

14 Data Quality

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Health information can be defined as an *integrated effort to collect and process data, report and use health information and knowledge to influence policy-making, programme action and research*. It is therefore evident that data have no value in themselves; value is only obtained when data are analysed and transformed into meaningful information and then used.^a

The use of poor quality data can lead to poor decisions because the decisions are based on incorrect information about the situation. Furthermore, if decision-makers become aware of data quality problems, they may lose confidence in the information system. The quality of health care data and reports has come under intensive scrutiny in recent years, notably in terms of the role of the Auditor-General in auditing non-financial data.

In terms of the National Health Act (61 of 2003) the National Department of Health (NDoH) is required to facilitate and co-ordinate the establishment, implementation and maintenance of health information systems at all levels. To adhere to the Act, the NDoH approved the District Health Management Information System (DHMIS) Policy in 2011 which defines the requirements and expectations of providing comprehensive, timely, reliable and good-quality routine evidence for tracking and improving health service delivery. The strategic objectives of the policy are to **“strengthen monitoring and evaluation (M&E) through standardisation of data management activities and to clarify the main roles and responsibilities at each level for each category of staff to optimise completeness, quality, use, ownership, security and integrity of data”**.^b

The NDoH also approved the District Health Management Information System (DHMIS) Standard Operating Procedures (SOP): Facility Level in November 2012. All health facilities should implement the SOP.

The NDoH revises the National Indicator Dataset (NIDS) every two years. The NIDS contains definitions for all the data elements for which data should be collected as well as which facility should submit data for the relevant data elements. Following the data element definition incorrectly can result in erroneous data collection and poor data quality.

To be of good quality, data should be complete, correct and consistent.^c The District Health Information Software (DHIS) was adopted as South Africa’s official health information system for managing aggregated routine health service-based information. The system features certain data quality assessment functions to ensure completeness, correctness and consistency. These functions include:

- ◆ Missing data reports and gaps to determine completeness
- ◆ Absolute validation report to determine correctness
- ◆ Outlier report to determine consistency
- ◆ Standardised use of 0 (zero)

Participants in District Health Barometer (DHB) workshops over the past three years have cited poor data quality as one of the reasons for sub-optimal district performance for most of the indicators. Poor data collection occurs when data are not collected in a logical sequence and when the tool used to collect data is deficient. Some causes and sources of poor data collection identified during the DHB workshops are:

- ◆ Poorly designed data collection tools that are not user-friendly
- ◆ Too many data collection tools
- ◆ Data for one data element obtained from more than one tool
- ◆ Out-dated data collection tools
- ◆ Incomplete data collection tools and standard registers
- ◆ Staff do not know the data element definitions
- ◆ Delay in recording data, when data are not recorded at the point of contact with a patient
- ◆ Staff add up values incorrectly
- ◆ Incorrect transcription of values from daily to weekly to monthly forms
- ◆ Incorrect capturing of data in the DHIS
- ◆ DHIS data quality assessment functions are not performed

a World Health Organization. Developing health management information systems. A practical guide for developing countries. Geneva: World Health Organization; 2000.

b South African National Department of Health. District Health Management Information System (DHMIS) Standard Operating Procedures: Facility Level. Pretoria: National Department of Health; 2012

c South African National Department of Health. Health Information Manual for Evidence Based Health Service Management, Participants Guide. Pretoria: National Department of Health; 2007.

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- ◆ Non-adherence to the District Health Management Information System (DHMIS) Standard Operating Procedures for facility level
- ◆ The DHIS functions do not ensure 100% data quality; some manual data quality checking should be performed.

This section focuses on examples of poor data quality identified in the raw data for indicators with poor performance or where huge fluctuations were identified.

14.1 Inpatient bed utilisation rate

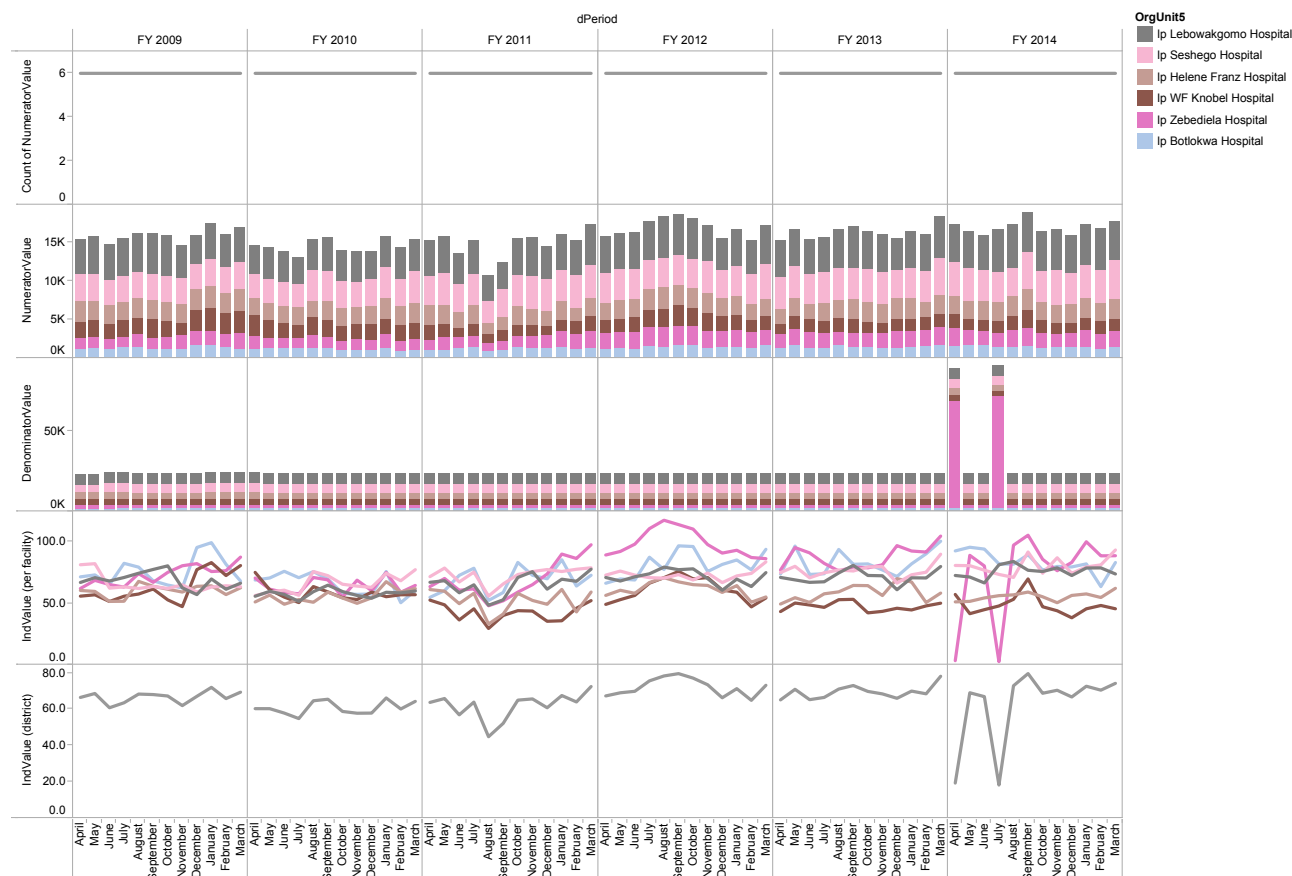
The inpatient bed utilisation rate of Capricorn District in the Limpopo Province was 72.1% in 2011/12, 69.4% in 2012/13 and then decreased to 48.5% in 2013/14. As seen in Table 1 and Figure 1, the 'inpatient beds' values for Zebediela Hospital in April and July 2013 are clear outliers and this not only affected the inpatient bed utilisation rate of the hospital, but also the inpatient bed utilisation rate of the district.

Table 1: Inpatient beds – Zebediela Hospital, April 2013 to March 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Zebediela Hosp	2013				2 220	74	74	2 294	74	74	74	74	74
	2014	74	74	74									

Source: DHIS

Figure 1: Capricorn District: inpatient bed utilisation rate monthly trends



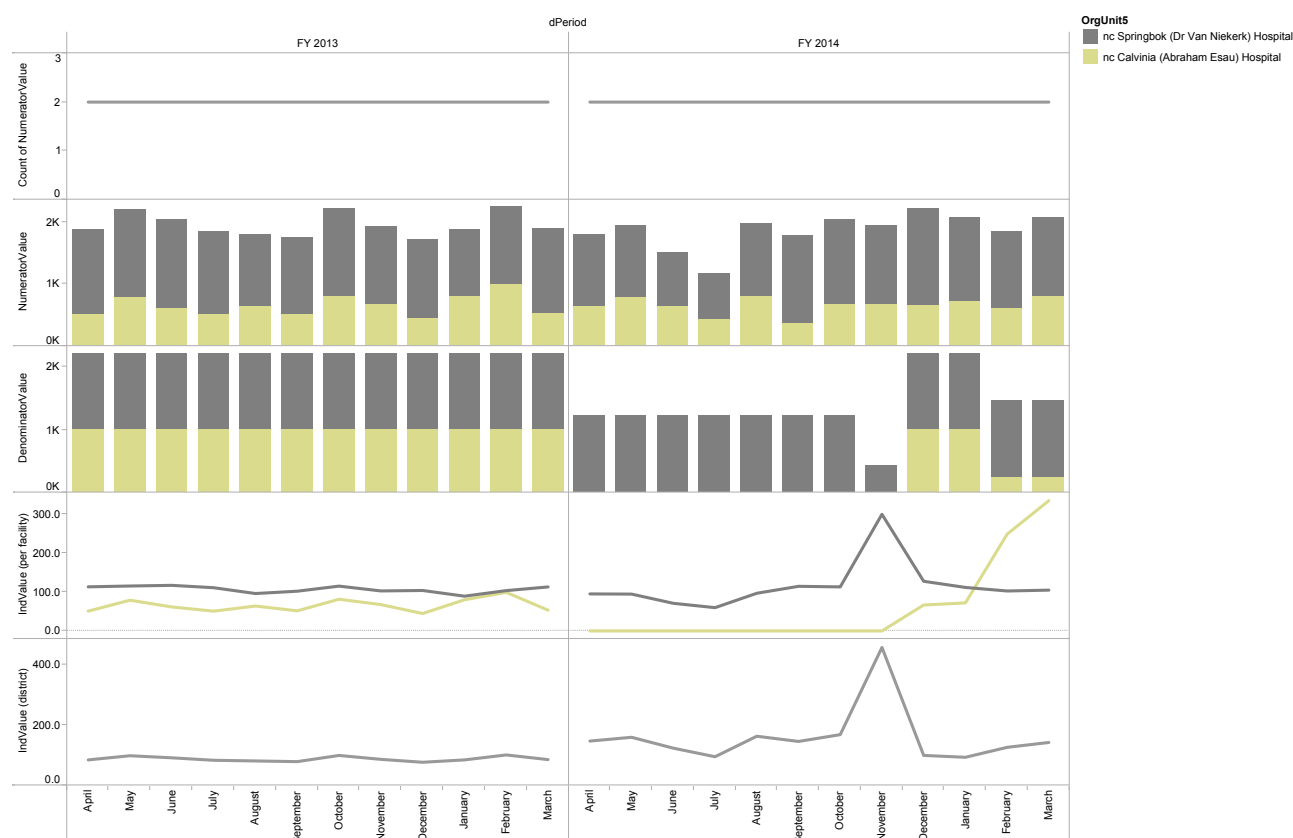
Source: DHIS

The inpatient bed utilisation rate of Namakwa District in the Northern Cape Province was 83.8% in 2011/12, 87.9% in 2012/13 and then increased to 137.4% in 2013/14. As seen in Table 2 and Figure 2, Abraham Esau Hospital had not submitted data for the data element 'inpatient beds' that is used to calculate the denominator (inpatient bed days) between April and November 2013, and it then changed between January and February 2014. The inpatient beds value for Dr Van Niekerk Hospital for November 2013 is also an outlier. The number of inpatient beds is supposed to be stable during a financial year. These gross errors resulted in an inpatient bed utilisation rate of more than 100% for the district.

Table 2: Inpatient beds – district hospitals in Namakwa District, April 2013 to March 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Abraham Esau Hosp	2013												33
	2014	33	8	8									
Dr Van Niekerk Hosp	2013				40	40	40	40	40	40	40	14	40
	2014	40	40	40									

Source: DHIS

Figure 2: Namakwa District: inpatient bed utilisation rate monthly trends

Source: DHIS

14.2 OPD new client not referred rate

Huge fluctuations are noticed in the OPD new client not referred rate of Bonajala District in North West Province. The rate was 20.5% in 2011/12, 72.5% in 2012/13 and 41.8% in 2013/14, with the 2012/13 value being a clear outlier. As seen in Table 3, the 'OPD headcount not referred new' values for Brits Hospital in January and February 2013 are clear outliers contributing to the huge fluctuation in the rate.

Table 3: OPD headcount not referred new – Brits Hospital, Jan 2013 to March 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Brits Hosp	2013	2 036	1 979	132	477	502	447	453	568	448	339	320	318
	2014	376	325	334									

Source: DHIS

14.3 Antenatal client initiated on ART rate

The antenatal client initiated on ART rate of Chris Hani District in the Eastern Cape Province was 90.5% in 2011/12, 92.6% in 2012/13 and then declined by 22.6 percentage points to 80.0% in 2013/14. As seen in Table 4, the 'Antenatal client eligible for ART initiation' value for All Saints Gateway Clinic in March 2014 is a clear outlier contributing to the huge fluctuation in the rate. It is also clear that for May 2013, more ANC clients were initiated on ART than were eligible for ART initiation.

Table 4: OPD Antenatal client eligible for ART initiation and Antenatal client Initiated on ART – All Saints Gateway Clinic, April 2013 to March 2014

			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EC All Saints Gateway Clinic	Antenatal client eligible for ART initiation	2013				9	2	4	4	5	2	4	3	6
		2014	5	2	22									
	Antenatal client INITIATED on ART	2013				7	4	4	4	5	2	4	3	6
		2014	5	2	4									

Source: DHIS

14.4 DTaP-IPV/Hib 3 – Measles 1st dose drop-out rate

The DTaP-IPV/Hib 3 – Measles 1st dose drop-out rate of Capricorn District in the Limpopo Province fluctuated and was 7.3% in 2011/12, 2.2% in 2012/13 and then increased to 18.1% in 2013/14. As seen in Table 5, the 'DTaP-IPV/Hib 3rd dose' value for Moletjie Clinic in March 2014 is a clear outlier contributing to the huge increase in the drop-out rate.

Table 5: DTaP-IPV/Hib 3rd dose – Moletjie Clinic, April 2013 to March 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Moletjie Clinic	2013		8	42	26	34	15	60		37	39	49	49
	2014	6	10	149									

Source: DHIS

The DTaP-IPV/Hib 3 – Measles 1st dose drop-out rate of Mopani District in the Limpopo Province also fluctuated and was -1.8% in 2011/12, -4.7% in 2012/13 and then increased to 20.4% in 2013/14. As seen in Table 6, the 'Measles 1st dose under 1 year' values for several clinics show huge outliers, inconsistencies and gaps that might have contributed to the huge increase in the drop-out rate in 2013/14.

Table 6: Measles 1st dose under 1 year, April 2013 to March 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dan Village	2013				17	4	40	44	15	15	26	15	16
	2014	22	21	16									
Dzumeri CHC	2013				46	33	47	50	22	50	50		32
	2014	28	31	45									
Sekgopo	2013				34	19	10	12	44	23	32	19	19
	2014			44									
Shotong	2013			34	29	27	7	7	1		39	16	17
	2014			41									

Source: DHIS

14.5 Immunisation coverage under 1 year

The immunisation coverage under 1 year of Fezile Dabi District in the Free State Province was 89.0% in 2011/12, 82.8% in 2012/13 and then dropped to 73.7% in 2013/14. If no vaccine stock-outs appear, the values for the data elements 'Measles 1st dose under 1 year' and 'immunised fully under 1 year new' should be in line, because if a child under one year received all vaccines as per the regime, the child will be fully immunised when receiving the Measles 1st dose under 1 year vaccination. As seen in Table 7, the 'Measles 1st dose under 1 year' and 'Immunised fully under 1 year new' values for several clinics show huge inconsistencies and gaps that might have contributed to the 9.1 percentage points decrease in the immunisation coverage under 1 year from 2012/13 to 2013/14.

Table 7: Measles 1st dose under 1 year versus immunised fully under 1 year new – facilities in Fezile Dabi District, April 2013 to March 2014

			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Harry Gwala (Sasi) Clinic	Immunised fully under 1 year new	2013				58	51	29	50	38	39	57	45	35
		2014	28	41	53									
	Measles 1st dose under 1 year	2013				58	51	29	50	38	39	67	46	35
		2014	36	55	53									
Kganya CHC	Immunised fully under 1 year new	2013				34	25	17	8	14	16	13	10	8
		2014	9	15	16									
	Measles 1st dose under 1 year	2013				34	25	17	13	13	21	17	11	15
		2014	13	15	20									
Rammulotsi Clinic	Immunised fully under 1 year new	2013				16	22		1	27	22	18	11	14
		2014	11	11	24									
	Measles 1st dose under 1 year	2013				16	22	28	1	27	22	18	11	14
		2014	11	11	24									
Sasolburg Clinic	Immunised fully under 1 year new	2013			17	16	18	23	30	14	13	28	25	18
		2014	15		12									
	Measles 1st dose under 1 year	2013			17	16	22	23	30	14	13	28	25	18
		2014	15	24	31									

Source: DHIS

14.6 Male condom distribution coverage

The male condom distribution coverage of uMgungundlovu District in KwaZulu-Natal Province was 26.3 condoms per male 15 years and older in 2011/12, 58.0 condoms in 2012/13 and then increased sharply to 153.4 condoms in 2013/14. In general, the quality of the data for 'male condoms distributed' in this district appears to be of poor quality and some examples are shown in Table 8. There are huge inconsistencies and gaps that might have contributed to the huge increase in the male condom distribution coverage in 2013/14.

Table 8: Male condoms distributed – facilities in uMgungundlovu District, April 2013 to March 2014

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
kz Bruntville CHC	2013				7 200	12 600	4 400	8 000	34 000	17 800	9 600	33 300	12 000
	2014	30 800	17 600	12 800									
kz Caluza Clinic	2013				140	80	3 184	7 440	120	6 200	3 900	7 400	5 000
	2014		7 200	3 400									
kz Condom Distribution Non-medical Site (Mkham-bathini)	2013				90 000	180 000	180 000	180 000	312 000	306 000	312 000	312 000	312 000
	2014	312 000		594 000									
kz Condom Distribution Non-medical Site (Mooi Mpfana)	2013					48 000	48 000	84 000	84 000	84 000	84 000	84 000	84 000
	2014	144 000		193 800									
kz Condom Distribution Non-medical Site (Richmond)	2013				108 000	369 000	261 000	400 000	460 000	460 000	460 000	436 000	454 000
	2014	544 000		562 000									
kz Condom Distribution Non-medical Site (Umsunduzi)	2013				814 000	1 222 000	1 222 000	1 510 000	1 576 000	2 166 000	2 616 000	2 943 000	3 435 000
	2014	3 015 000		4 741 000									

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		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
kz Cramond Clinic	2013				4 710	4 020	4 120	3 890	3 920	2 600	3 620	5 600	30 200
	2014	23 000	28 400	53 400									
kz Embo Clinic	2013				7 600	7 200	6 800	3 500	31 000	3 200	3 300	6 300	4 000
	2014	5 600	7 200	24 000									
kz Gomane Clinic	2013				10 400	600	12 500	800	9 800	7 000	1 000	8 936	1 600
	2014	4 000	6 150	36 000									

Source: DHIS

14.7 Couple year protection rate (CYPR)

As seen in Table 9, the CYPR of Gauteng Province (GP) at 25.0% was the lowest in the country and 12.3 percentage points below the national average of 37.3% in 2013/14.

Table 9: Couple year protection rate – provinces, April 2013 to March 2014

Indicator	Province	2013/14 (%)
Couple Year Protection Rate	EC	30.9
	FS	34.9
	GP	25.0
	KZN	45.0
	LP	36.3
	MP	36.0
	NC	32.8
	NW	32.9
	WC	63.6

Source: DHIS

The CYPR of all the districts contributed to the low rate in GP, as seen in Table 10.

Table 10: Couple year protection rate – GP districts, April 2013 to March 2014

Indicator	District	2013/14 (%)
Couple Year Protection Rate	Ekurhuleni: EKU	25.6
	Johannesburg: JHB	26.2
	Sedibeng: DC42	27.7
	Tshwane: TSH	20.2
	West Rand: DC48	30.2

The 2013 NIDS indicates that all facilities, including all hospitals, should submit data on family planning contraceptive methods issued. If every parturient woman is offered a family planning method after the delivery, the number of deliveries in facility and the number of injectable family planning (FP) methods issued should be close. The DHIS data revealed that most hospitals in Gauteng had submitted limited or no data for FP methods. Table 11 shows that there were also marked inconsistencies between the number of deliveries and injectable FP methods issued, as well as gaps that might have contributed to the low CYPR in 2013/14. The following hospitals have (except for male condoms distributed and sterilisation – female) not submitted any other family planning methods data for the reporting period.

- ◆ Far East Rand Hospital
- ◆ Natalspruit Hospital
- ◆ Tambo Memorial Hospital
- ◆ Chris Hani Hospital
- ◆ Rahima Moosa Hospital
- ◆ Steve Biko Hospital

Table 11: Delivery in facility and family planning methods data – Gauteng Province, April 2013 to March 2014

District/ Metro	Facility	Data Element Name	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Grand Total	
Ekurhuleni MM	Far East Rand Hospital	Delivery in facility total	518	623	610	631	580	564	532	563	640	528	526	575	6 890	
		Male condoms distributed	4 502	4 530	4 600	4 200	4 621	5 600	5 600	3 800	3 560	1 561	800	800	800	39 374
	Natalespruit Hospital	Delivery in facility total	856	925	857	830	816	943	836	836	869	885	962	894	920	10 593
		Male condoms distributed	5 500	7 000	8 500	3 500	6 000	9 000	9 000	9 000	120 000	12 000	123 000	5 000	4 500	313 000
	Pholosoeng Hospital	Sterilisation – female	26	29	31	30	20	42	42	40	33	20	25	31	33	360
		Delivery in facility total	320	373	275	282	393	377	372	370	372	360	386			3 508
		Male condoms distributed	11 000	9 400	8 600	11 200	8 200	8 400	8 400	9 000	9 800	8 800		8 400	7 600	100 400
		Medroxyprogesterone injection	255	341	253	247	298	345	345	284	319	306	116	390	213	3 367
	Johannesburg MM	Tambo Memorial Hospital	Norethisterone enanthate injection	7	13	10	7	9	6	16	6	13	15	11	6	119
			Sterilisation – female	19	20	8	12	21	16	16	20	20	18	4	9	35
Delivery in facility total		551	592	535	579	528	540	540	508	545	547	519	563	577	6 584	
Male condoms distributed		9 480	8 790	9 290	10 350	9 370	8 780	8 780	8 000	8 150	8 330	7 540	10 380	10 790	109 250	
Sterilisation – female		41	20	19	21	24	19	19	32	44	23	40	39	21	343	
Delivery in facility total		266	300	269	266	251	254	232	232	234	223	242	243	252	3 032	
Male condoms distributed		14 000	11 800	14 000	6 800	5 800	5 800	5 800				6 400	10 800	3 000	72 600	
Medroxyprogesterone injection		45			60	44	50	50	23	51	32	33	54	49	441	
Norethisterone enanthate injection		17			20	26	13	13	8	10	11	18	38	21	182	
Sterilisation – female		15	30	18	25	14	22	22	23	20	18	19	12	22	238	
Charlotte Maxeke Hospital	Delivery in facility total	765	764	690	770	793	781	792	792	750	790	790	754		8 439	
	Male condoms distributed	3 400	3 400	3 200	3 000	3 000	3 200	3 200	3 800	5 000	2 000	1 400	3 400	2 800	37 600	
	Medroxyprogesterone injection	148	118	105	94	124	137	137	145	140	74	129	132		1 346	
	Norethisterone enanthate injection	100	90	66	82	93	85	85	96	46	35	67	78		838	
Chris Hani Hospital	Sterilisation – female	31	21	35	37	28	29	29	31	24	37	26	37	38	374	
	Delivery in facility total	1 799	1 825	1 730	1 962	2 067	1 861	1 861	1 732	1 741	2 134	1 815	1 817	1 867	22 350	
	Male condoms distributed	5 800	8 000	1 600	2 000	8 500	6 000	6 000	6 000	2 800	2 400	2 800	4 000	3 350	53 250	
	Delivery in facility total	374	417	382	393	384	388	388	315	368	340	335	304	330	4 330	
Edenvale Hospital	IUCD inserted					2				1					3	
	Male condoms distributed	22 600	20 200	24 600	23 600	22 000	12 600	12 600	20 200	20 200	12 000	4 000	16 800	14 800	213 600	
	Medroxyprogesterone injection	28	34	46	65	38	42	42	19	20	8	15	6	3	324	
	Norethisterone enanthate injection	25	25	25	43	17	19	19	17	19	8	10	6		214	
Rahima Moosa Hospital	Delivery in facility total	957	996	987	1 050	989	1 010	997	997	909	1 037	929	812	1 020	11 693	
	Sterilisation – female	13	53	59	76	71	58	58	75	64	69			38	576	

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District/ Metro	Facility	Data Element Name	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Grand Total		
Sediberg DM	Heidelberg Hospital	Delivery in facility total	199	197	207	207	207	195	213	157	171	180	184	187	208	2 305	
		Male condoms distributed	12 000	6 000	120 000	10 200	1 200			24 000	6 000	6 000	6 000	6 000	12 000	120 000	209 400
		Medroxyprogesterone injection	35	84	147	105	130		110	116	138	130	130	133	155	166	1 449
		Norethisterone enanthate injection	114	27	2	10	2		40	32	22	36	45	45	56	28	414
		Sterilisation – female	7	17	9	13	10		12	14	5	5	4	4	15	8	119
	Sebokeng Hospital	Delivery in facility total	417	447	414	440	480		437	415	367	448	461	394	458	5 178	
		Male condoms distributed	71 400	64 400	10 400	25 800	28 000		22 800	82 120	25 000	19 000	8 400	3 700	64 000	425 020	
		Medroxyprogesterone injection	197	65	30	68	54		54	17	57	15	78	46	41	722	
		Norethisterone enanthate injection	217	25	33	19	28		22	24	3	15	29	8	15	438	
		Sterilisation – female	30	38	23	27	25		34	34	20	21	28	7	16	303	
Tshwane MM	Jubilee Hospital	Delivery in facility total	429	452	446	554	469		436	424	411	433	517	457	472	5 500	
		IUCD inserted	1			4	14		11	7	13	6	3			59	
		Male condoms distributed	18 000	2 600	6 000	24 000	24 000		12 000	54 000	42 000	408 000		192 000	42 000	824 600	
		Medroxyprogesterone injection							37	30	10	16	40	30	30	193	
		Norethisterone enanthate injection							21	9	8	3	6	7	7	61	
	Odi Hospital	Delivery in facility total	224	277	222	201	258		265	242	239	224	253	238	287	2 930	
		IUCD inserted		16	32	33	36		35	28	28	12	29	16	17	254	
		Male condoms distributed		7 200	8 000	11 400	12 800		3 800	15 400	14 600	13 400	27 200	18 000	18 000	149 800	
		Medroxyprogesterone injection				311	122		187	230	141	213	281	196	187	1 868	
		Norethisterone enanthate injection				248	200		209	233	232	216	175	179	192	1 884	
Pretoria West Hospital	Sterilisation – female													13	23		
	Delivery in facility total	116	130	143	128	149		165	103	105	106	121	124	183	1 573		
	IUCD inserted	6	1	2		1			5	1	2		1	2	21		
	Male condoms distributed	6 810	9 490	9 920	8 630	10 180		4 450	11 400	12 400	7 060	75	84	67	80 566		
	Medroxyprogesterone injection	71	74	67	72	79		95	73	75	61	49	48	38	802		
															400		

District/ Metro	Facility	Data Element Name	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Grand Total	
Tshwane District Hospital	Delivery in facility total	243	311	253	271	230	247	247	251	258	243	246	211	275	3 039	
					18	16	7			20		15	17	11	19	123
	IUCD inserted	24 000	12 000	12 000	36 000	36 000	24 000	24 000	24 000	24 000	24 000	12 000	24 000	36 000	18 000	282 000
					80	11	34	6	66	6	66	67	58	74	89	485
	Medroxyprogesterone injection				57	8	123	72	38	38	38	10	31	27	404	
															1	1
	Norethisterone enanthate injection															
	Sterilisation – female															
Dr G Mukhari Hospital	Delivery in facility total	858	848	797	864	887	769	835	835	745	858	887	804	902	10 054	
					5	8	14	7					2	6	5	54
	IUCD inserted	44 600	40 400	40 600	53 800	114	33 200	16	104	104	156	107	129	121	120	416 500
	Medroxyprogesterone injection	140	157	132	134	148	147	135	167	114	166	101	152	152	1 693	
	Norethisterone enanthate injection	2	1	1		4	2	3	2	3	2	3	1	1	7	26
	Sterilisation – female	231	257	287	256	251	265	245	253	302	266	276	276	240	276	3 129
Steve Biko Hospital	Delivery in facility total	710	760	745	703	724	773	684	684	744	736	710	718	730	8 737	
	Male condoms distributed	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	3 000	12 000	36 000	
	Medroxyprogesterone injection	73	52	77	123	143	105	336	219	83	159	298	298	298	1 668	
	Norethisterone enanthate injection	43	27	6	20	27	66	13	50					11	265	
	Sterilisation – female				12											12
West Rand DM	Delivery in facility total	318	325	342	379	357	367	350	350	392	347	372	346	396	4 291	
	Male condoms distributed	10 200	12 000	12 200	8 200	8 800	10 600	12 000	12 000	12 000	6 000	12 000	12 000	20 200	22 800	147 000
	Medroxyprogesterone injection	22	25	16	22	20	22	22	22	22	82	22	164	15	169	601
	Norethisterone enanthate injection	21	26	18	20	30	25	19	67	56	56	56	156	18	92	548
	Delivery in facility total	671	670	663	574	577	575	534	507	564	546	560	546	491	560	6 992
Male condoms distributed	1 800	20 000	2 000	3 600	1 800	8 400	600	8 800	8 800	9 600	600	8 800	2 200	9 200	69 400	
Medroxyprogesterone injection	141	132	105	136	144	151	185	188	70	115	176	152	152	1 695		
Norethisterone enanthate injection	140	82	78	99	70	91	104	91	41	77	123	115	115	1 111		
Sterilisation – female	46	40	48	40	30	41	36	23	41	46	46	46	46	38	475	

Source: DHIS

Gaps

Inconsistency between number of deliveries and FP methods

These are merely a few examples of how poor data quality can affect district performance. The purpose of the District Health Barometer is to provide an overview of the delivery of primary health care in the public health sector and to provide reliable and credible information that can be used to inform the development of District Health Plans and the National Department of Health's Annual Performance Plan. However, given the less than optimal quality of data, in many cases the current performance of districts and provinces as reflected in the Barometer, might not necessarily be a true representation of actual service delivery on the ground.

Recommendations to improve the data quality include:

- ◆ All facilities should implement and adhere to the SOP.
- ◆ Data collection tools should be standardised, limited and user-friendly.
- ◆ Data collection tools and standard registers should be completed correctly.
- ◆ All facility staff should be trained on data element definitions.
- ◆ DHIS data quality assessment functions should be performed according to the SOP.
- ◆ As the DHIS functions do not ensure 100% data quality, some manual checking mechanisms should be implemented.
- ◆ Information management units at sub-districts, districts and national levels should perform proper data quality assessments to identify errors such as those described in this chapter.