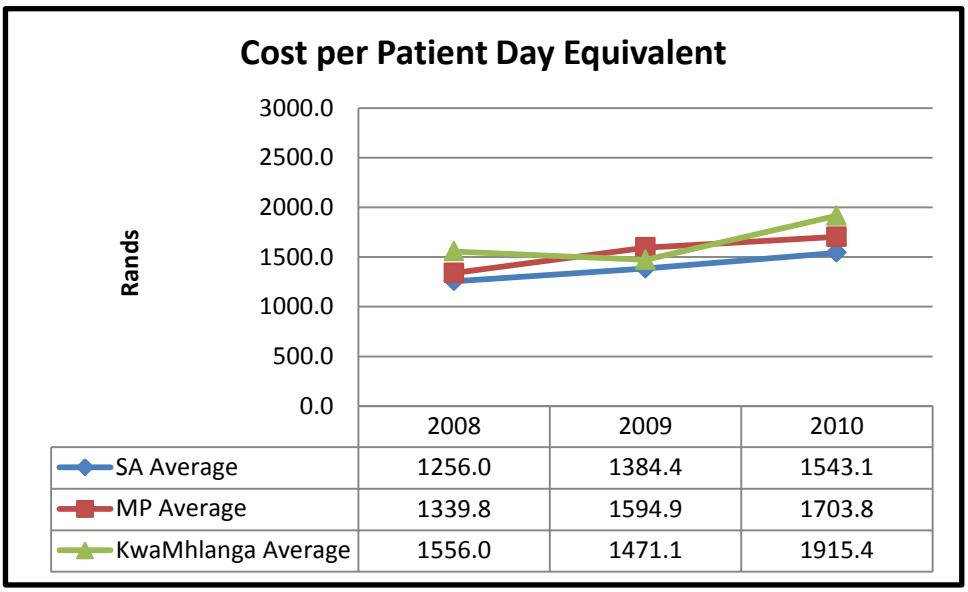
The ALOS was relatively constant between 2008 and 2010. It was higher than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
KwaMhlanga Average	5.2	5.5	5.4

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

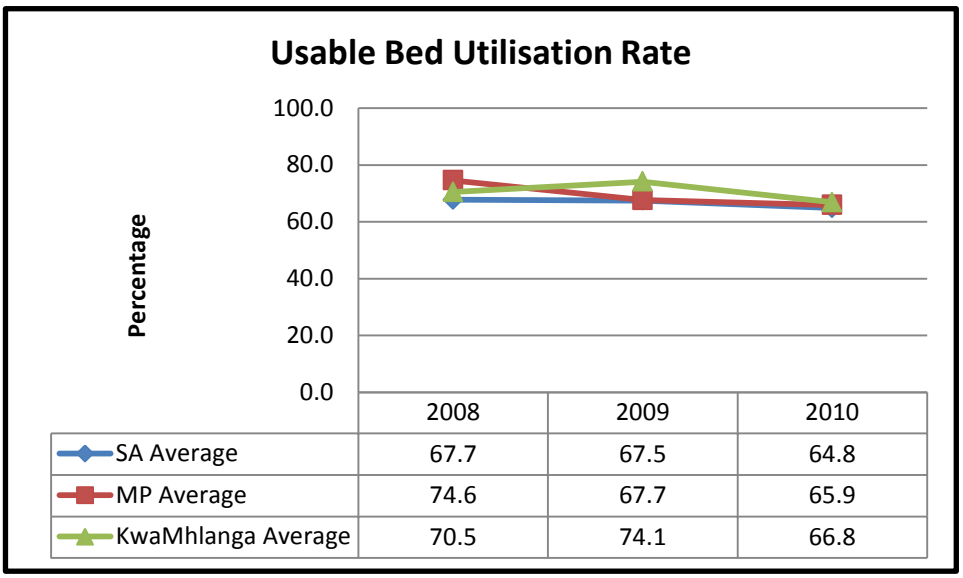
The CpPDE fluctuated, decreasing between 2008 and 2009 and increasing to R1915 in 2010, when it was higher than the national and provincial averages.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
KwaMhlanga Average	1556.0	1471.1	1915.4

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR fluctuated slightly, increasing between 2008 and 2009 and then decreasing in 2010. It was in line with the national and provincial averages in 2010.

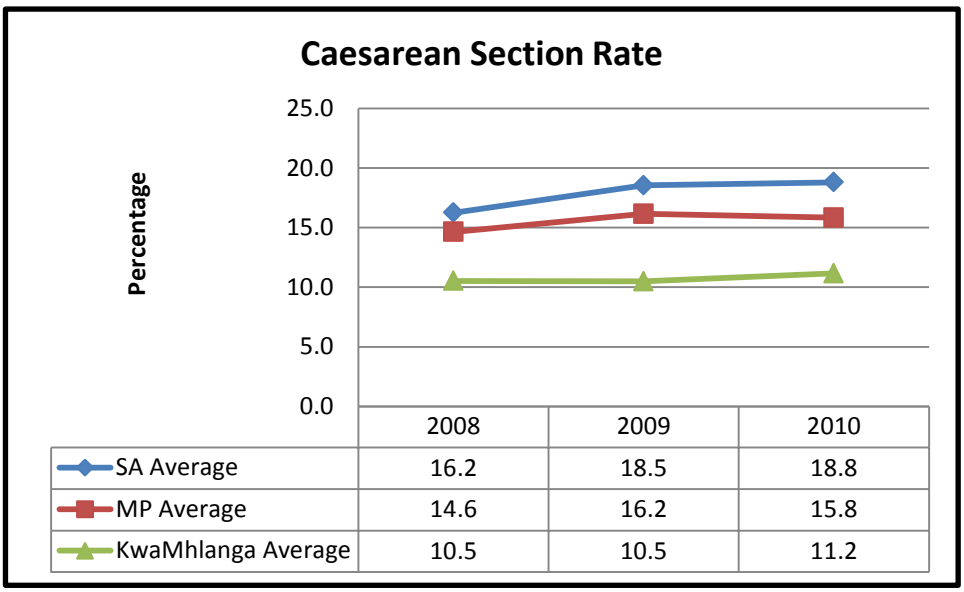


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
KwaMhlanga Average	70.5	74.1	66.8

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate was largely constant over the reporting period. It was lower than the national and provincial averages throughout this period.

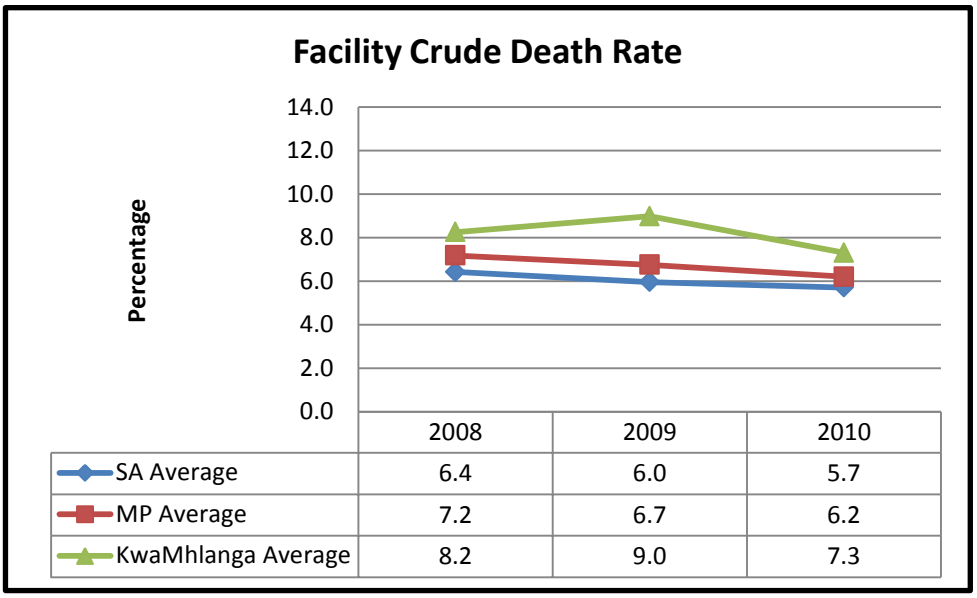


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
KwaMhlanga Average	10.5	10.5	11.2

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

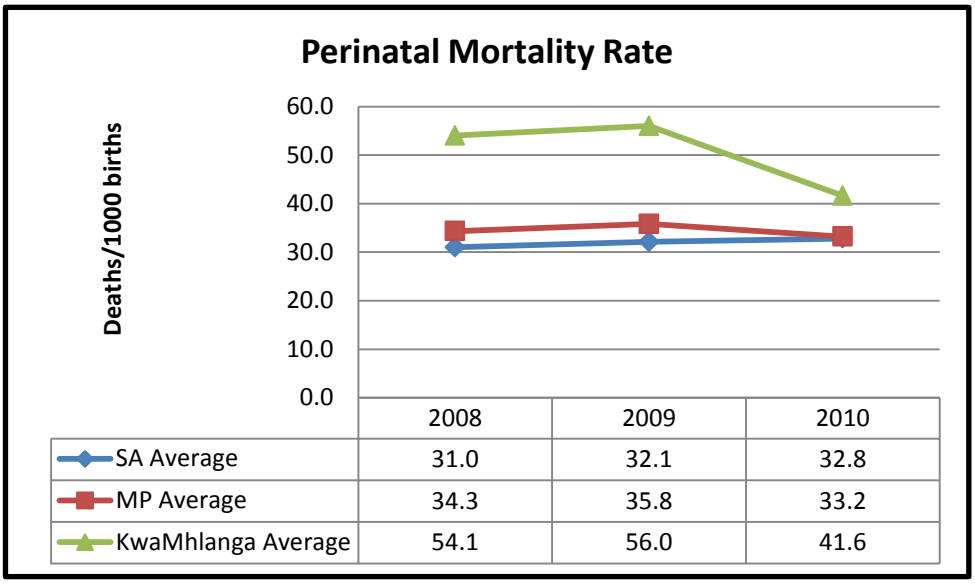
The FCDR increased marginally between 2008 and 2009, before decreasing in 2010. It was higher than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
KwaMhlanga Average	8.2	9.0	7.3

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

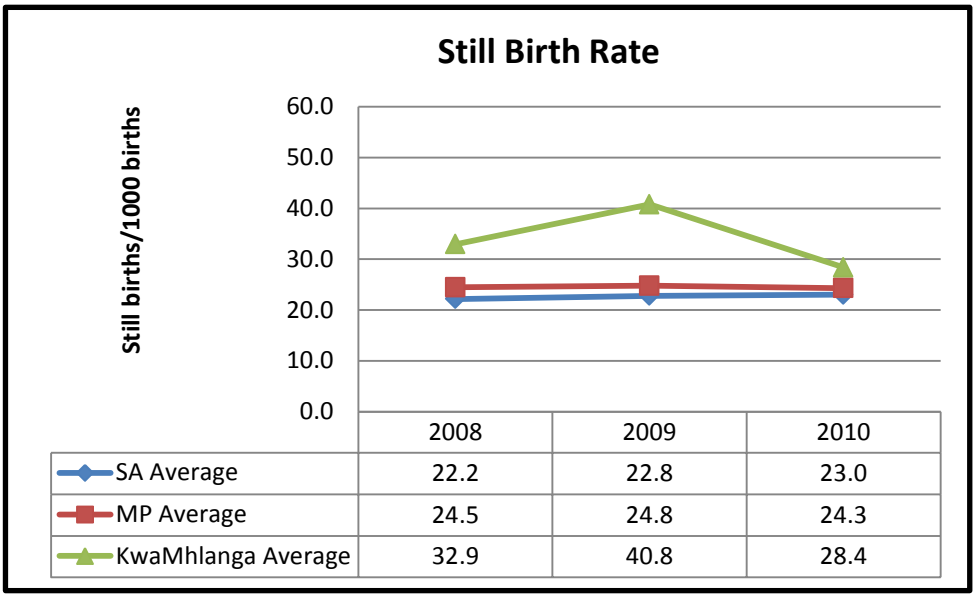
The PNMR increased slightly between 2008 and 2009 and then decreased substantially in 2010. It was significantly higher than the national and provincial averages throughout the reporting period. The reasons for the high PNMR should be ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
KwaMhlanga Average	54.1	56.0	41.6

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR fluctuated, increasing to a high rate of 41/1000 births in 2009 before decreasing in 2010. It was higher than the national and provincial averages throughout the reporting period. The data should be reviewed and the reasons for the fluctuation and the high rates observed ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
KwaMhlanga Average	32.9	40.8	28.4

v: Conclusions:

The reasons for the high CpPDE should be ascertained. Although the PNMR and SBR declined, they were higher than the national and provincial averages; the reasons for this should be ascertained. The SBR data should also be reviewed to ascertain the reasons for the fluctuation observed.

C Ehlanzeni – DC32

Ehlanzeni District had a population of approximately 1,563,857 people in 2010. It has 8 district hospitals, 105 clinics, 14 CHCs, 32 mobile services 1 specialised hospital and 1 provincial tertiary hospital.

1. Matikwana Hospital

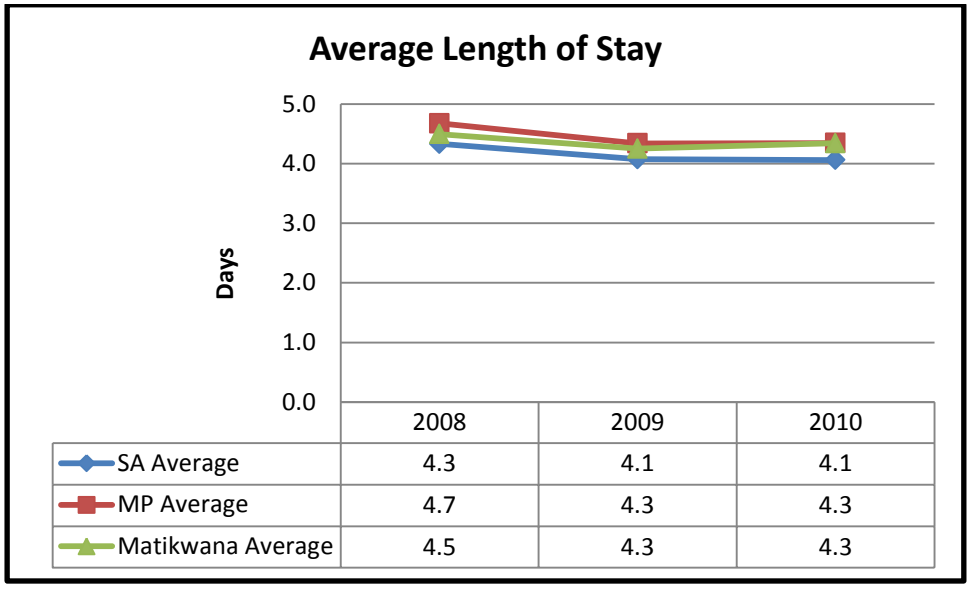
i: Description

Matikwana District Hospital has 178 beds and lies in the Bushbuckridge sub- district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

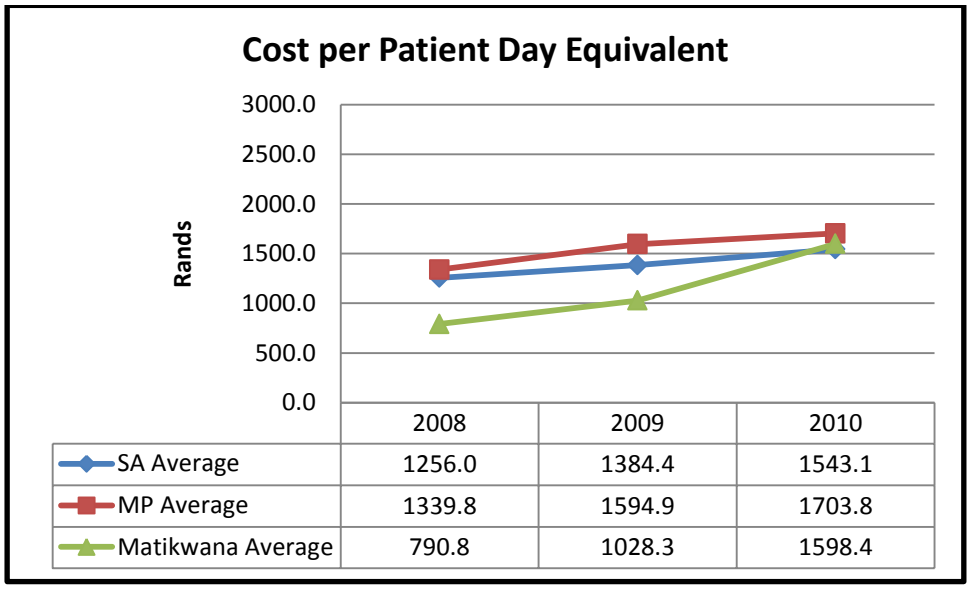
The ALOS was relatively constant throughout the reporting period and was in line with the national and provincial averages.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Matikwana Average	4.5	4.3	4.3

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

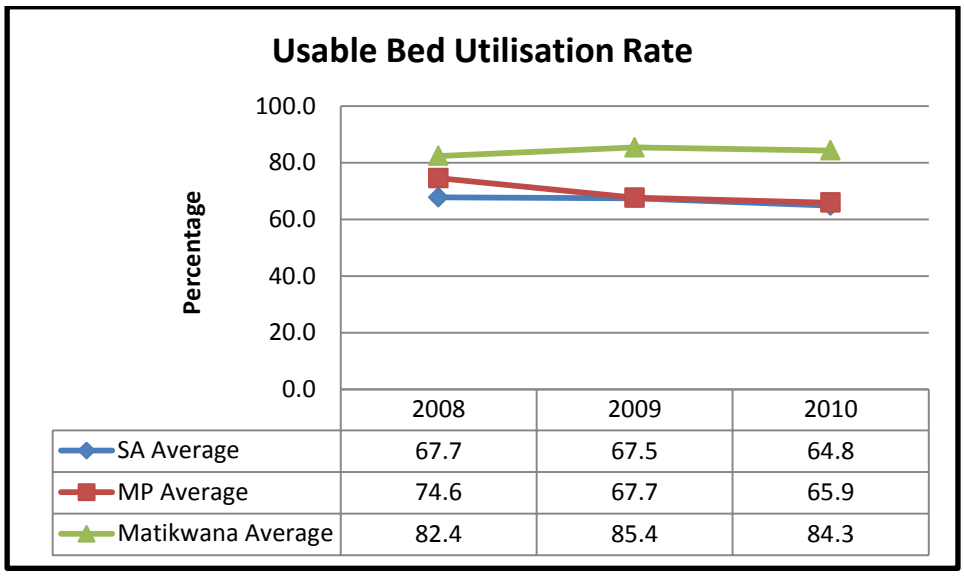
The CpPDE was very low in 2008, and increased steadily over the reporting period. It was closer to national and provincial averages in 2010.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Matikwana Average	790.8	1028.3	1598.4

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR increased slightly between 2008 and 2010. It was higher than the national and provincial averages throughout this period.

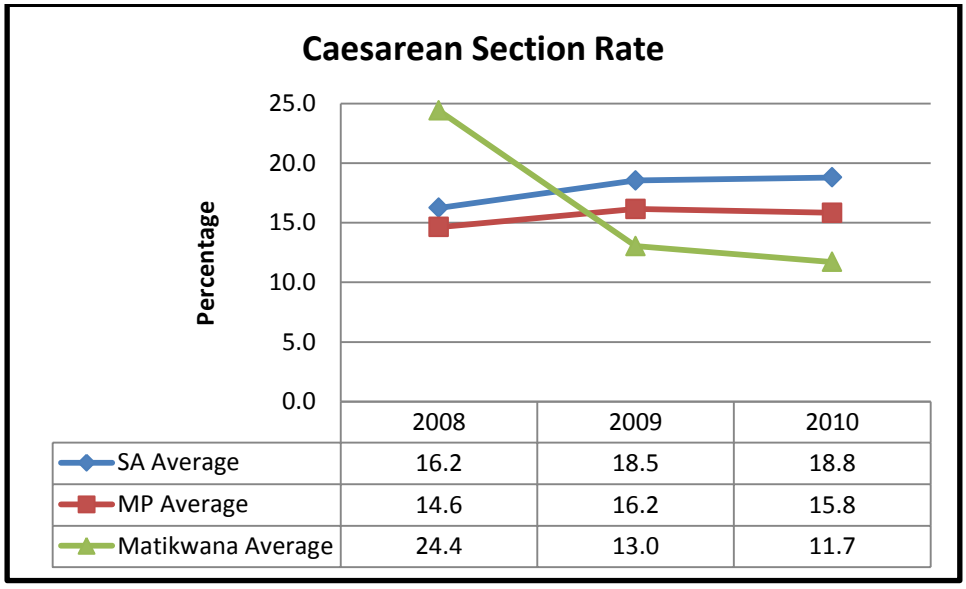


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Matikwana Average	82.4	85.4	84.3

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate decreased sharply between 2008 and 2009, with a further smaller decline in 2010. It was lower than the national and provincial averages in 2009 and 2010.

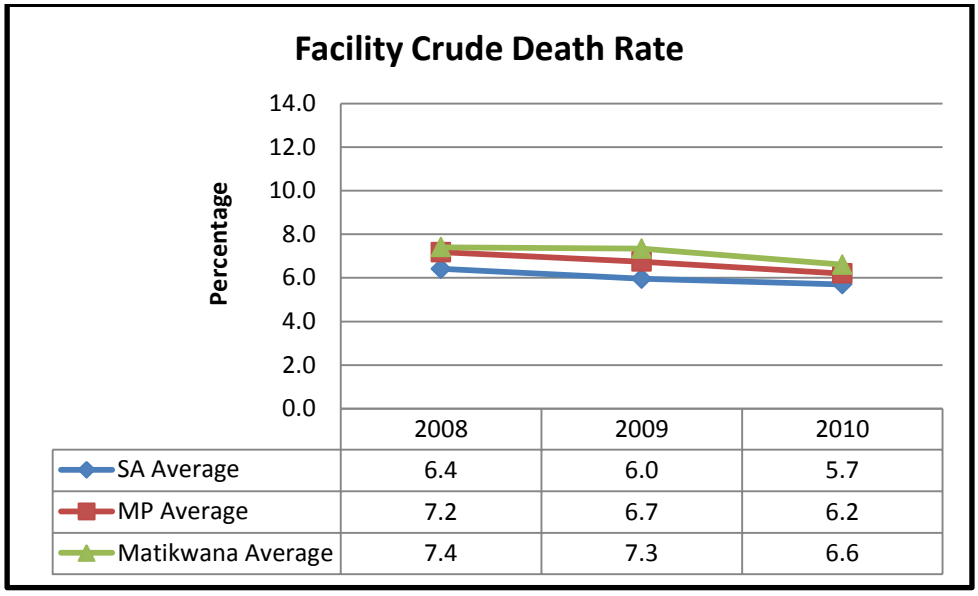


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Matikwana Average	24.4	13.0	11.7

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

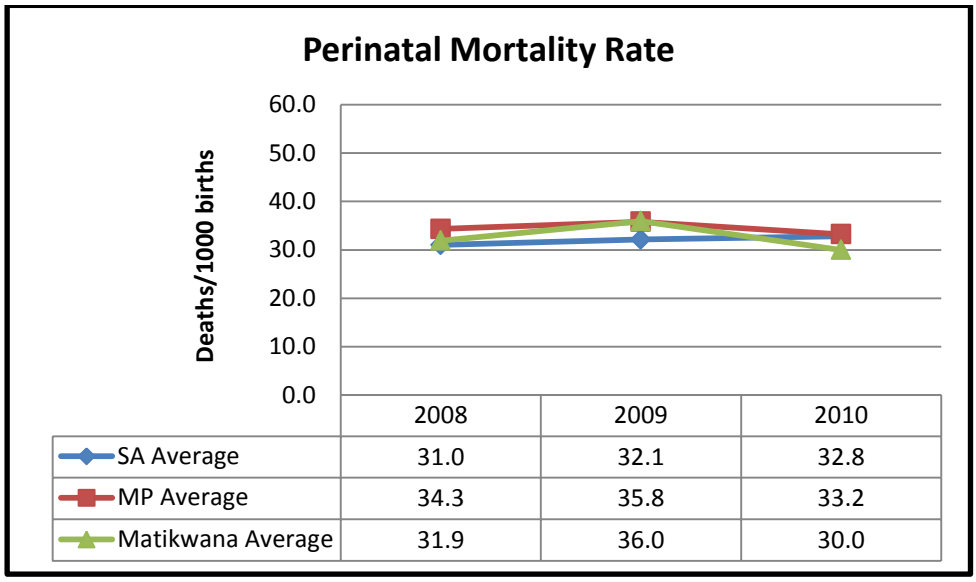
The FCDR was constant between 2008 and 2009 and decreased in 2010. It was higher than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Matikwana Average	7.4	7.3	6.6

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

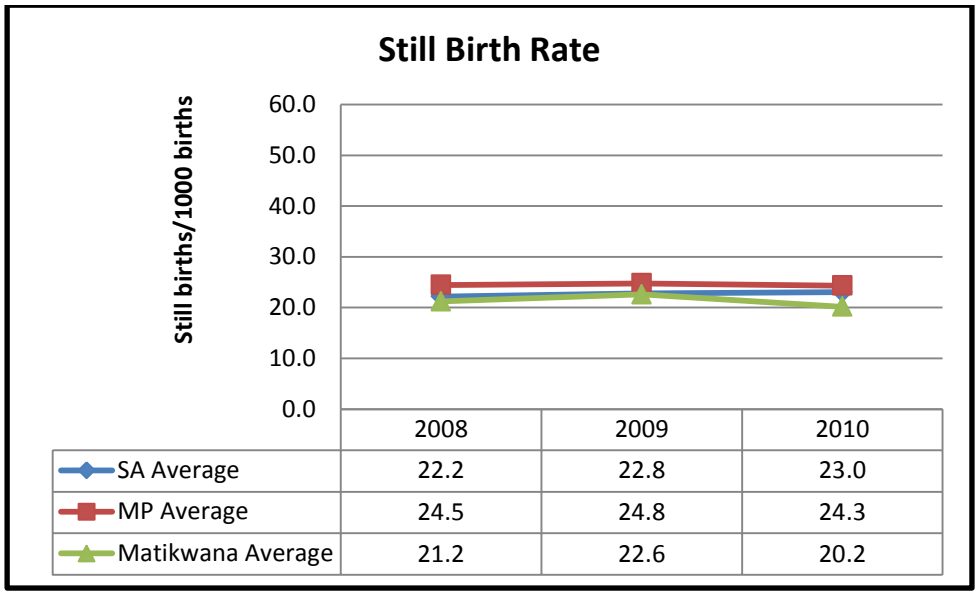
The PNMR fluctuated, increasing between 2008 and 2009, and then decreasing in 2010 to a rate in line with that observed in 2008. It was lower than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Matikwana Average	31.9	36.0	30.0

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR was relatively constant throughout the reporting period and was lower than the national and provincial averages.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Matikwana Average	21.2	22.6	20.2

v: Conclusions:

The indicators for this hospital are generally below or in line with the national or provincial averages, and should be maintained.

2. *Tintswalo Hospital*

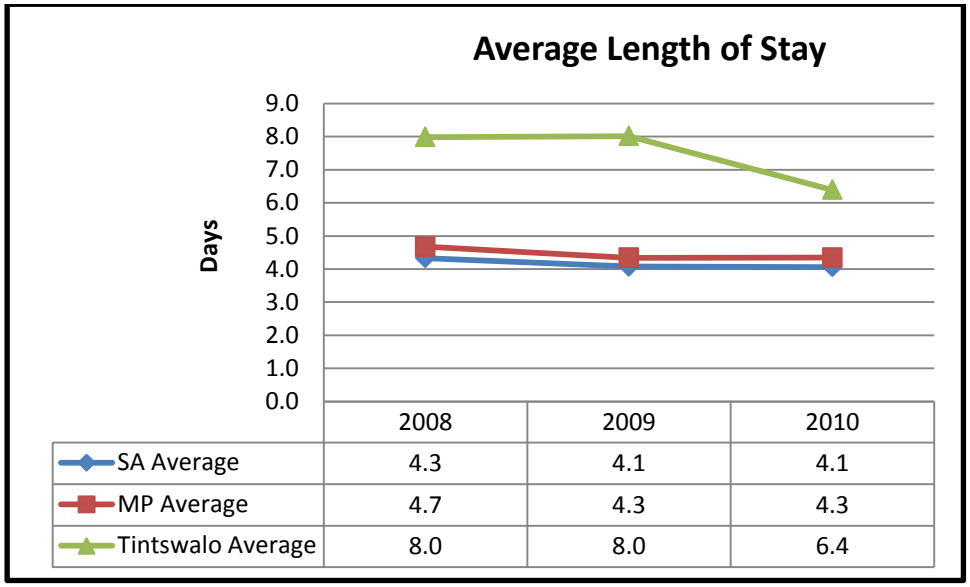
i: Description

Tintswalo District Hospital has 329 beds and lies in the Bushbuckridge sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

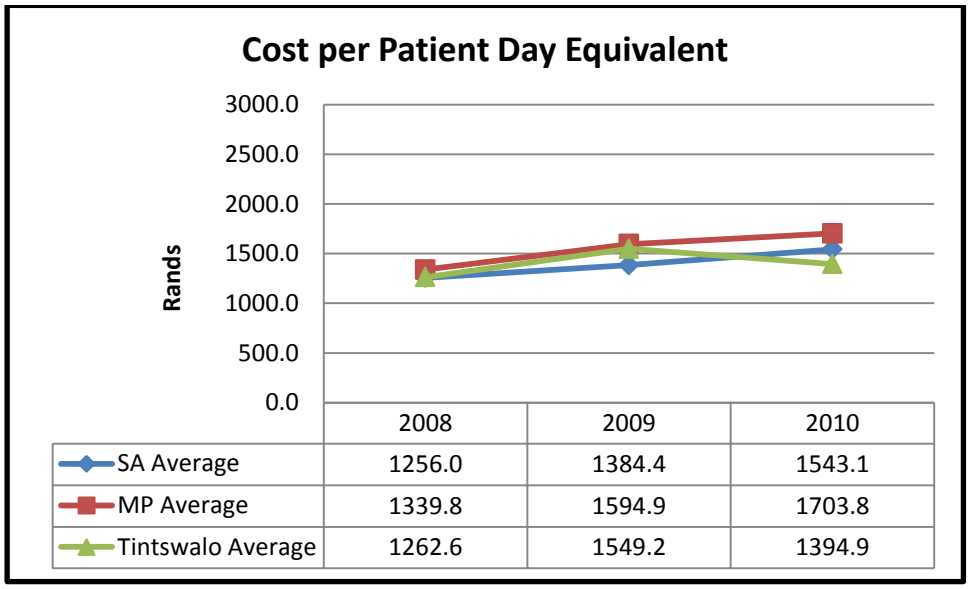
The ALOS was high. It was constant at 8 days in 2008 and 2009 and decreased in 2010. It was higher than the national and provincial averages throughout the reporting period. The reasons for the high ALOS should be ascertained.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Tintswalo Average	8.0	8.0	6.4

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

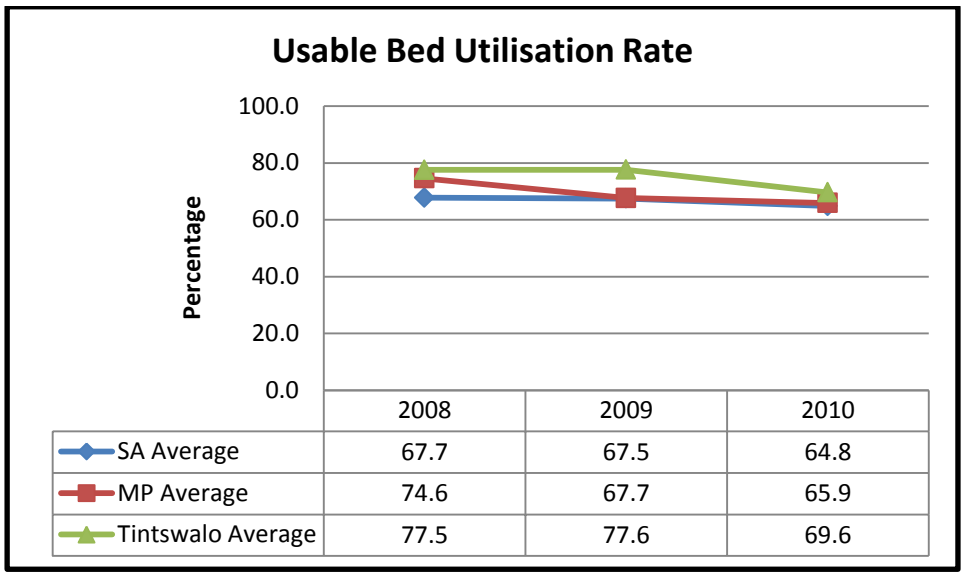
The CpPDE fluctuated, increasing between 2008 and 2009 and then decreasing in 2010, when it was then lower than the national and provincial averages.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Tintswalo Average	1262.6	1549.2	1394.9

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR was constant in 2008 and 2009 and decreased in 2010. It was higher than the national and provincial averages throughout this period.

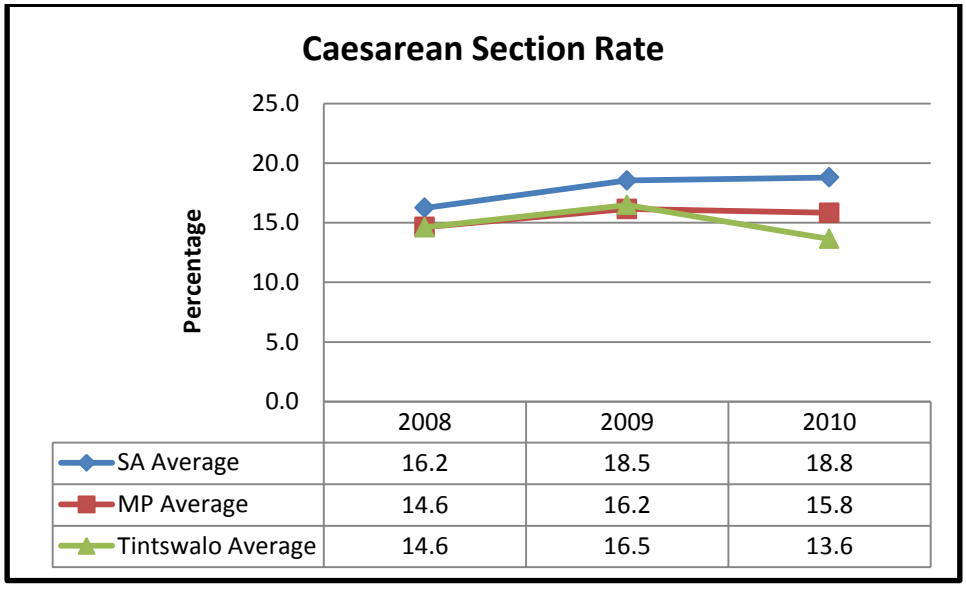


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Tintswalo Average	77.5	77.6	69.6

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate increased slightly between 2008 and 2009 before decreasing in 2010. It was lower than the national and provincial averages in 2010.

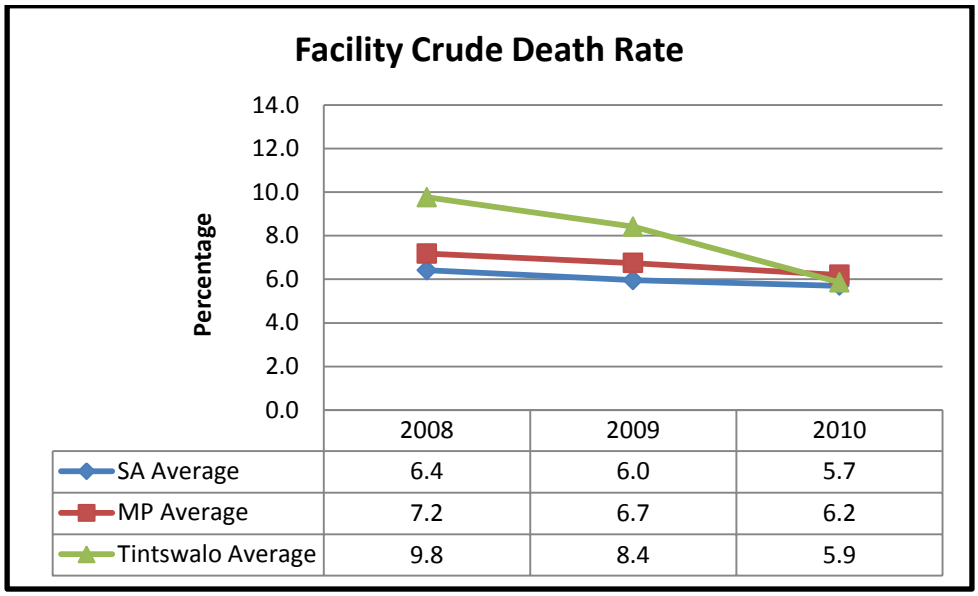


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Tintswalo Average	14.6	16.5	13.6

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

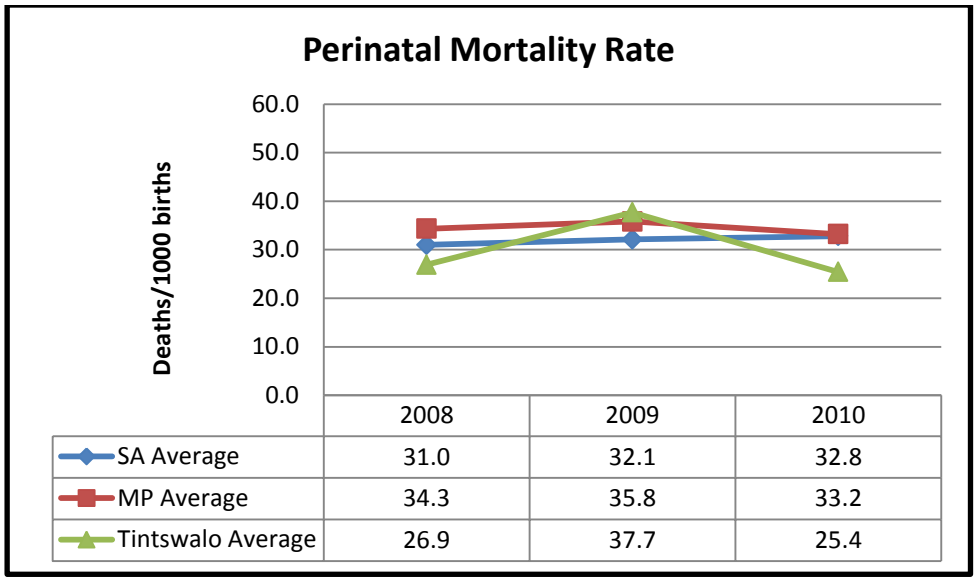
The FCDR decreased over the reporting period. It was in line with the national and provincial averages in 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Tintswalo Average	9.8	8.4	5.9

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

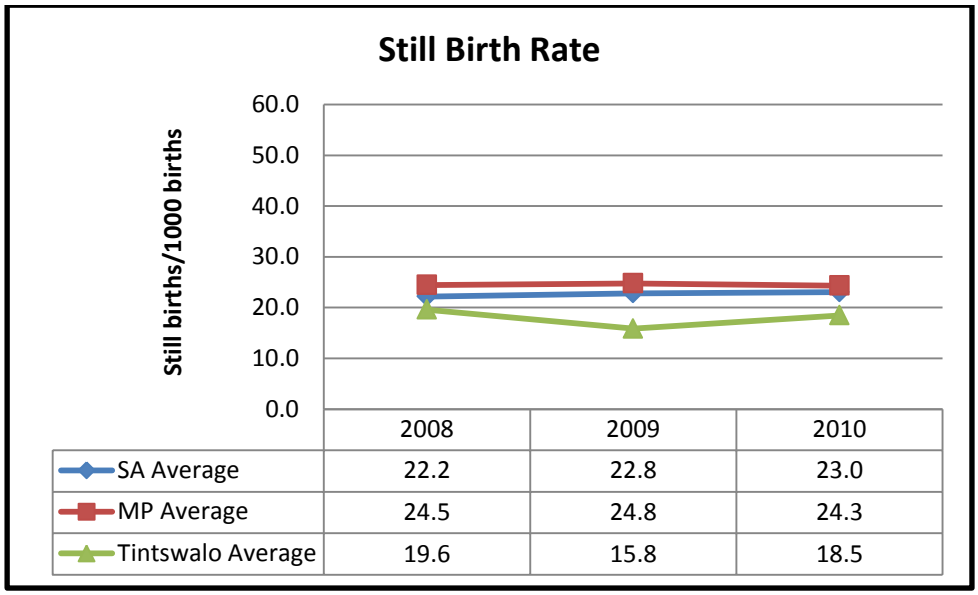
The PNMR fluctuated, increasing between 2008 and 2009, and then decreasing in 2010, when it was lower than the national and provincial averages. The data should be reviewed and the reasons for the fluctuation observed ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Tintswalo Average	26.9	37.7	25.4

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR fluctuated slightly. It was lower than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Tintswalo Average	19.6	15.8	18.5

v: Conclusions:

The reasons for the high ALOS should be ascertained. The PNMR data should be reviewed and the reasons for the fluctuation observed ascertained.

3. *Barberton Hospital*

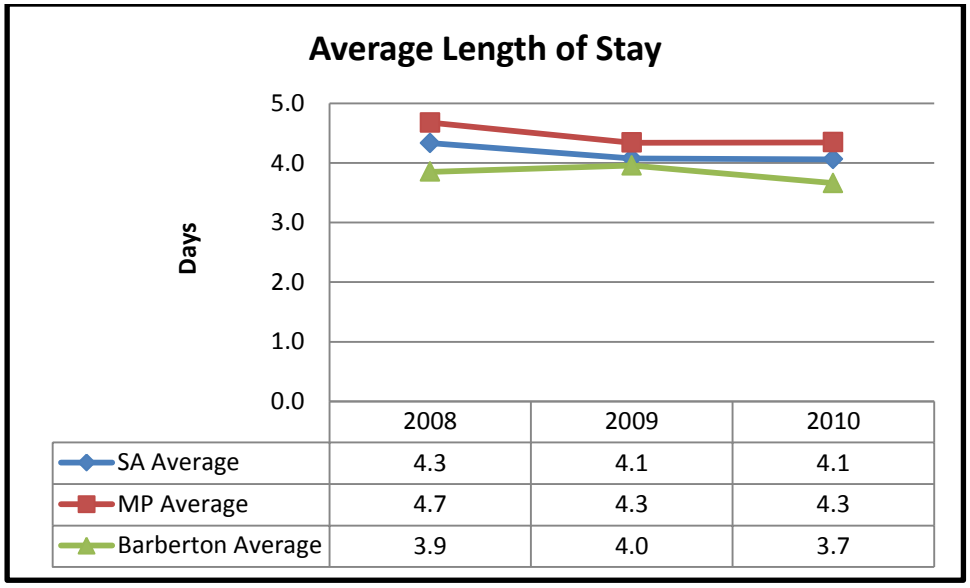
i: Description

Barberton District Hospital has 155 beds and lies in the Umjindi sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

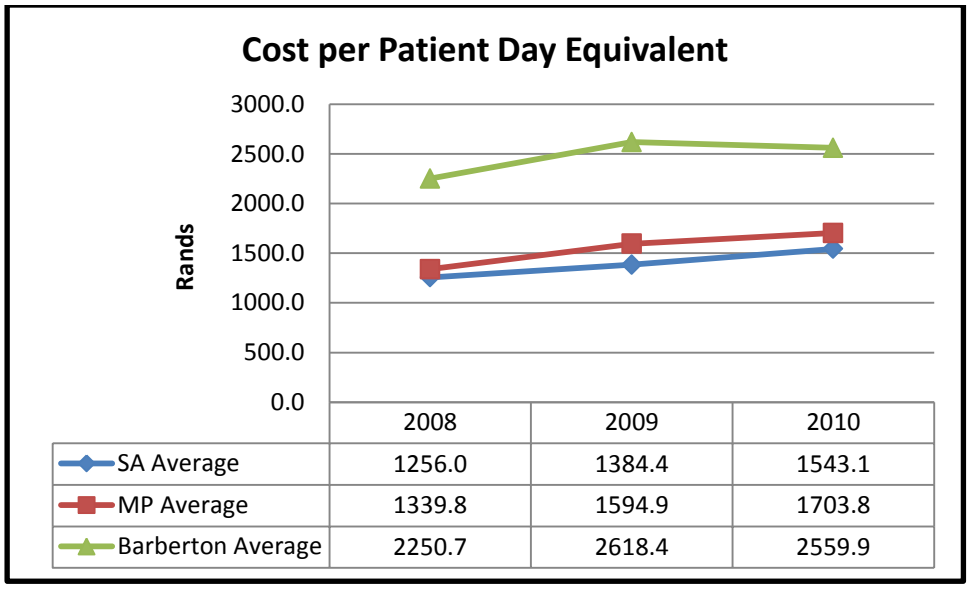
The ALOS was relatively constant, and was lower than the national and provincial averages.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Barberton Average	3.9	4.0	3.7

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

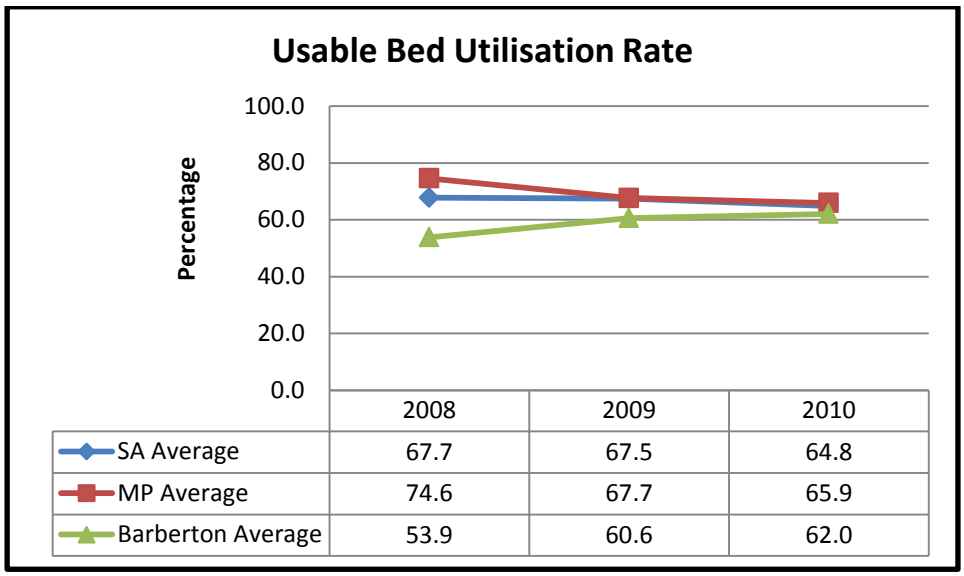
The CpPDE increased steadily between 2008 and 2010. It was significantly higher than the national and provincial averages throughout the reporting period. The reasons for this high CpPDE should be ascertained.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Barberton Average	2250.7	2618.4	2559.9

3. Usable bed utilisation rate (BUR): measures occupancy of beds that are available for use

The BUR increased steadily between 2008 and 2010. It was lower than the national and provincial averages throughout this period.

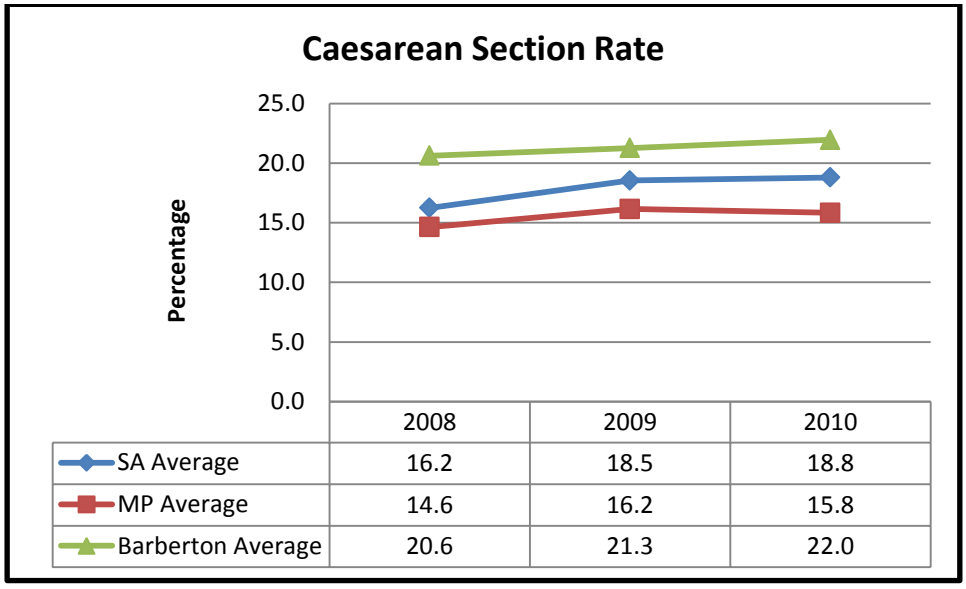


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Barberton Average	53.9	60.6	62.0

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate increased marginally between 2008 and 2010. It was higher than the national and provincial averages throughout this period. The reasons for this high rate should be ascertained.

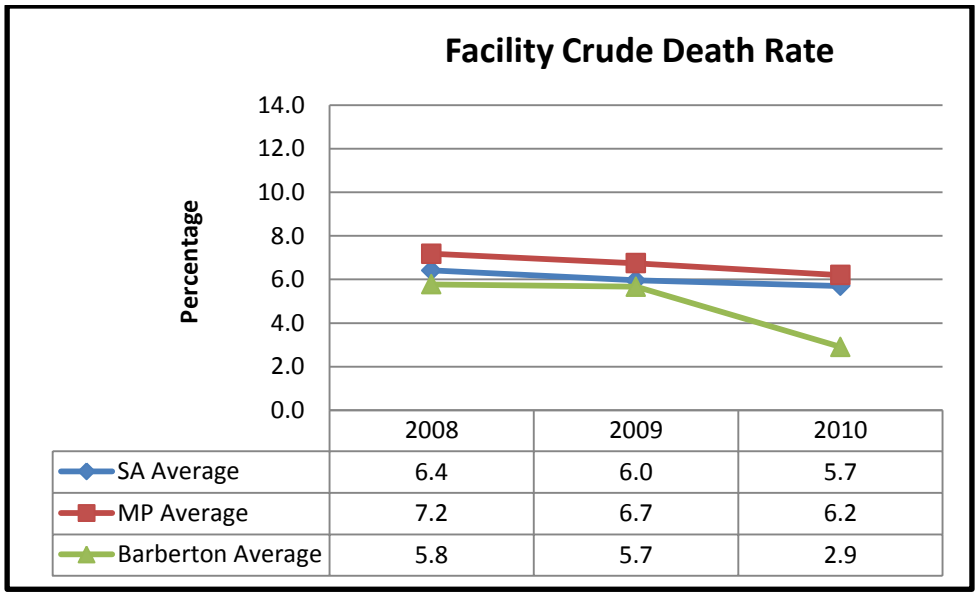


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Barberton Average	20.6	21.3	22.0

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

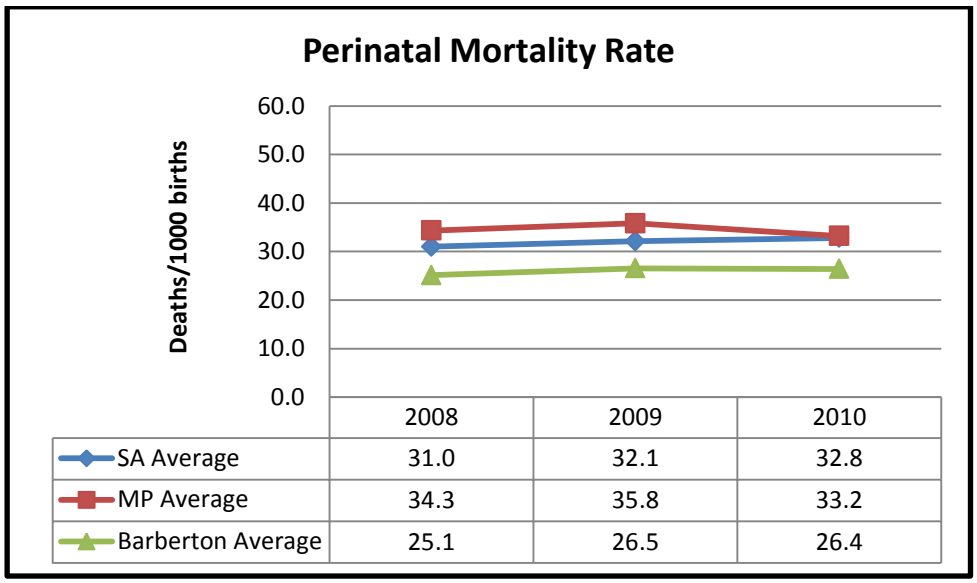
The FCDR was constant in 2008 and 2010, and decreased significantly in 2010. It was much lower than the national and provincial averages in 2010. These data should be reviewed to confirm the very low rate observed in 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Barberton Average	5.8	5.7	2.9

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

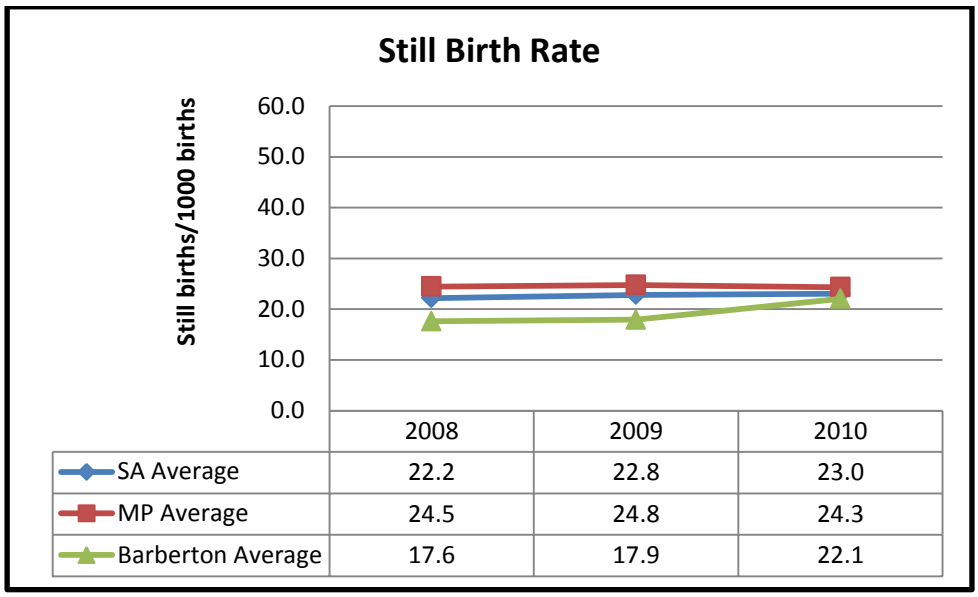
The PNMR was relatively constant between 2008 and 2010 and was lower than the national and provincial averages.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Barberton Average	25.1	26.5	26.4

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR was constant in 2008 and 2009, and increased to 22/1000 births in 2010, when it was then generally in line with the national and provincial averages.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Barberton Average	17.6	17.9	22.1

v: Conclusions:

The reasons for the high CpPDE, and the high CS rates should be ascertained. The FCDR data should be reviewed to confirm the very low rate observed in 2010.

4. *Lydenburg Hospital*

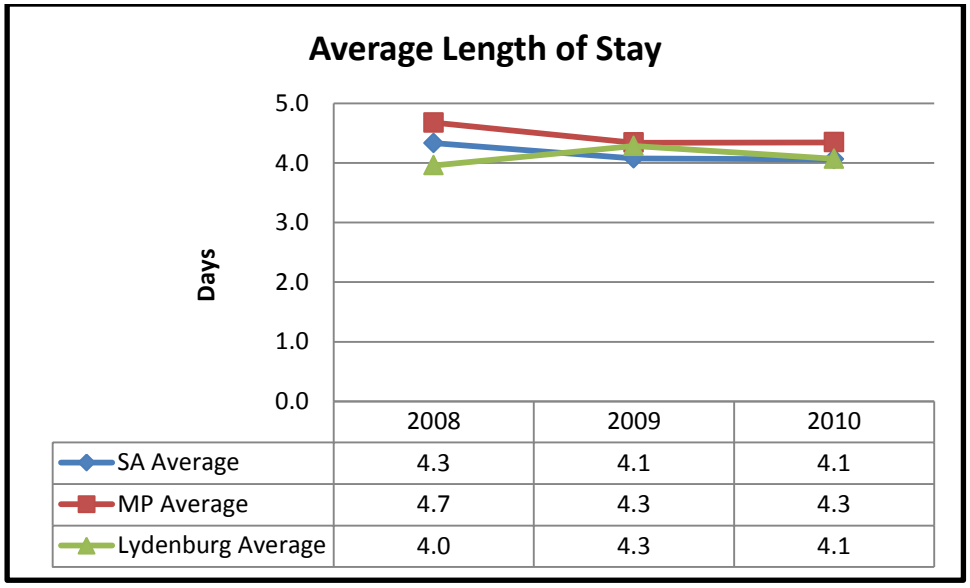
i: Description

Lydenburg District Hospital has 90 beds and lies in the Thaba Chweu sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

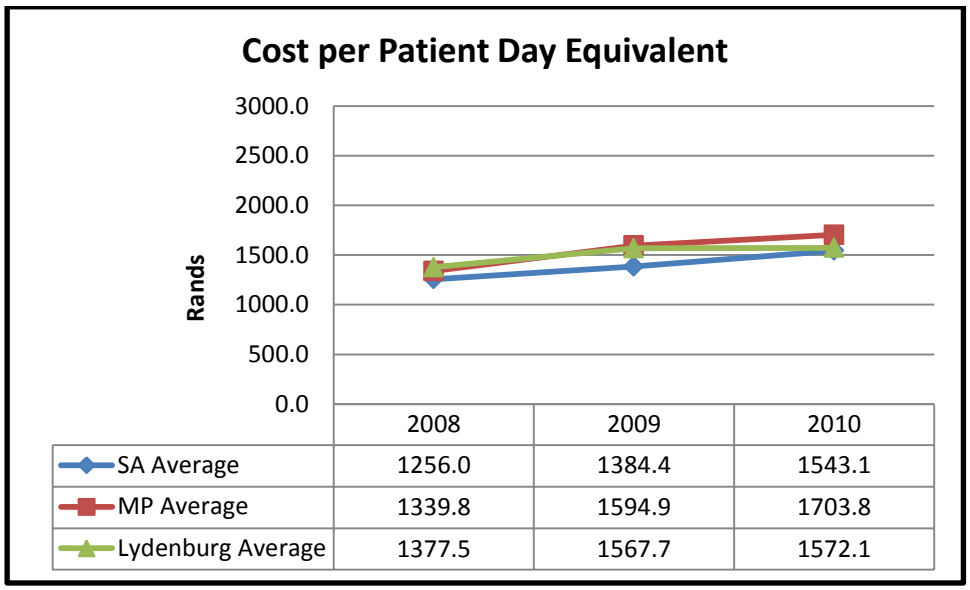
The ALOS was relatively constant, and was in line with the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Lydenburg Average	4.0	4.3	4.1

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

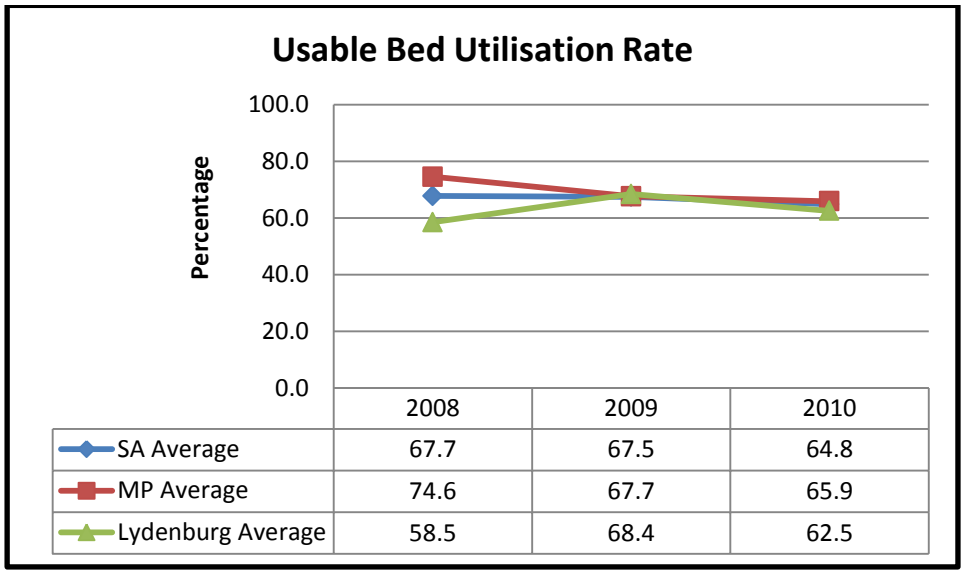
The CpPDE increased over the reporting period. It was in line with the national average and was lower than the provincial average in 2010.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Lydenburg Average	1377.5	1567.7	1572.1

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR fluctuated, increasing to 68% in 2009 and then decreasing in 2010. It was lower than the national and provincial averages throughout the reporting period.

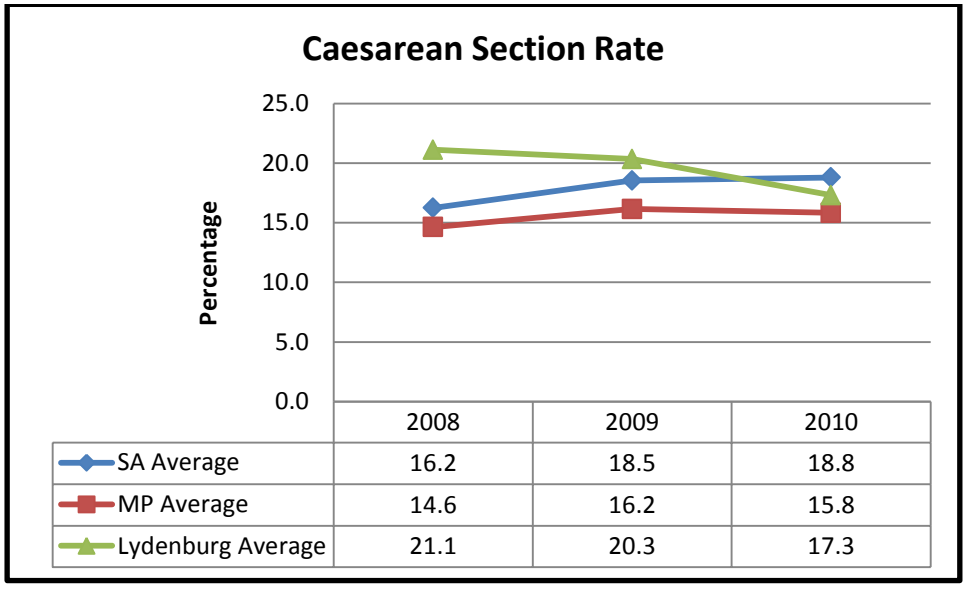


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Lydenburg Average	58.5	68.4	62.5

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate deceased over the reporting period reaching a rate of 17% in 2010. It was higher than the provincial averages throughout this period, and was lower than the national average in 2010.

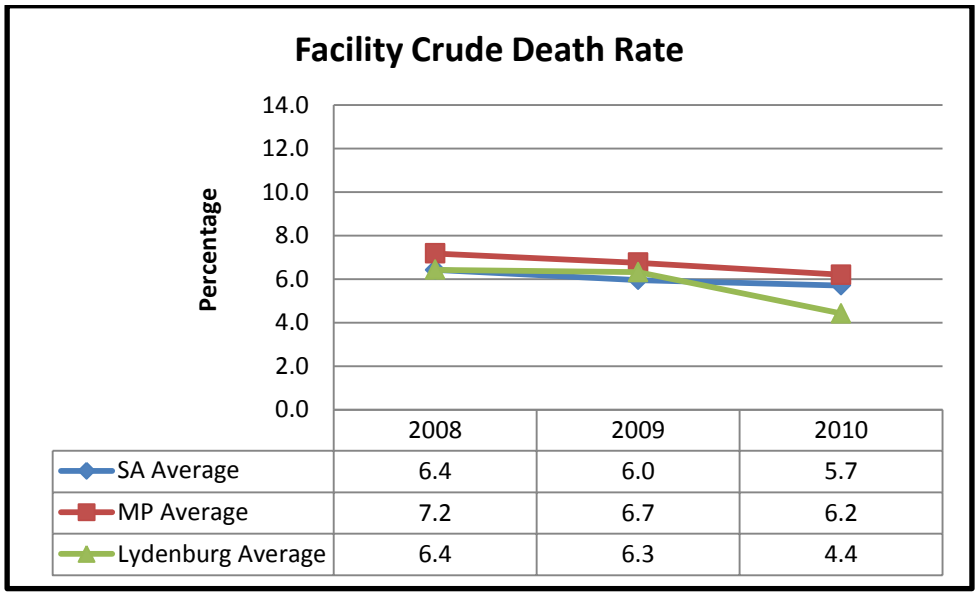


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Lydenburg Average	21.1	20.3	17.3

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

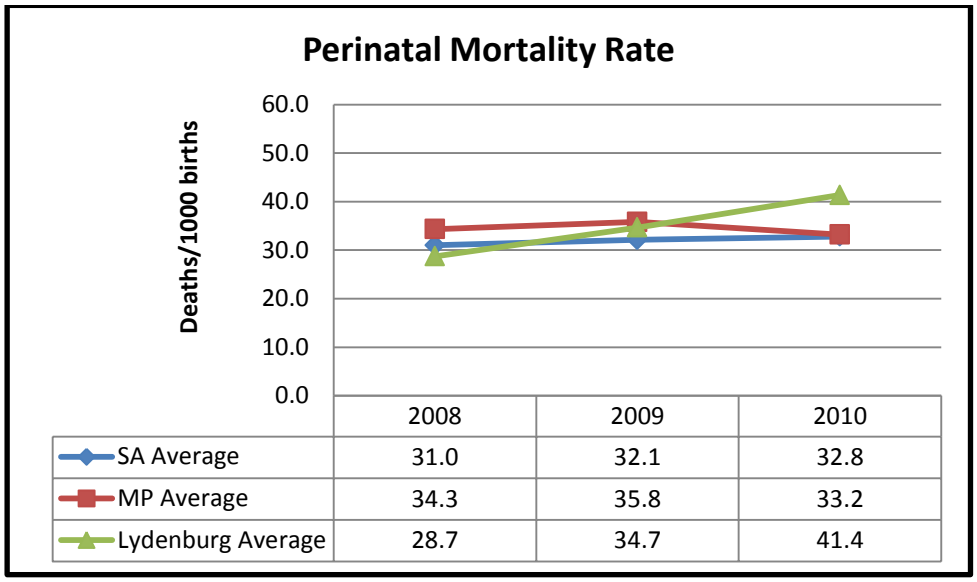
The FCDR decreased over the reporting period. It was lower than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Lydenburg Average	6.4	6.3	4.4

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

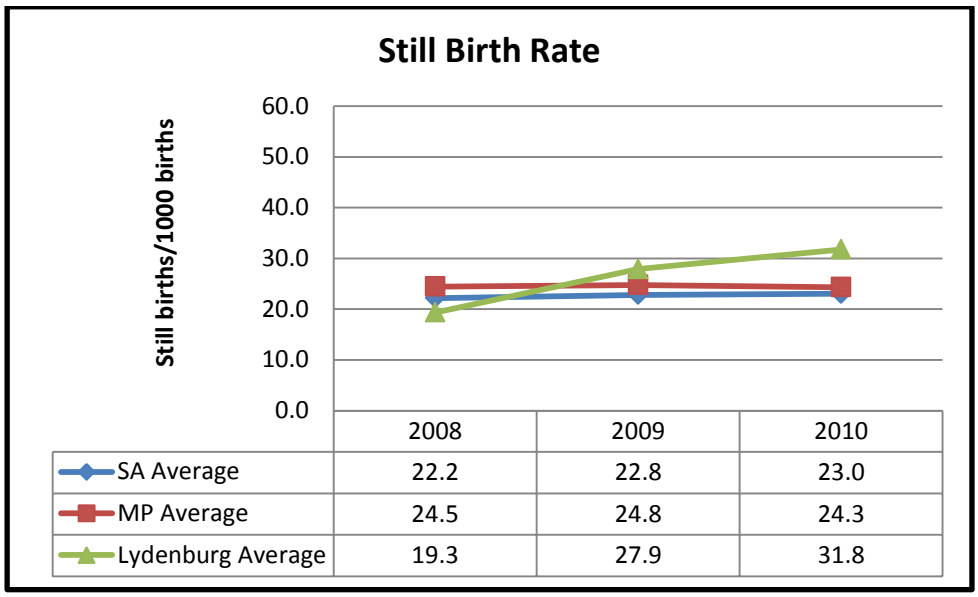
The PNMR increased steadily between 2008 and 2010, and was higher than the national and provincial averages in 2010. The reasons for this increase should be ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Lydenburg Average	28.7	34.7	41.4

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR increased significantly over the reporting period and was higher than the national and provincial averages in 2010. The reasons for this increase should be ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Lydenburg Average	19.3	27.9	31.8

v: Conclusions:

The reasons for the high PNMR and SBR should be ascertained.

5. *Sabie Hospital*

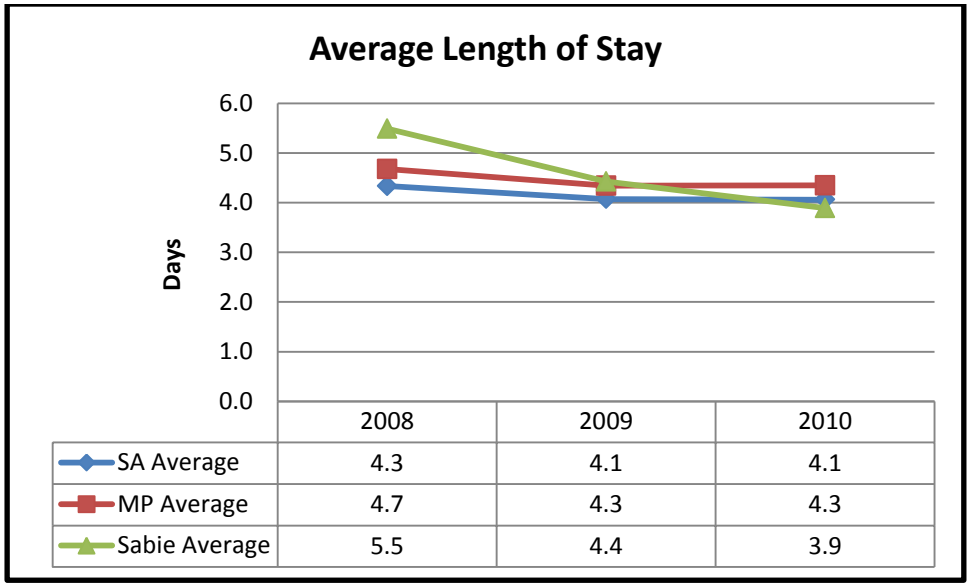
i: Description

Sabie District Hospital has 83 beds and lies in the Thaba Chweu sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

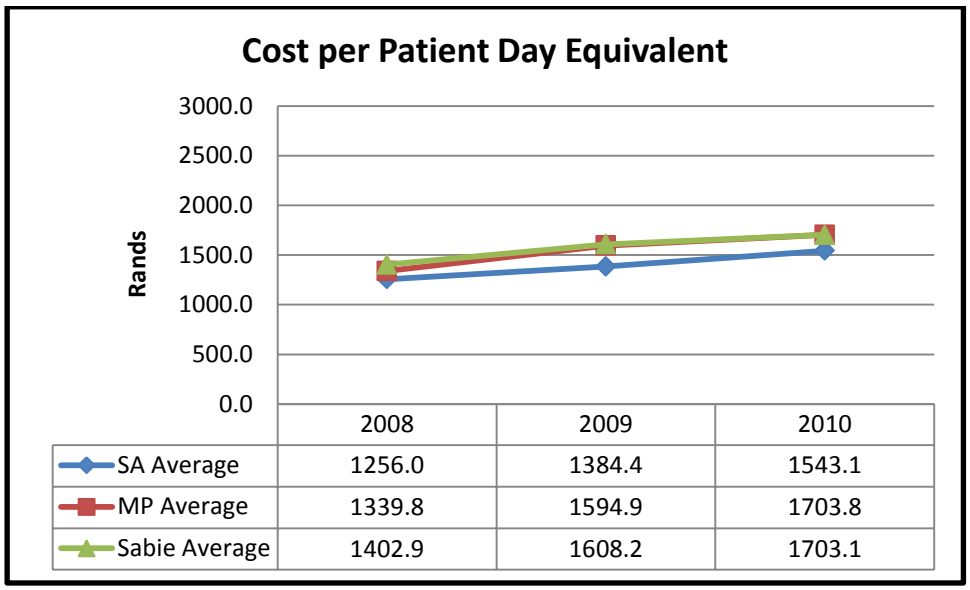
The ALOS decreased between 2008 and 2010, and was lower than the provincial average in 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Sabie Average	5.5	4.4	3.9

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

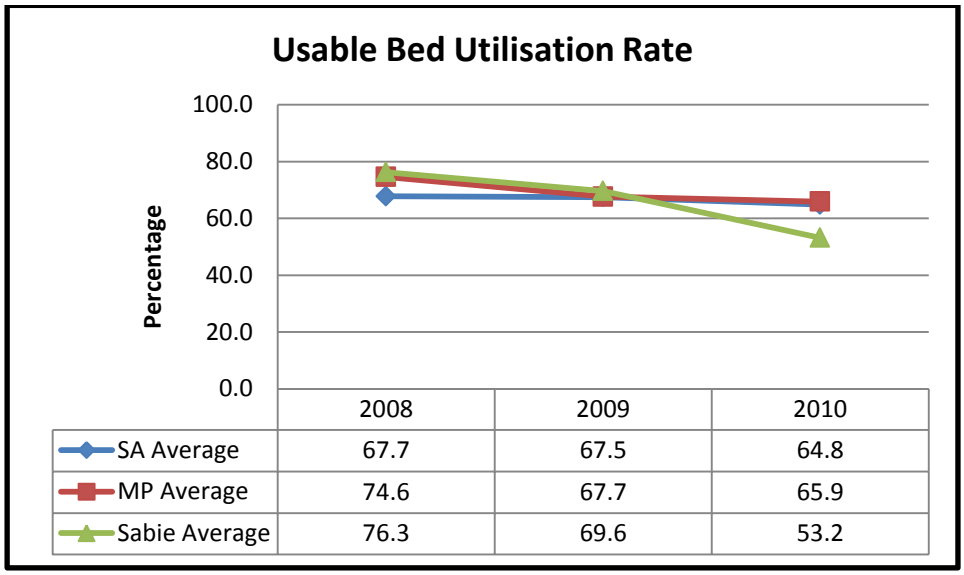
The CpPDE increased steadily over the reporting period. It was in line with the provincial average but higher than the national average in 2010.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Sabie Average	1402.9	1608.2	1703.1

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR declined significantly over the reporting period to a level well below the national and provincial averages in 2010. The reasons for this significant decline should be ascertained.

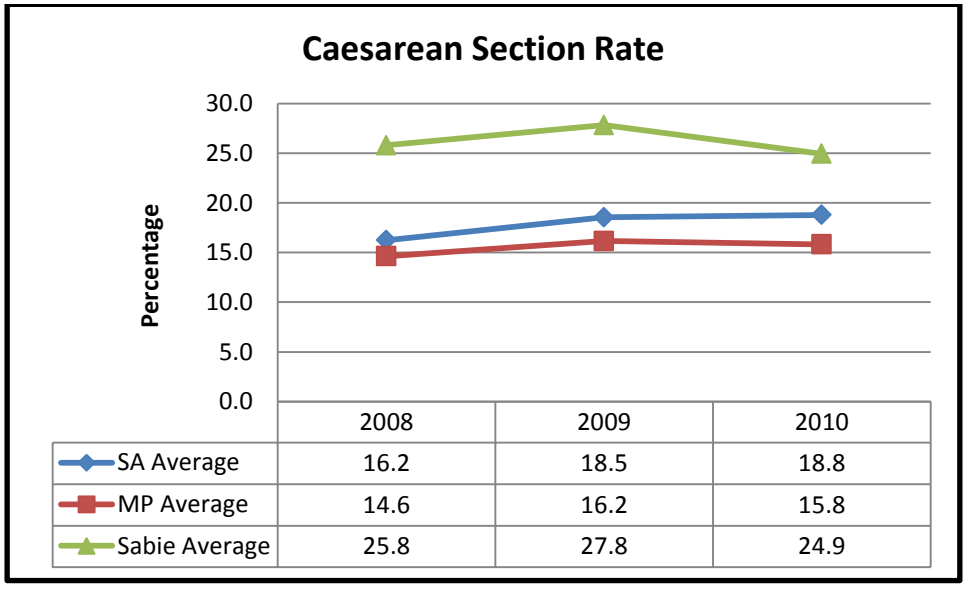


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Sabie Average	76.3	69.6	53.2

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate fluctuated marginally. It was significantly higher than the national and provincial averages throughout the reporting period. The reasons for the high rates should be ascertained.

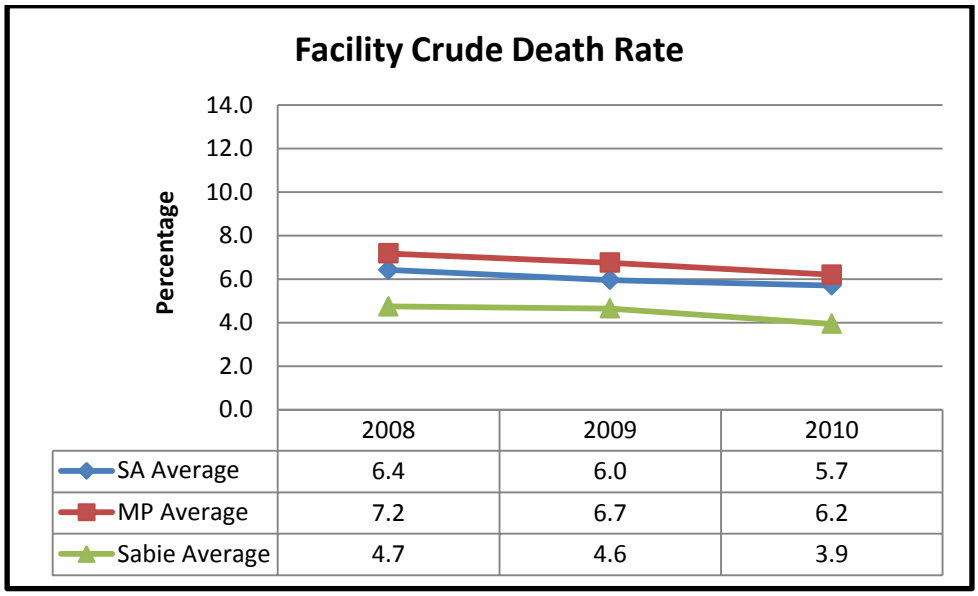


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Sabie Average	25.8	27.8	24.9

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

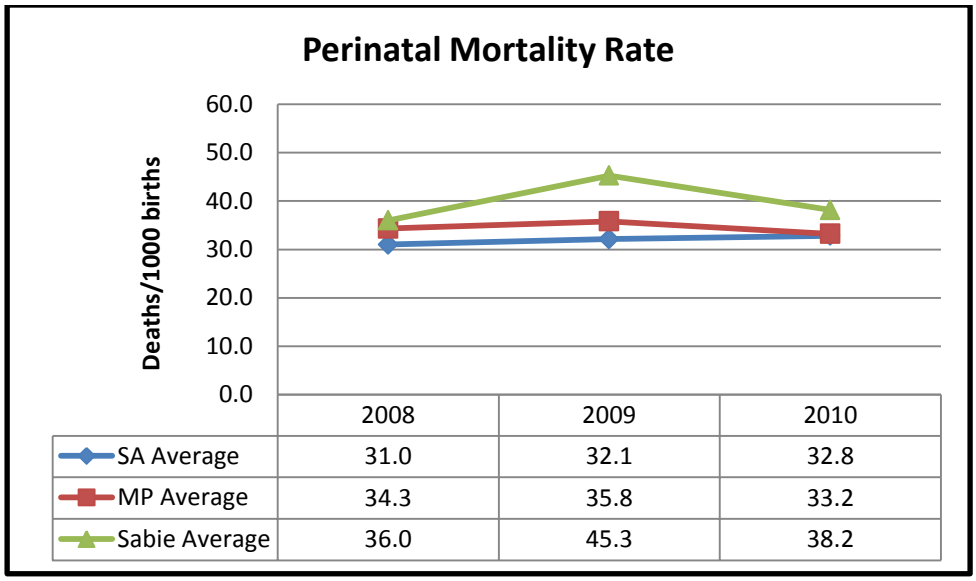
The FCDR declined over the reporting period. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Sabie Average	4.7	4.6	3.9

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

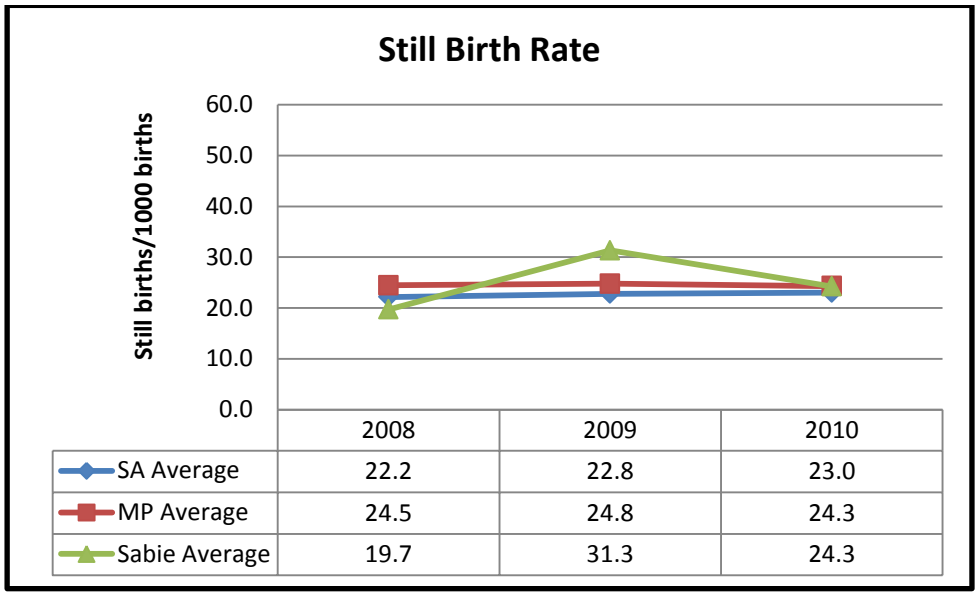
The PNMR fluctuated, increasing between 2008 and 2009 and then decreasing in 2010. It was higher than the national and provincial averages throughout the reporting period. The data should be reviewed to ascertain the reasons for the fluctuation observed.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Sabie Average	36.0	45.3	38.2

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR also fluctuated, increasing between 2008 and 2009 before decreasing in 2010. It was in line with the national and provincial averages in 2010. The data should be reviewed to ascertain the reasons for the fluctuation observed.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Sabie Average	19.7	31.3	24.3

v: Conclusions:

The reasons for the low BUR in 2010 should be ascertained. The reasons for the high CS rates and the high PNMR should also be ascertained. The PNMR and SBR data should be reviewed to ascertain the reasons for the fluctuations observed.

6. *Matibidi Hospital*

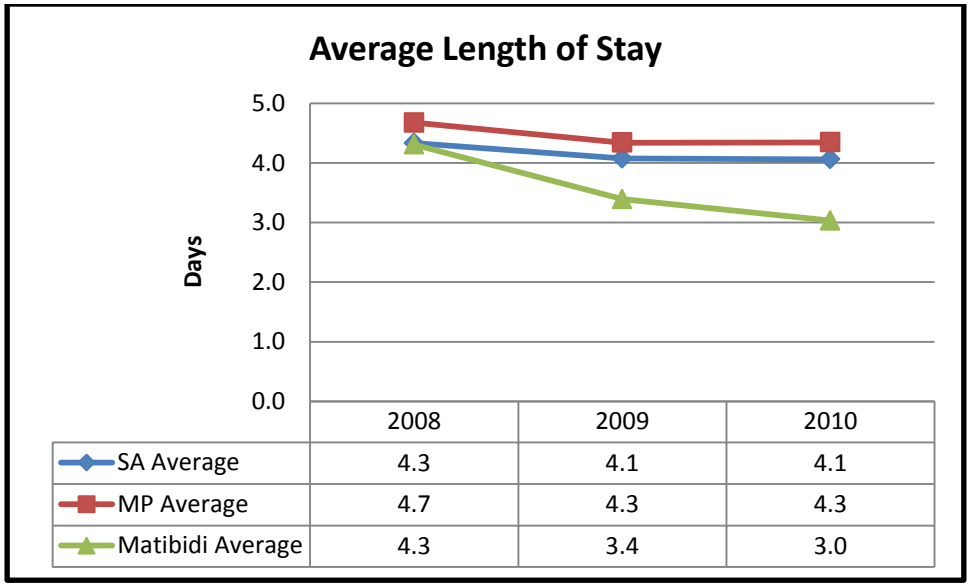
i: Description

Matibidi District Hospital has 50 beds and lies in the Thaba Chweu sub-district

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

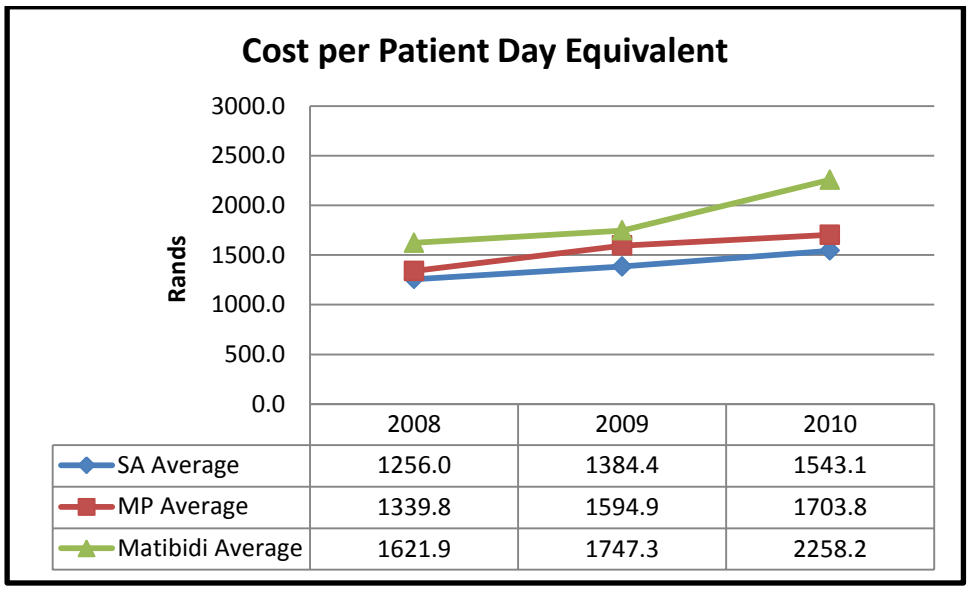
The ALOS decreased from 4 days in 2008 to 3 days and 2010. It was lower than the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Matibidi Average	4.3	3.4	3.0

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

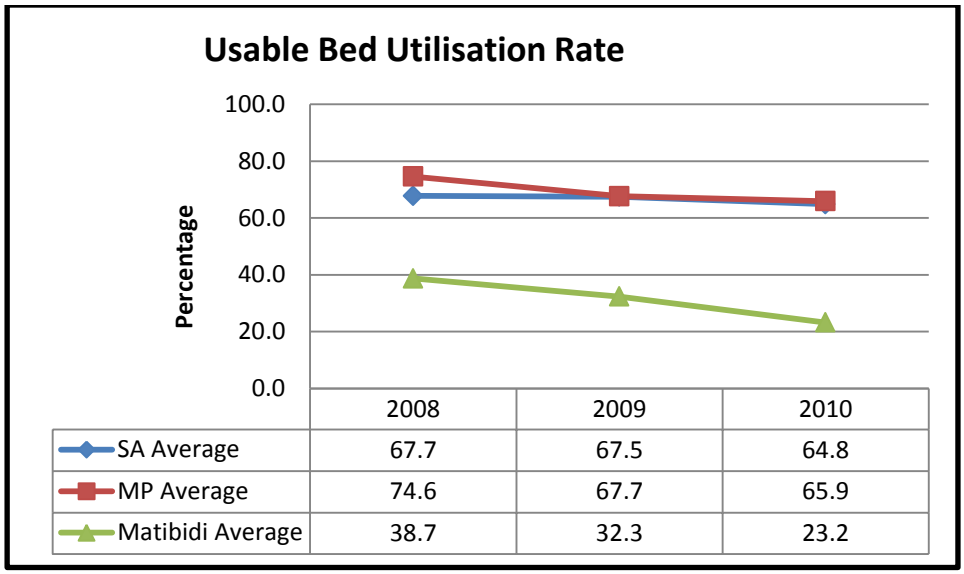
The CpPDE increased significantly over the reporting period. It was higher than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Matibidi Average	1621.9	1747.3	2258.2

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR was very low throughout the reporting period, and reached an exceptionally low level of 23% in 2010. It was much lower than the national and provincial averages. The reasons for the low BUR should be ascertained.

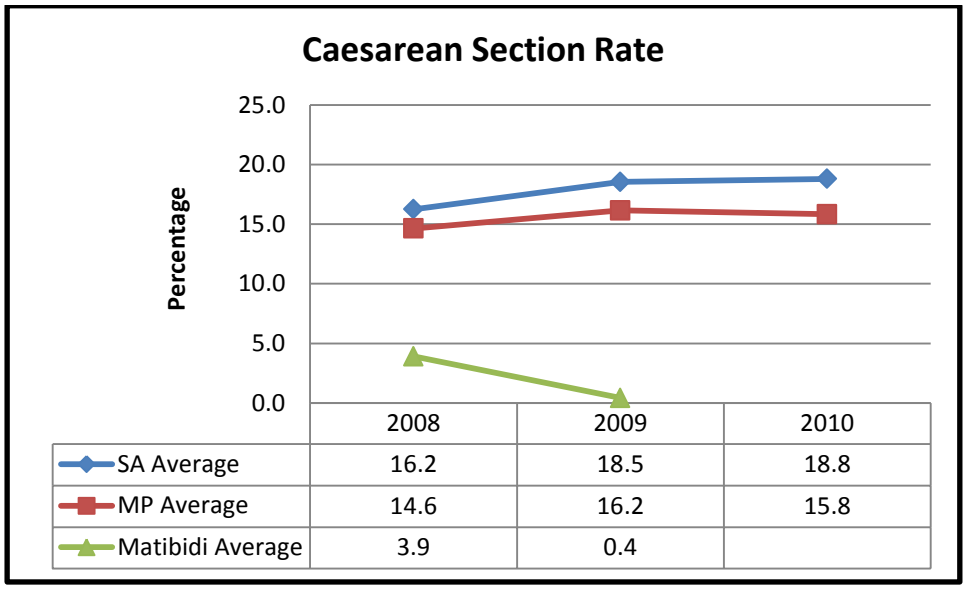


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Matibidi Average	38.7	32.3	23.2

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate was very low (3.9%) in 2008, decreased further in 2009, and data were not available in 2010. This requires urgent investigation.

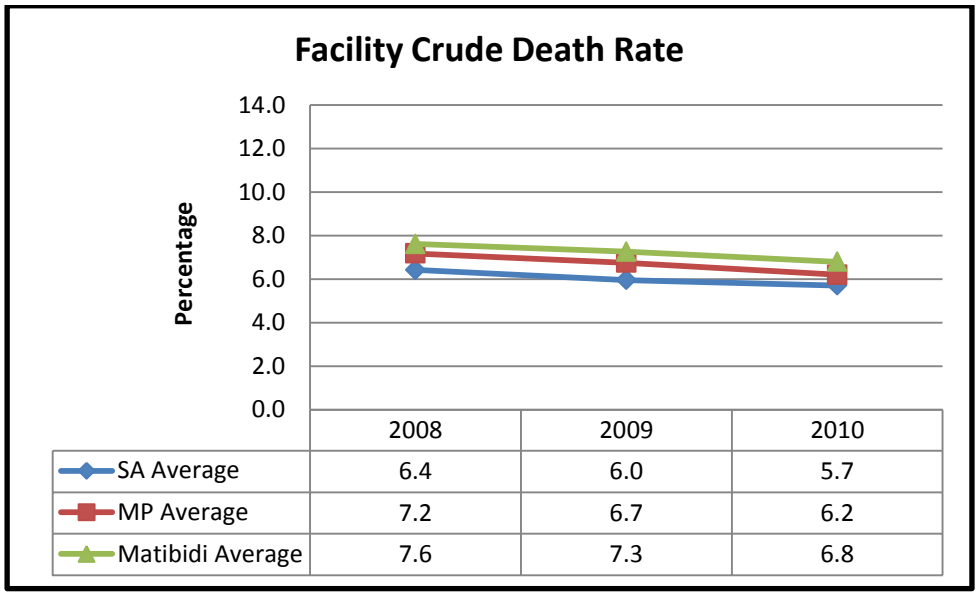


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Matibidi Average	3.9	0.4	

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

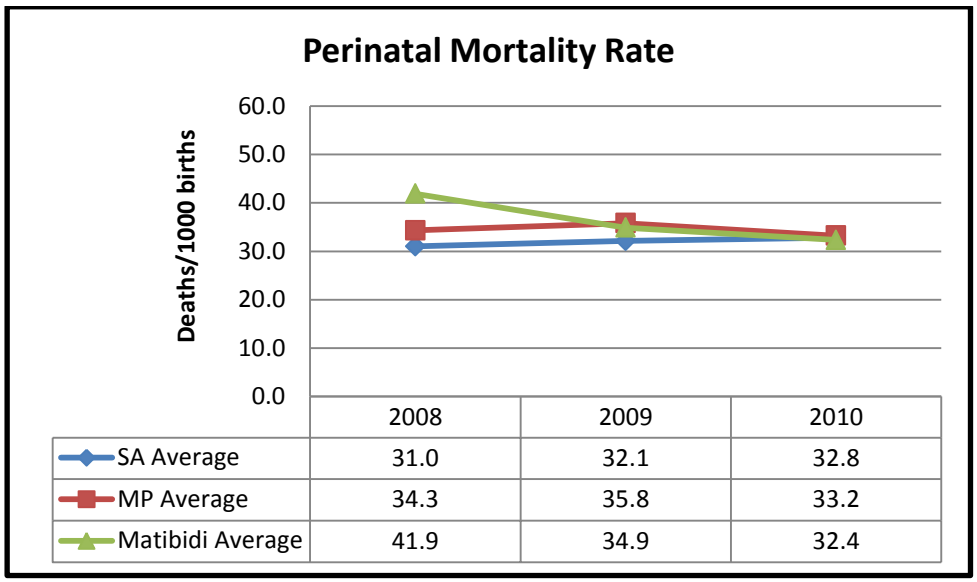
The FCDR decreased steadily over the reporting period. It was higher than the national and provincial averages.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Matibidi Average	7.6	7.3	6.8

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

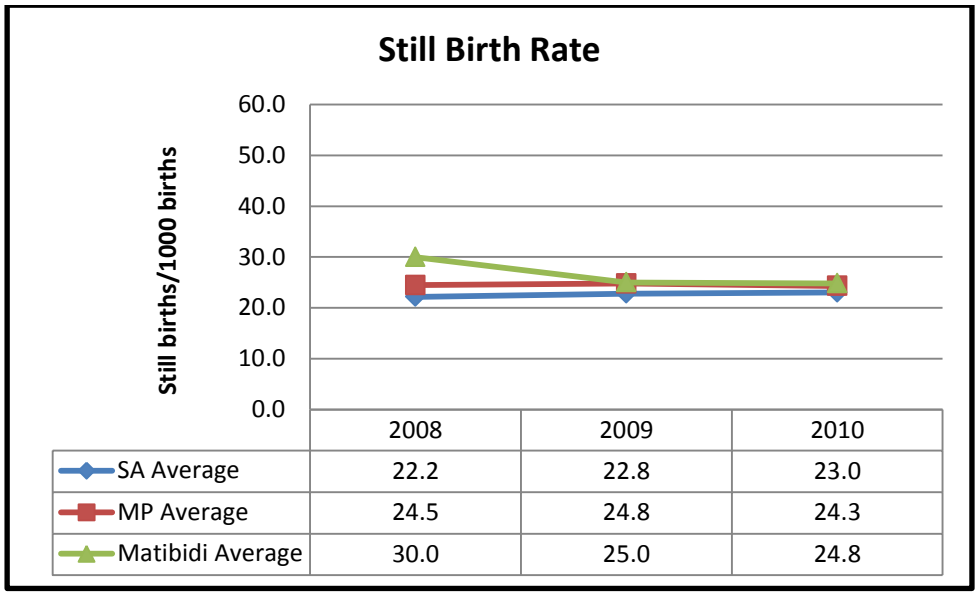
The PNMR decreased steadily over the reporting period and was in line with and the national and provincial averages in 2010.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Matibidi Average	41.9	34.9	32.4

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR decreased over the reporting period and was in line with the national and provincial averages in 2009 and 2010.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Matibidi Average	30.0	25.0	24.8

v: Conclusions:

The high CpPDE and very low BUR require urgent attention as they suggest inefficiency at this hospital. The reasons for the low CS rate and absence of CS rate data in 2010 should also be ascertained. If the hospital is unable to perform Caesarean sections then by definition it is no longer a hospital and should be re-classified as a CHC.

7. *Shongwe Hospital*

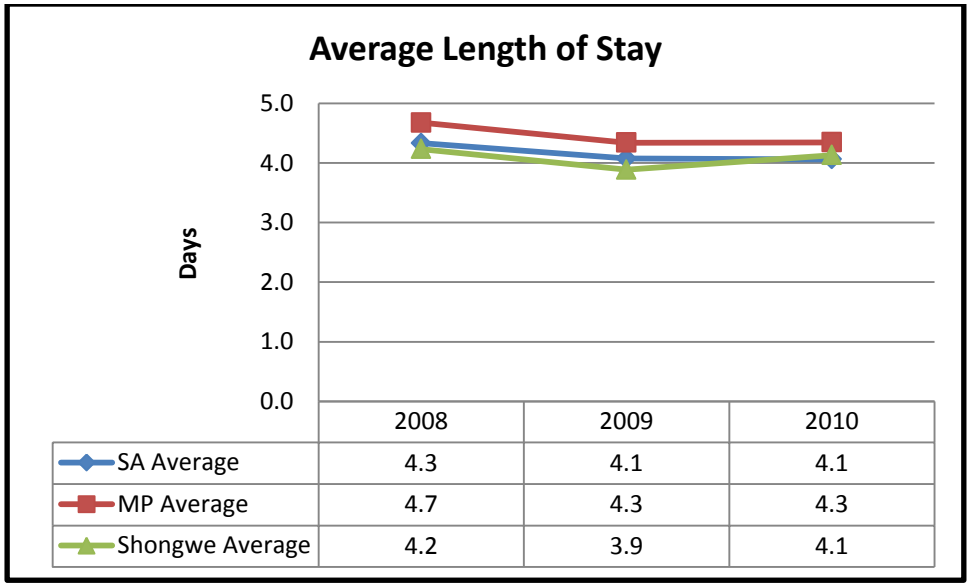
i: Description

Shongwe District Hospital has 183 beds and lies in the Nkomazi sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

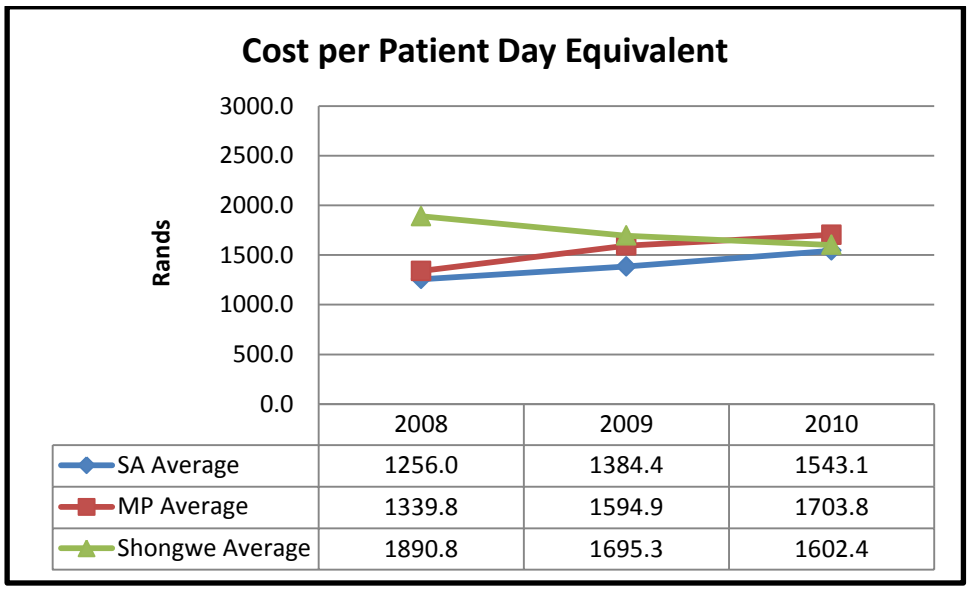
The ALOS was relatively stable over the reporting period. It was in line with the national and provincial averages in 2010.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Shongwe Average	4.2	3.9	4.1

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

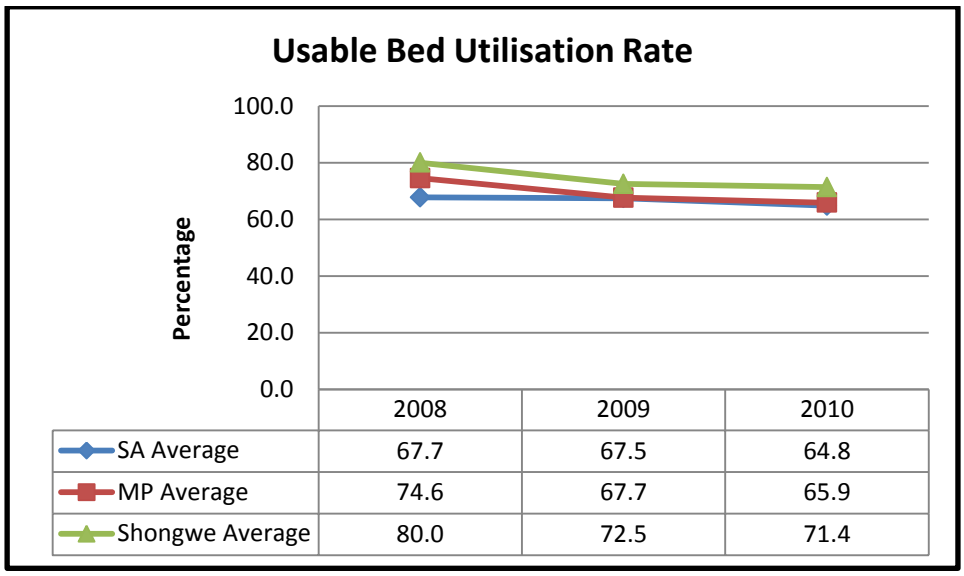
The CpPDE decreased over the reporting period. It was lower than the provincial average in 2010.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Shongwe Average	1890.8	1695.3	1602.4

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR decreased over the reporting period. It was higher than the national and provincial averages throughout this period.

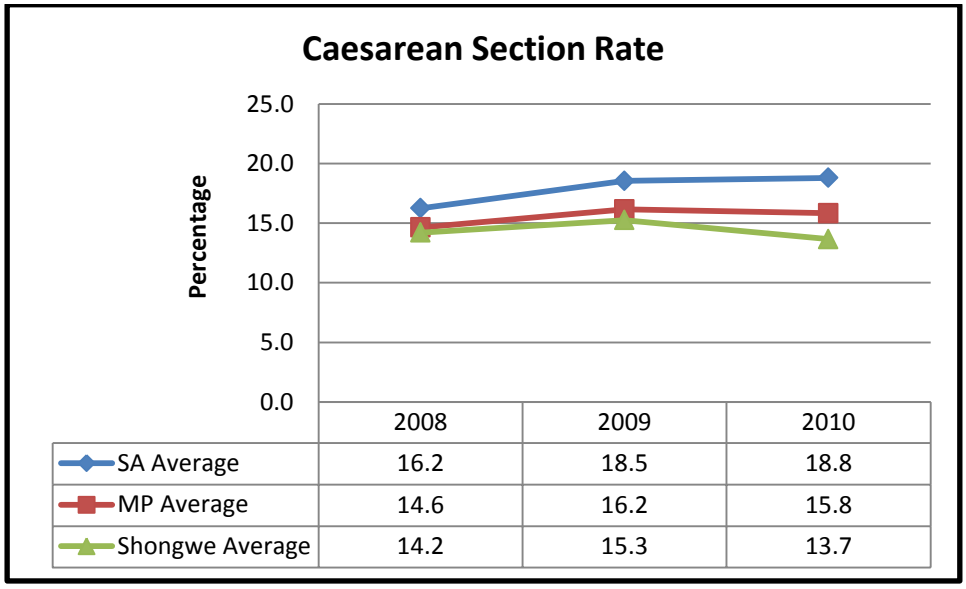


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Shongwe Average	80.0	72.5	71.4

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate fluctuated, increasing to 15.3% in 2009 before decreasing in 2010. It was lower than the national and provincial averages throughout the reporting period.

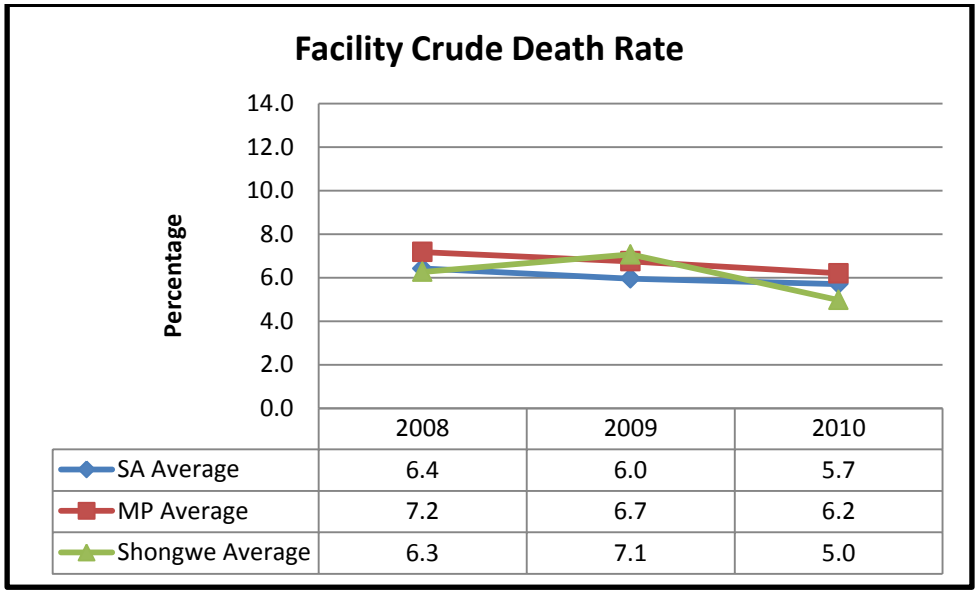


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Shongwe Average	14.2	15.3	13.7

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

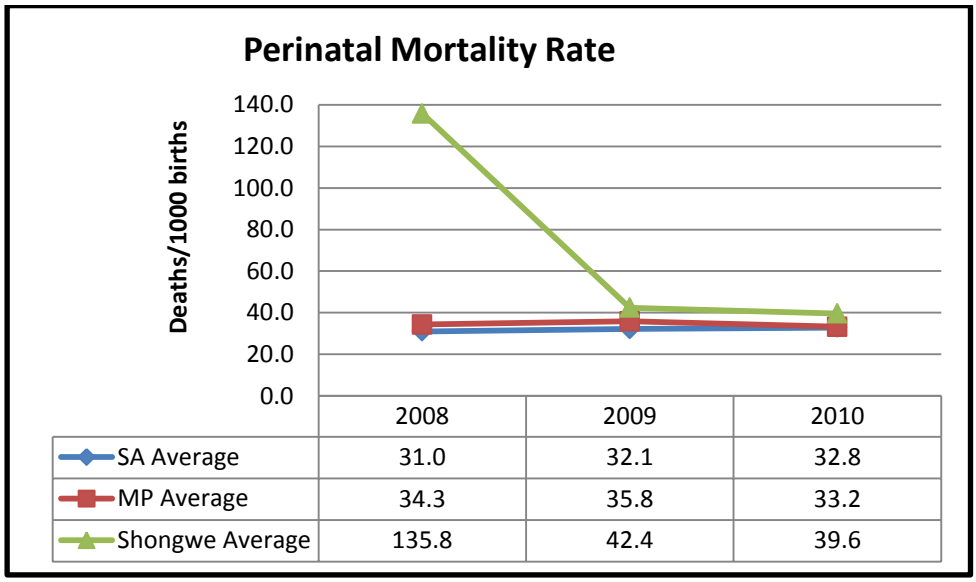
The FCDR fluctuated; increasing between 2008 and 2009 before decreasing in 2010. It was lower than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Shongwe Average	6.3	7.1	5.0

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

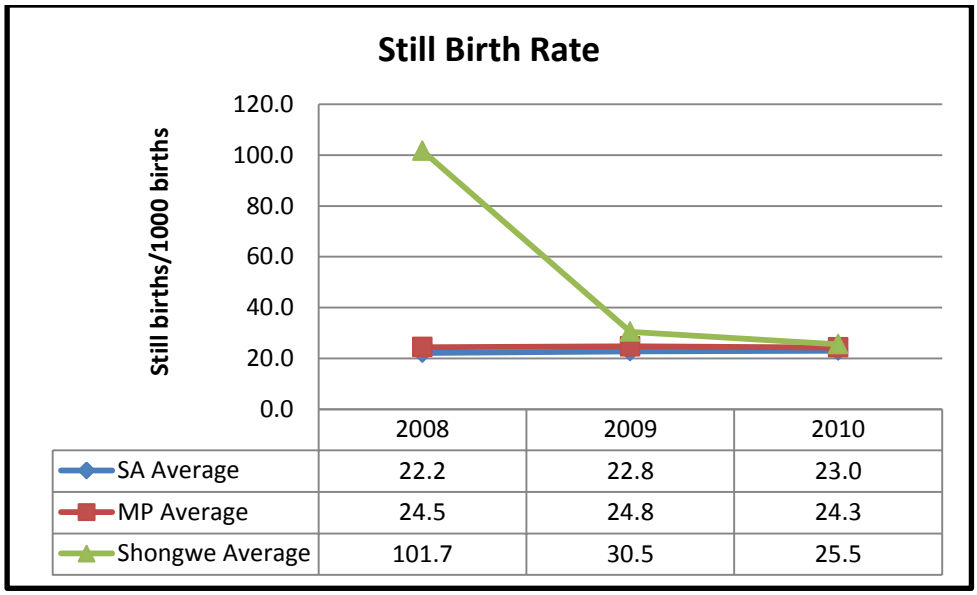
The PNMR was extremely high in 2008, and decreased significantly in 2009, with a further smaller decrease in 2010. It was higher than the national and provincial averages throughout the reporting period. The data should be reviewed and reasons for the very high rate in 2008 ascertained.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Shongwe Average	135.8	42.4	39.6

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR was also extremely high in 2008, and decreased significantly in 2009, with further smaller decrease in 2010. It was higher than the national and provincial averages throughout the reporting period. The data should be reviewed and reasons for the high rate in 2008 ascertained.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Shongwe Average	101.7	30.5	25.5

v: Conclusions:

The PMNR and SBR data should be reviewed and the reasons for the extremely high rates observed in 2008 ascertained.

8. *Tonga Hospital*

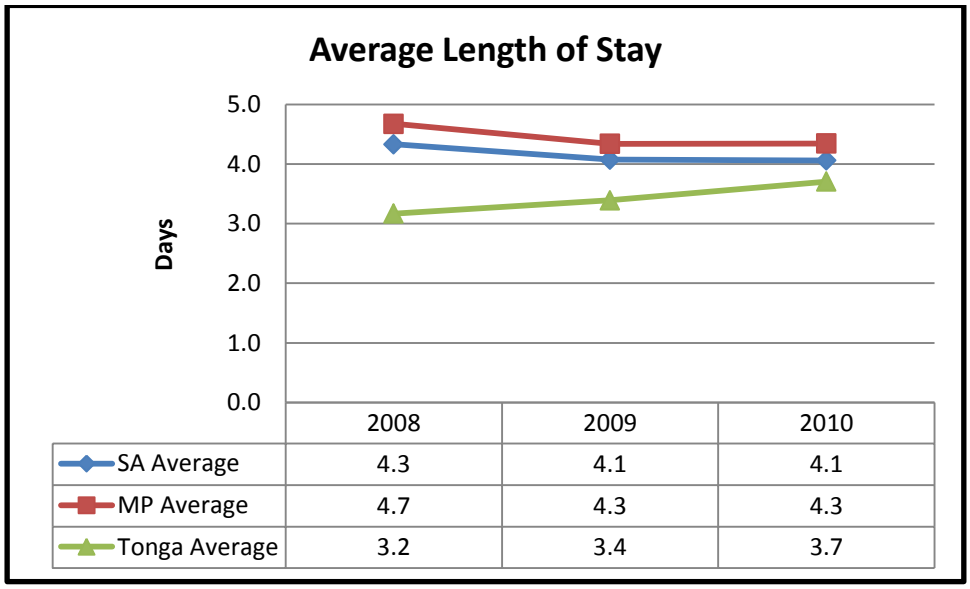
i: Description

Tonga District Hospital has 143 beds and lies in the Nkomazi sub-district.

ii: Input and process indicators

1. Average length of stay (ALOS) – the average length of time inpatients spend in hospital

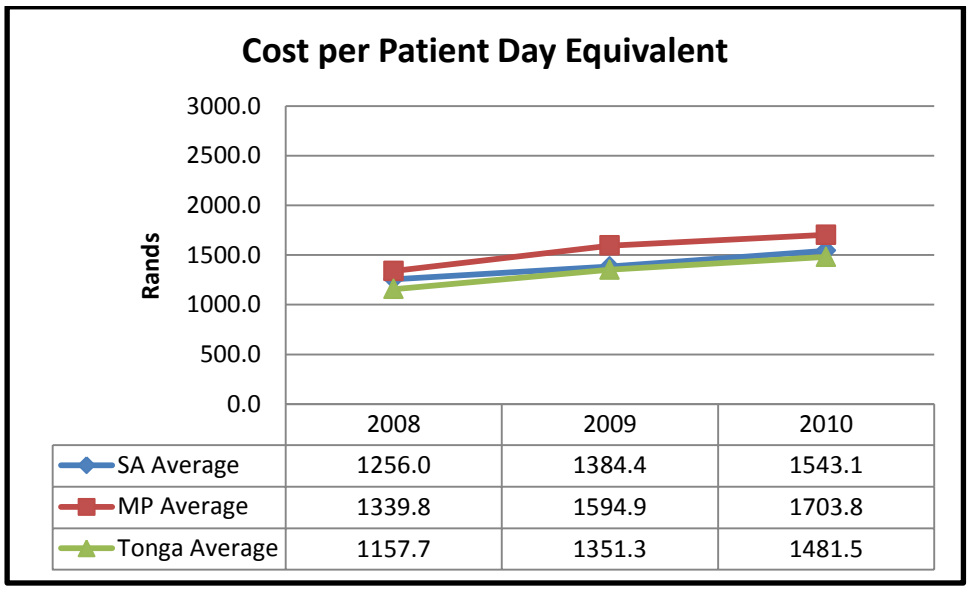
The ALOS increased marginally. It was lower than the national and provincial averages throughout the reporting period.



	2008	2009	2010
SA Average	4.3	4.1	4.1
MP Average	4.7	4.3	4.3
Tonga Average	3.2	3.4	3.7

2. Cost per patient day equivalent (CpPDE): measure of efficiency in the hospital

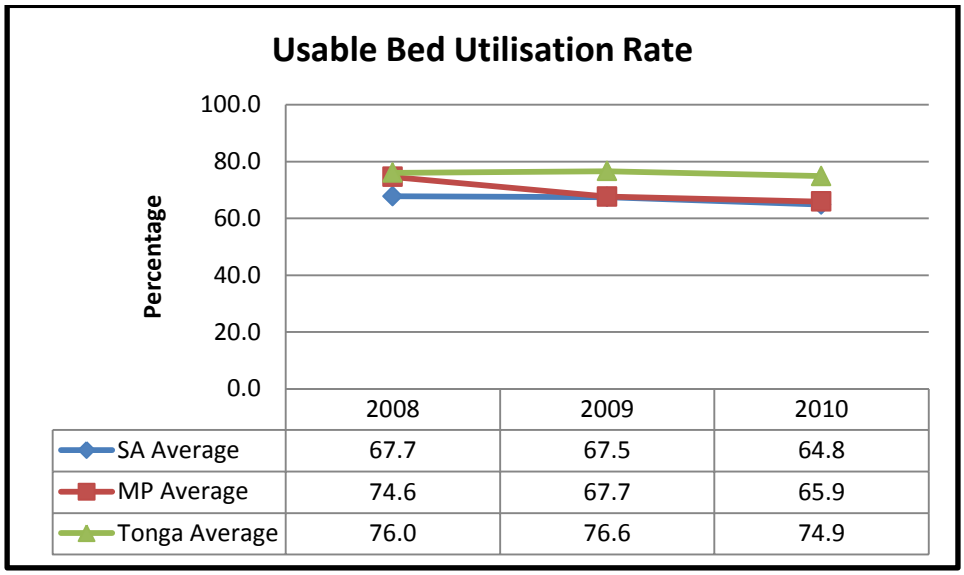
The CpPDE increased over the reporting period, and was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	1256.0	1384.4	1543.1
MP Average	1339.8	1594.9	1703.8
Tonga Average	1157.7	1351.3	1481.5

3. Usable bed utilisation rate (BUR): measures occupancy of beds which are available for use

The BUR was largely constant in 2008 and 2009 and decreased slightly in 2010. It was higher than the national and provincial averages throughout this period.

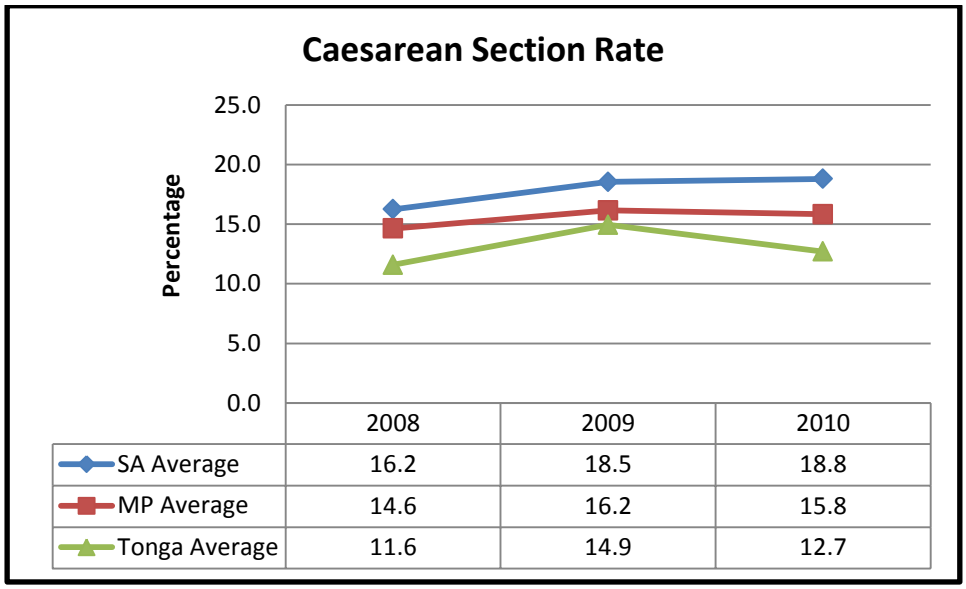


	2008	2009	2010
SA Average	67.7	67.5	64.8
MP Average	74.6	67.7	65.9
Tonga Average	76.0	76.6	74.9

iii: Outcomes indicators

Caesarean section (CS) rate: proportion of deliveries for which a CS is performed

The CS rate fluctuated between 2008 and 2010. It was lower than the national and provincial averages throughout this period.

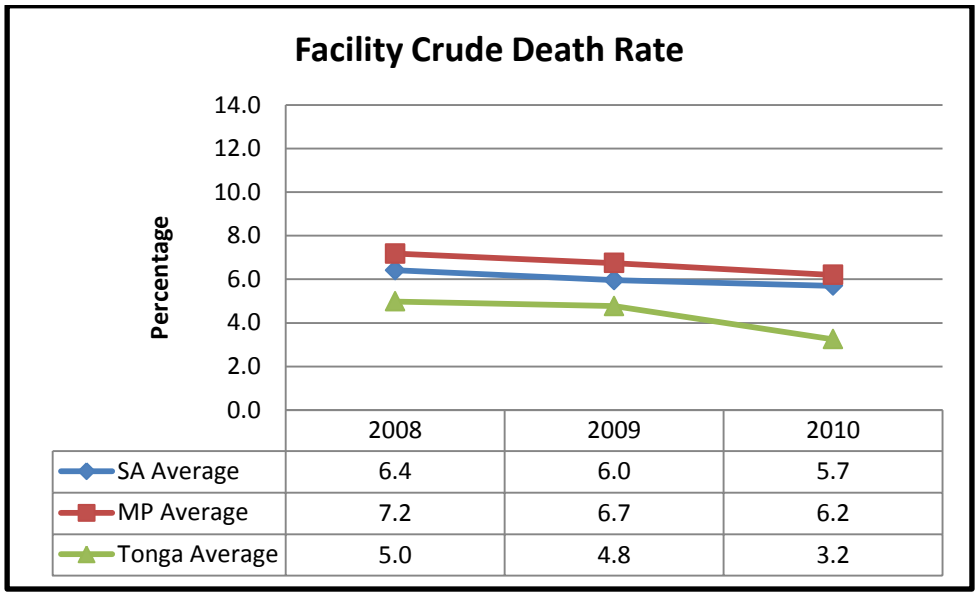


	2008	2009	2010
SA Average	16.2	18.5	18.8
MP Average	14.6	16.2	15.8
Tonga Average	11.6	14.9	12.7

iv: Impact Indicators

1. Facility crude death rate (FCDR): proportion of all inpatient separations that are deaths

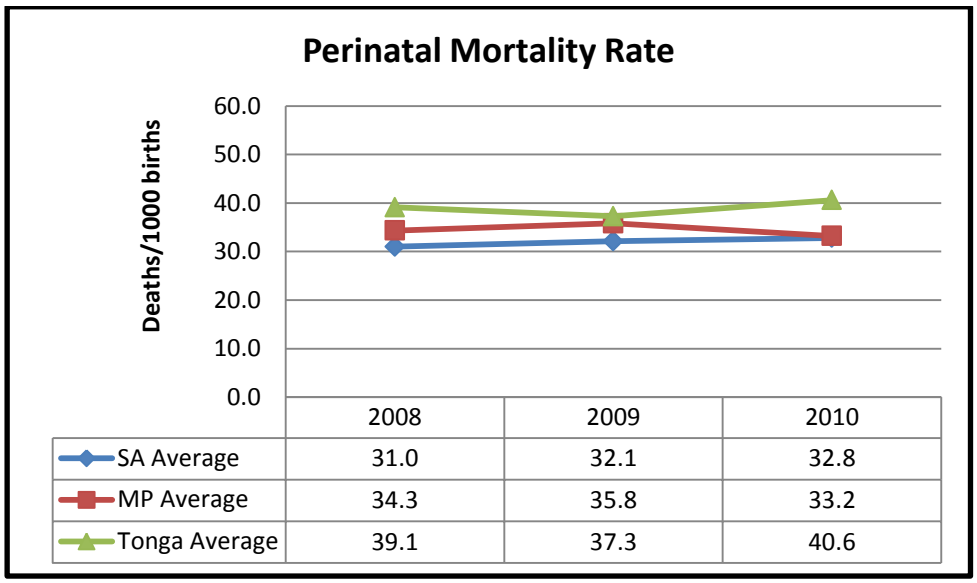
The FCDR decreased steadily over the reporting period. It was lower than the national and provincial averages throughout this period.



	2008	2009	2010
SA Average	6.4	6.0	5.7
MP Average	7.2	6.7	6.2
Tonga Average	5.0	4.8	3.2

2. Perinatal mortality rate (PNMR) – the sum of still births + those babies dying within 7 days of life/1000 births

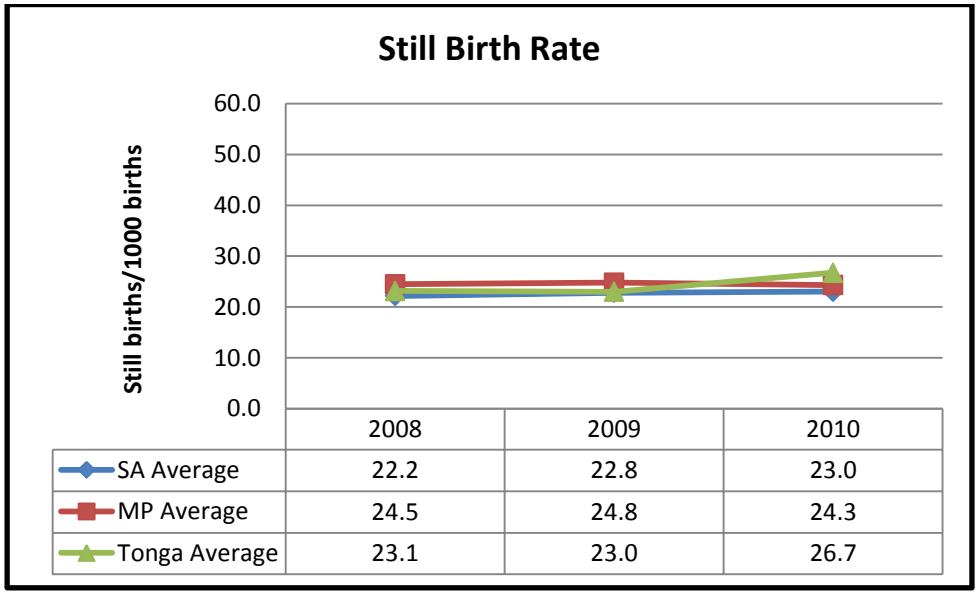
The PNMR fluctuated marginally between 2008 and 2010. It was higher than the national and provincial averages.



	2008	2009	2010
SA Average	31.0	32.1	32.8
MP Average	34.3	35.8	33.2
Tonga Average	39.1	37.3	40.6

3. Still birth rate (SBR): number of babies born dead/1000 births

The SBR was constant in 2008 and 2009 and increased in 2010. It was higher than the national and provincial averages in 2010.



	2008	2009	2010
SA Average	22.2	22.8	23.0
MP Average	24.5	24.8	24.3
Tonga Average	23.1	23.0	26.7

v: Conclusions:

The BUR was higher than the national and provincial averages and the reasons for this should be ascertained. The reasons for the increasing PNMR and SBR should also be ascertained.