

# Update on the Perinatal Morbidity and Mortality statistics in SA( NaPeMMCo)

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Province

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# Outline

- Role of NaPeMMco
- Activities
- Results
  - Data
  - Drivers of mortality” primary, final
  - Modifiable factors
- Recommendations

# Role Of NaPeMMco

- Recommend the methodology and source of data collection to be used as the primary source of the mortality and morbidity estimates in the country.
- Analyze data collected to determine the trends and progress in monitoring the avoidable causes of deaths in the country.
- Provides advice on audited perinatal and neonatal deaths through development of recommendations to reduce avoidable deaths.

# Activities

- Produce an annual interim report and a triennial comprehensive report.
- Annual and triennial reports will be aggregated for the country and disaggregated at the provincial and district level.
- Produce minutes of the meetings which will be shared with the Minister and for the presentation to the NHC tech as the evidence of the collective agreement of the deliberations.

# Activities

- The committee is responsible for analysis of avoidable and non-avoidable factors causing perinatal morbidity and mortality in order to inform development of policy and clinical guidelines by the National Department of Health for implementation at provincial, districts and facilities.
- The committee act as an advisory committee to the Minister of Health.

# Total births in South Africa 2002-2017, recorded on DHIS



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total births	742751	759552	856202	904656	929482	935390	971916	950933	926074	947829	962062	958675	974739	942136	894810	911361

# Total births recorded on PPIP 2017

	Number
500 - 999g	9103
1,000 - 1,499g	12763
1,500 - 1,999g	22092
2,000 - 2,499g	62066
2,500g+	594969
Total	700 993

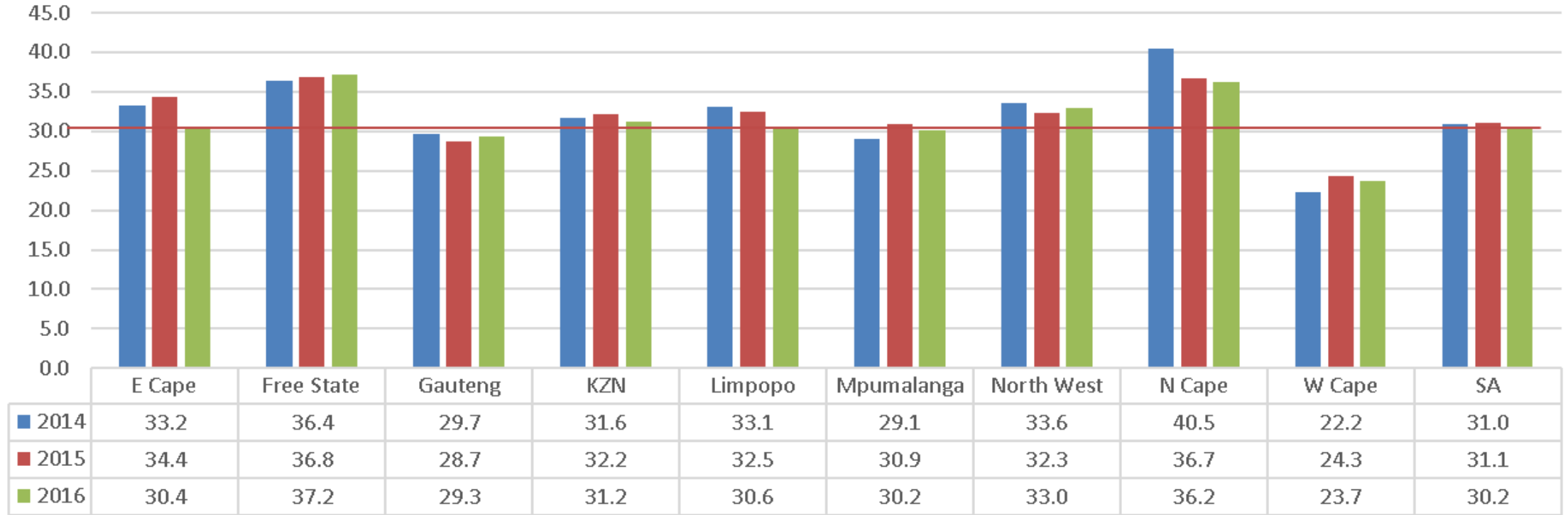
210 368 less than recorded  
on DHIS (23%)

# Total deliveries on PPIP, per province and per weight group(2017)

	500 - 999g	1,000 - 1,499g	1,500 - 1,999g	2,000 - 2,499g	2,500g+	All birth weights
Total EC	1038	1660	2909	8161	74565	88333
Total FS	581	845	1227	3281	29464	35398
Total Gauteng	1929	2598	4290	11715	109151	129683
Total KZN	1552	1971	3493	9969	100811	117796
Total Limpopo	984	1544	2746	8130	90130	103534
Total Mpumalanga	719	1182	2117	6047	66381	76446
Total North West	583	830	1400	4436	38324	45573
Total NC	315	423	845	2324	14055	17962
Total WC	1402	1710	3065	8003	72088	86268
<b>Total SA</b>	<b>9 103</b>	<b>12 763</b>	<b>22 092</b>	<b>62 066</b>	<b>594 969</b>	<b>700 993</b>

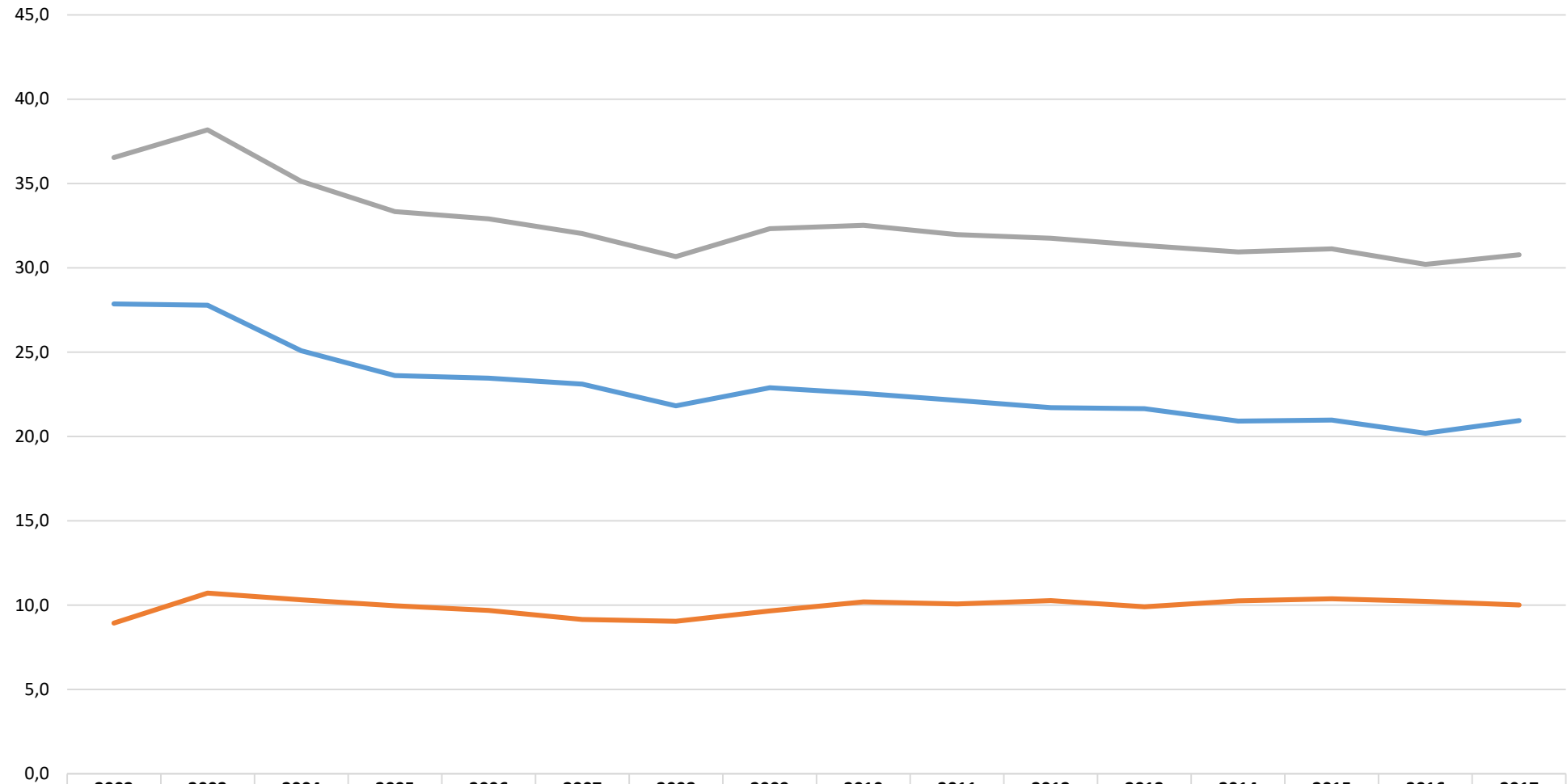


Perinatal Mortality Rate 2014-2016, DHIS data



■ 2014 ■ 2015 ■ 2016

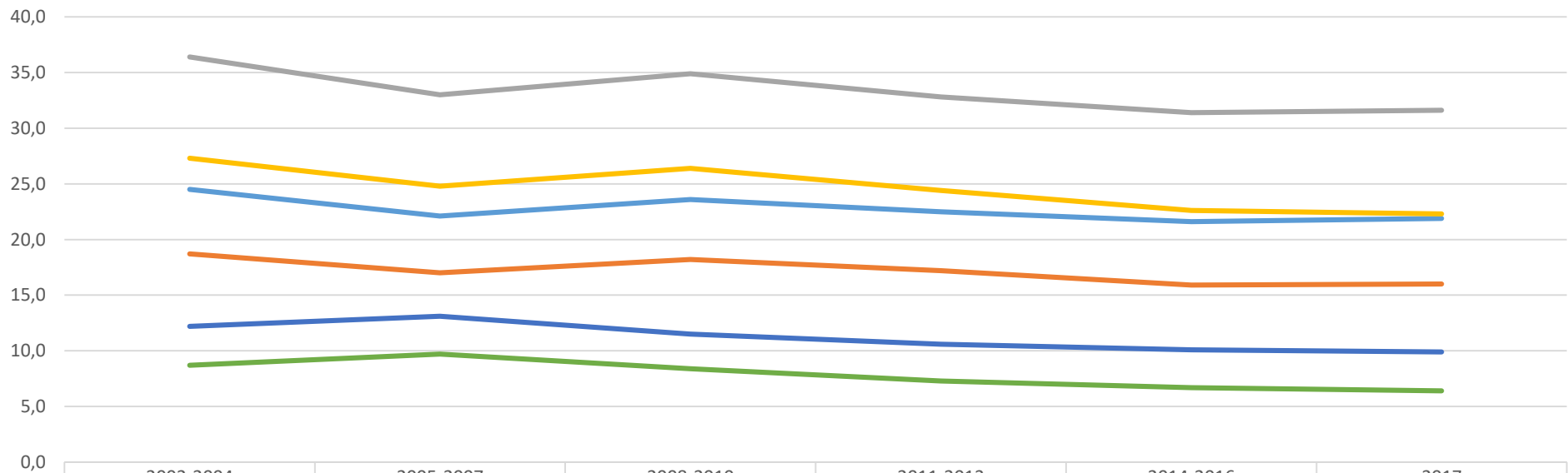
# Rates DHIS (all births) 2002-2017, per year



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Stillbirth rate	27,9	27,8	25,1	23,6	23,5	23,1	21,8	22,9	22,6	22,1	21,7	21,6	20,9	21,0	20,2	20,9
Early neonatal mortality rate	8,9	10,7	10,3	10,0	9,7	9,1	9,0	9,6	10,2	10,1	10,3	9,9	10,2	10,4	10,2	10,0
Perinatal mortality rate	36,5	38,2	35,1	33,3	32,9	32,0	30,7	32,3	32,5	32,0	31,7	31,3	30,9	31,1	30,2	30,8

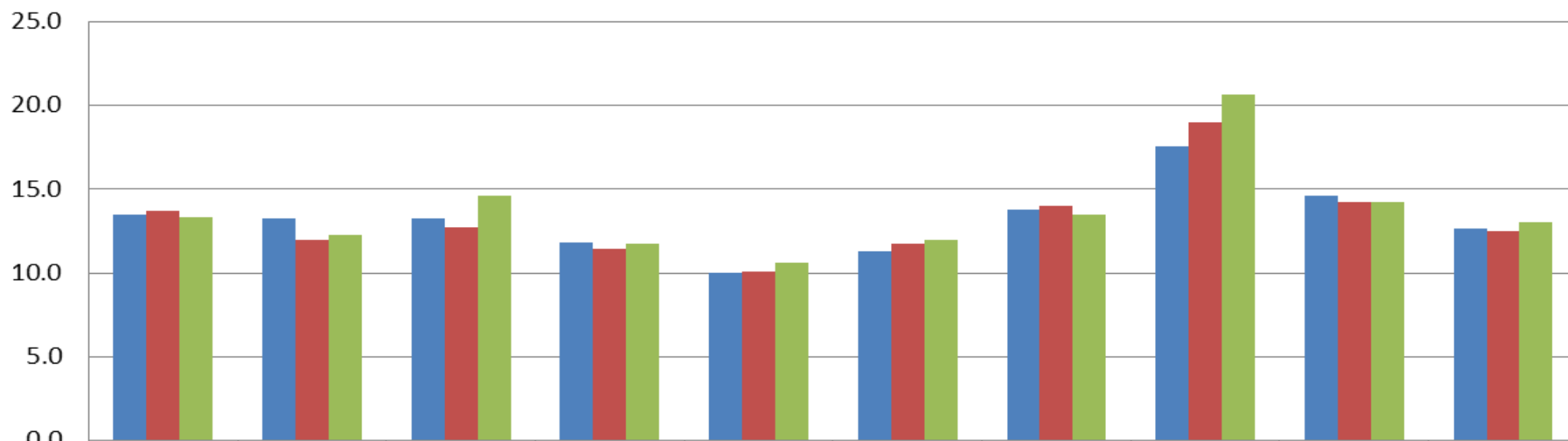
# 2002-2017 rates (PPIP)

Comparison of PPIP rates 2002-2017, South Africa



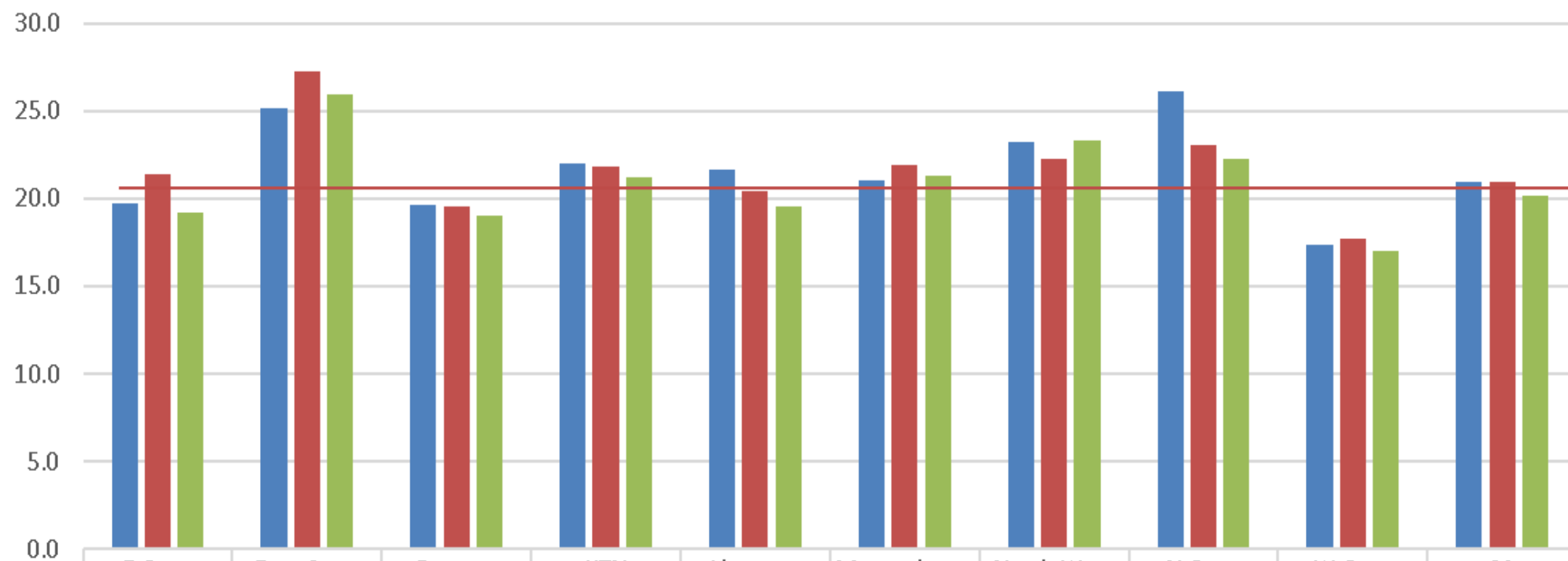
	2002-2004	2005-2007	2008-2010	2011-2013	2014-2016	2017
Stillbirth Rate 500g+	24,5	22,1	23,6	22,5	21,6	21,9
Stillbirth Rate 1000g+	18,7	17,0	18,2	17,2	15,9	16,0
PNM Rate 500g+	36,4	33	34,9	32,8	31,4	31,6
PNM Rate 1000g+	27,3	24,8	26,4	24,4	22,6	22,3
Early Neonatal MR 500g+	12,2	13,1	11,5	10,6	10,1	9,9
Early Neonatal MR 1000g+	8,7	9,7	8,4	7,3	6,7	6,4

Low Birth Weight Rate 2014-2016 (as a percentage), DHIS data, per province



	E Cape	Free State	Gauteng	KZN	Limpopo	Mpumalanga	North West	N Cape	W Cape	SA
■ LBWR 2014	13.5	13.3	13.3	11.9	10.0	11.3	13.8	17.5	14.6	12.7
■ LBWR 2015	13.7	11.9	12.7	11.5	10.1	11.8	14.0	19.0	14.3	12.5
■ LBWR 2016	13.3	12.3	14.6	11.7	10.6	12.0	13.5	20.7	14.2	13.0

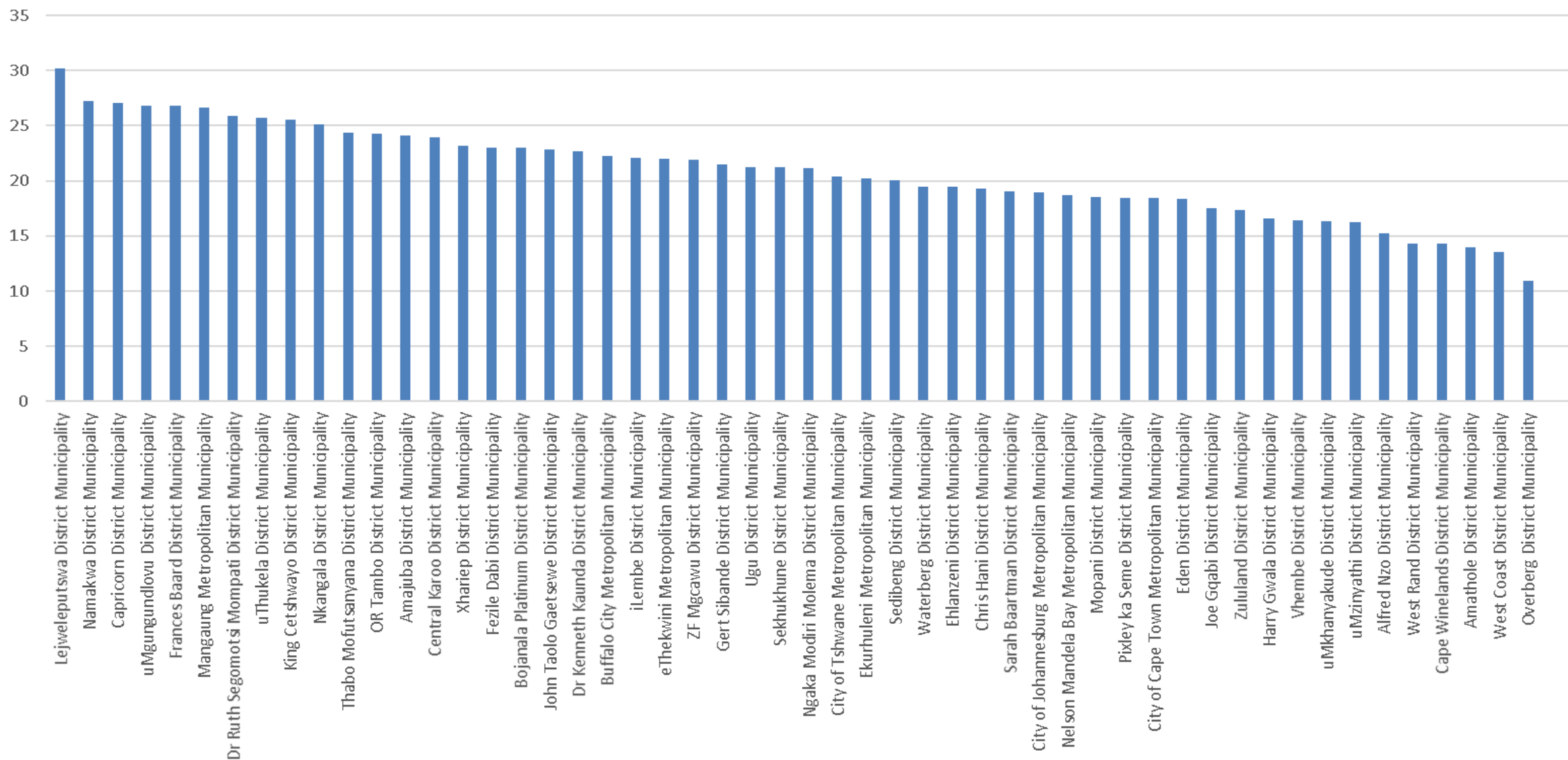
Stillbirth Rate per province, 2014-2016, DHIS data



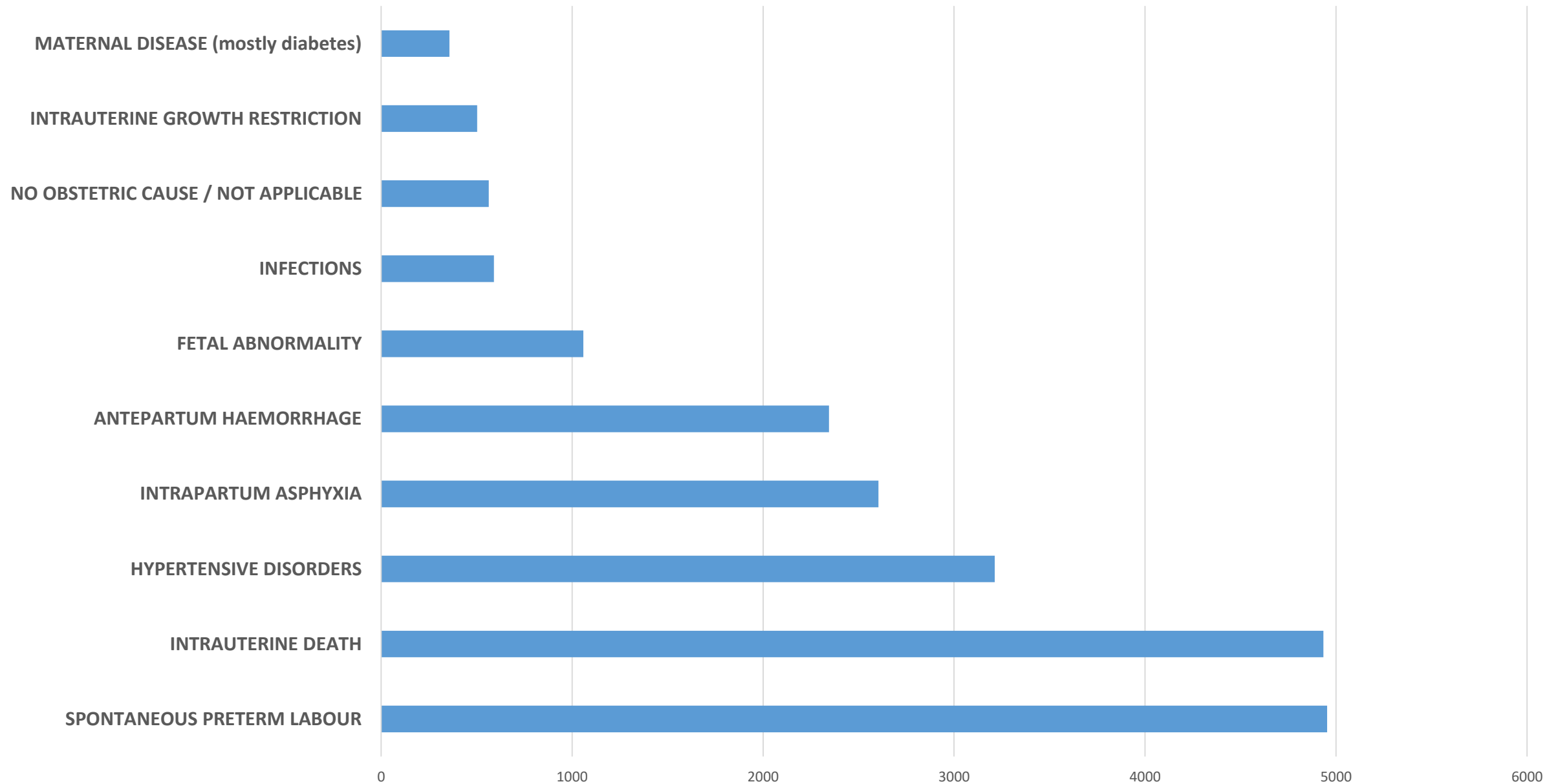
	E Cape	Free State	Gauteng	KZN	Limpopo	Mpumalanga	North West	N Cape	W Cape	SA
■ SB Rate 2014	19.8	25.2	19.6	22.0	21.6	21.1	23.2	26.1	17.3	20.9
■ SB Rate 2015	21.4	27.2	19.5	21.8	20.4	21.9	22.2	23.0	17.7	21.0
■ SB Rate 2016	19.2	25.9	19.0	21.2	19.5	21.3	23.3	22.3	17.0	20.2

■ SB Rate 2014   ■ SB Rate 2015   ■ SB Rate 2016

Stillbirth Rate per 1000 deliveries per district, 2014-2016 DHIS data



### Primary causes of neonatal deaths (21 486 deaths) 2017 PPIP data



# Final Causes of Neonatal deaths

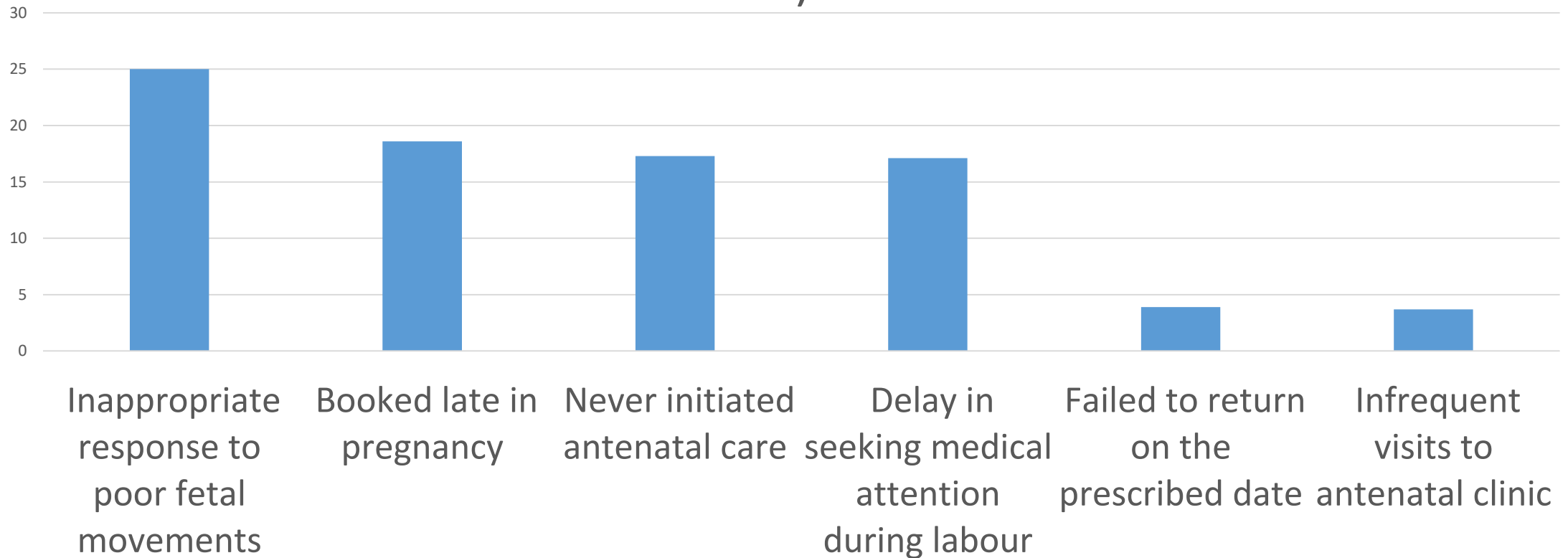
- Asphyxia,
- Prematurity and
- Infection

(API of HAPPINESS strategy) remain responsible for more than 80% of the final causes of death

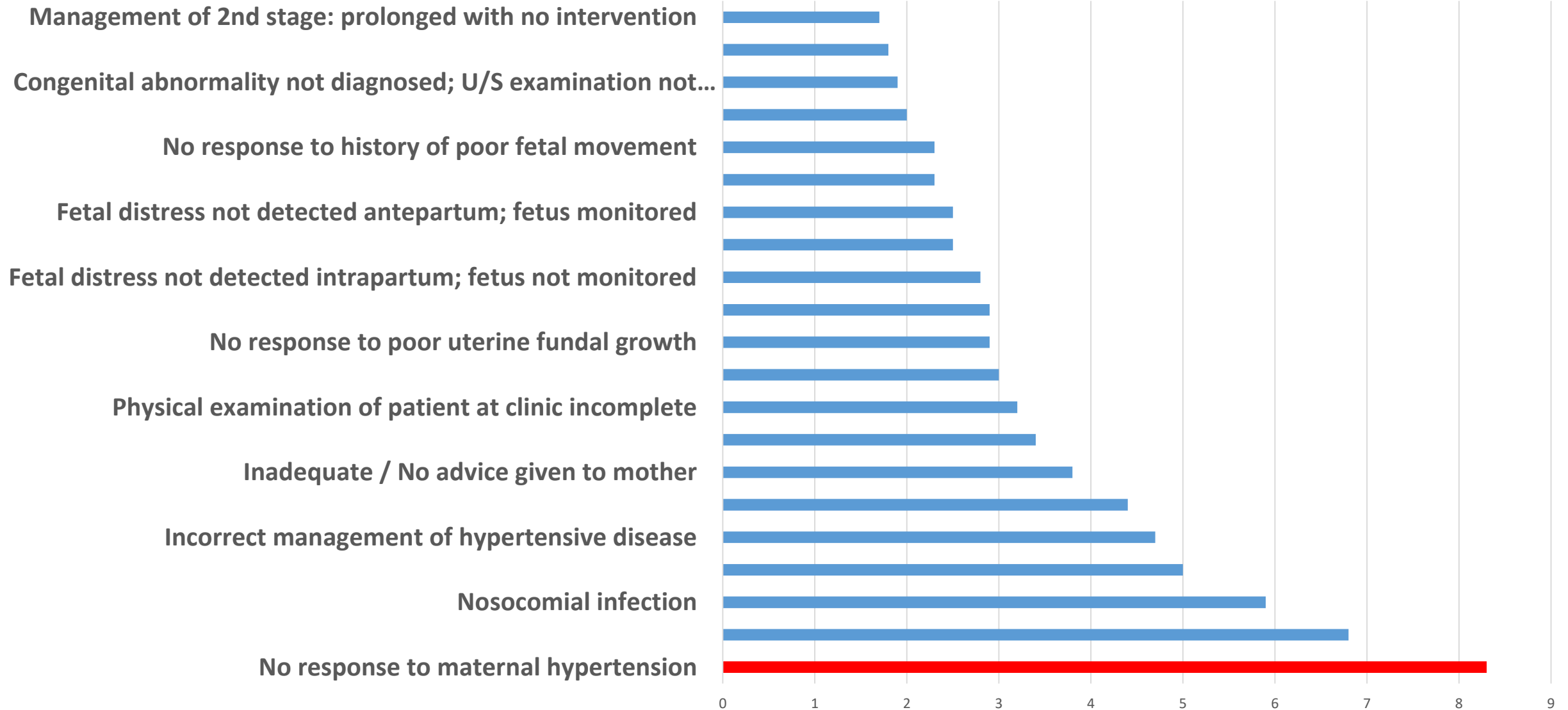


# MODIFIABLE FACTORS

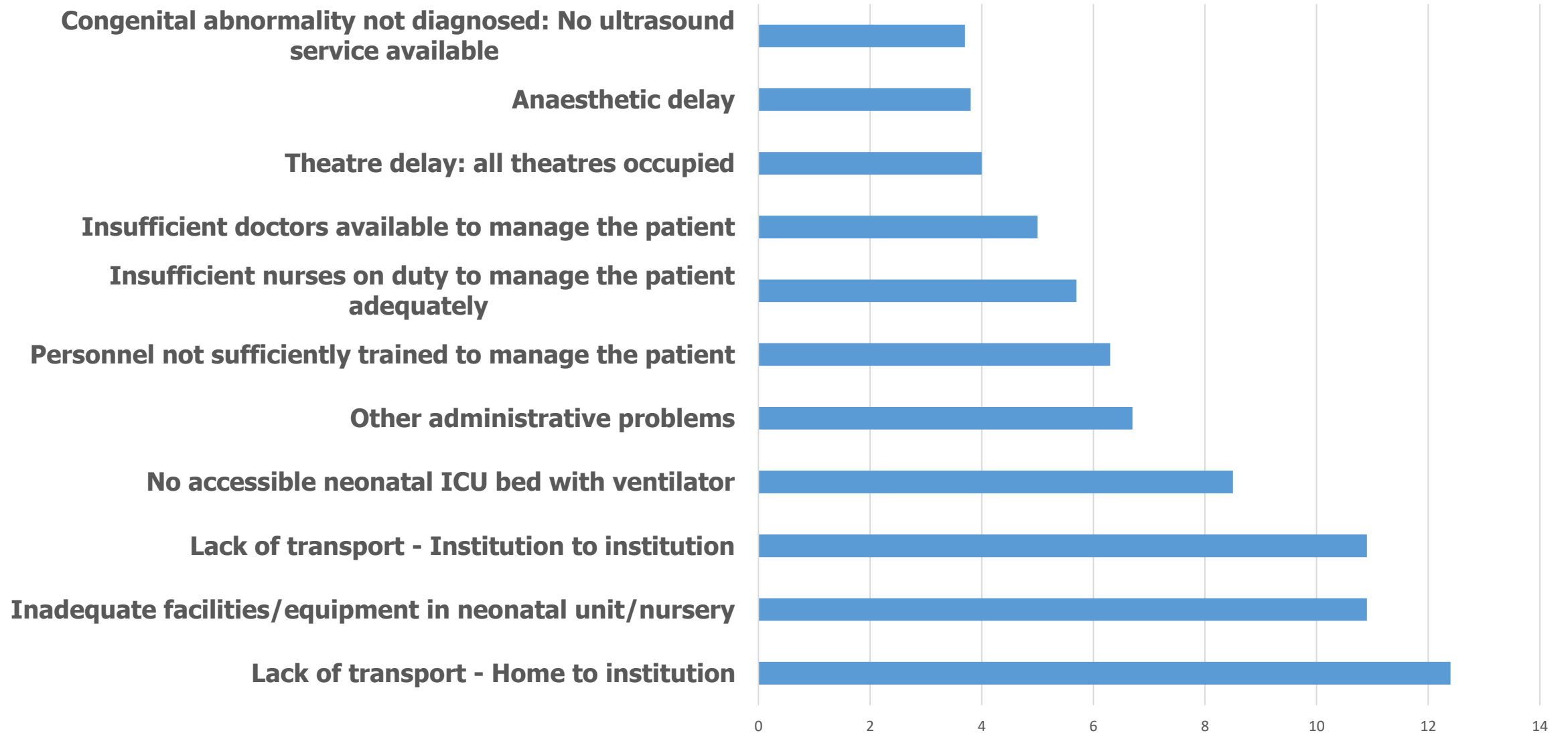
Main patient associated avoidable factors (% of group;  
15 008 deaths)



# Main medical personnel associated avoidable factors (% of group; 8301 deaths)



## Main administrative problems associated with avoidable factors (% of group; 3329 deaths)



# Recommendations

Reduce deaths due to prematurity and intra-partum asphyxia

- HHAPI-NeSS Interventions all still apply
- Continue with scale-up of Helping Babies Breathe (HBB) and Managing Small and Sick Neonates (MSSN) programmes and roll-out of CPAP
- Focus on intra-partum care:
  - ESMOE
  - Safe CD package (indirectly reducing neonatal deaths as well)
  - RMC

# Recommendations

Reduce deaths due to unexplained stillbirths, especially in the third trimester:

- Continue roll-out and scale up of BANC plus:
  - Increase patient awareness of fetal movements
  - Emphasis on monitoring fetal growth
  - Early detection and management of hypertensive disease
- Further investigation of the role of Umbiflow, with a view to scaling it up in the country.

Thank You