4. REDUCING STILLBIRTHS IN THE WEST MIDLANDS

4.1 Introduction

As we highlighted in previous Key Health Data reports (www.pi.nhs.uk/pnm/khd.htm) the West Midlands has consistently had one of the highest stillbirth rates in the country. Furthermore, confidential enquiries have demonstrated that, after excluding congenital anomalies, the majority are potentially avoidable www.pi.nhs.uk/pnm/clinicaloutcomereviews/index.htm.

The largest factor associated with stillbirths was fetal growth restriction, and improved antenatal recognition could be demonstrated to be associated with significantly reduced rates of stillbirth www.bmj.com/content/346/bmj.f108

4.2 Actions

The West Midlands Perinatal Institute (WMPI) implemented a co-ordinated programme for stillbirth prevention which focussed on improved antenatal recognition of pregnancies at risk due to fetal growth restriction. This included

- designation of 'antenatal detection of fetal growth restriction' as a Key Performance Indicator (see Chapter **Error! Reference source not found.**);
- a rolling programme of implementation, training and support in the use of customised growth charts;
- benchmarking and reporting on performance, which demonstrated significant increases in antenatal detection www.pi.nhs.uk/pnm/maternity_reports.htm;
- implementation of enhanced serial ultrasound scan protocols for high risk pregnancies (www.pi.nhs.uk/cogs/).

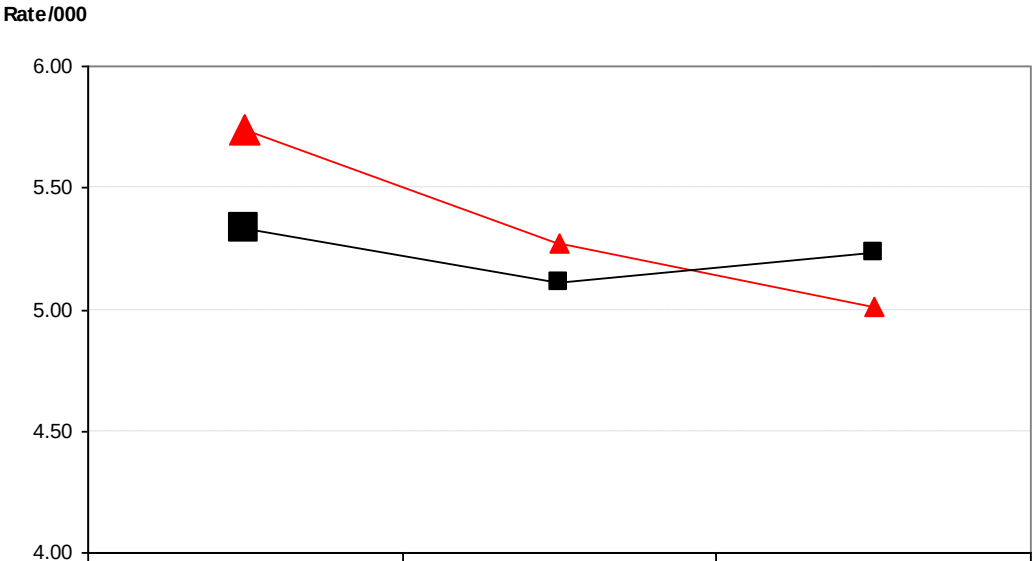
4.3 Results

The results of the efforts put in by many clinicians in provider units around the region were encouraging. According to latest (2011) ONS figures, stillbirth rates in the West Midlands have dropped to their lowest ever levels in 50 years (since regional rates were first available in 1963). Furthermore, they fell for the first time below the national average: West Midlands: 5.01 vs. England and Wales: 5.24 /1000 (Figure 4.1).

This trend is illustrated in Figure 4.1 for crude (total) stillbirth rates by comparing 2010 and 2011 figures with the preceding 10 year baseline. While England and Wales rates remained essentially unchanged, there was a statistically significant ($p<0.05$) downward trend in stillbirths in the West Midlands. Compared to the expected yearly number of stillbirths based on the 10 year baseline, this

drop represented 53 fewer stillbirths in the West Midlands in one year alone (2011).

Figure 4.1: Crude stillbirth rates, West Midlands and England & Wales 2000-09, 2010 and 2011



	2000-2009	2010	2011
West Midlands	5.74	5.27	5.02
Confidence interval	5.56-5.92	4.77-5.83	4.53-5.55
England & Wales	5.33	5.11	5.24
Confidence interval	5.28-5.39	4.95-5.28	5.07-5.41

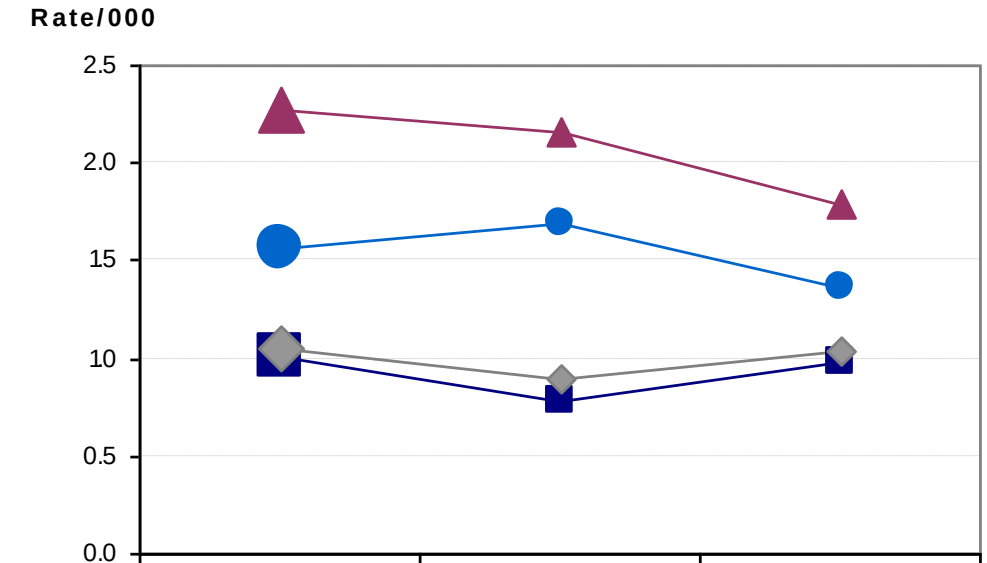
Analysis within the 4 main stillbirth subgroups (congenital anomalies, fetal growth restriction, miscellaneous causes, and unclassified) shows that this downward trend was limited to stillbirths associated with fetal growth restriction, which dropped from a baseline of 2.28 to 1.79/1000 (22% reduction; OR 0.8; CI 0.7-0.9) (Figure 4.2).

These results indicate clear beneficial effects of the regional initiative, which led to increased awareness of the significance of fetal growth restriction, and gradual improvements in its antenatal detection as reported on the quarterly updated PEERview www.pi.nhs.uk/PEERview/2a/Display.aspx

However uptake of prevention measures has not been uniform and improvements were proportionate to efforts put into co-ordinated strategies. As shown in the KPI 3 analysis (Chapter **Error! Reference source not found.**), there is wide variation in FGR detection rates, ranging from 42% down to 12% for CCG populations across the West Midlands. This performance was related to the degree to which appropriate protocols and training have been implemented.

While overall rates have been dropping, stillbirth rates still vary widely. This is illustrated in Table 4.1 and Figure 4.3, showing the variation in crude stillbirth rates for West Midlands CCG, with average annual rates ranging from 1.6/1000 to almost fivefold higher: 7.8 /1000.

Figure 4.2: Main categories of stillbirths, West Midlands 2000-09, 2010, 2011



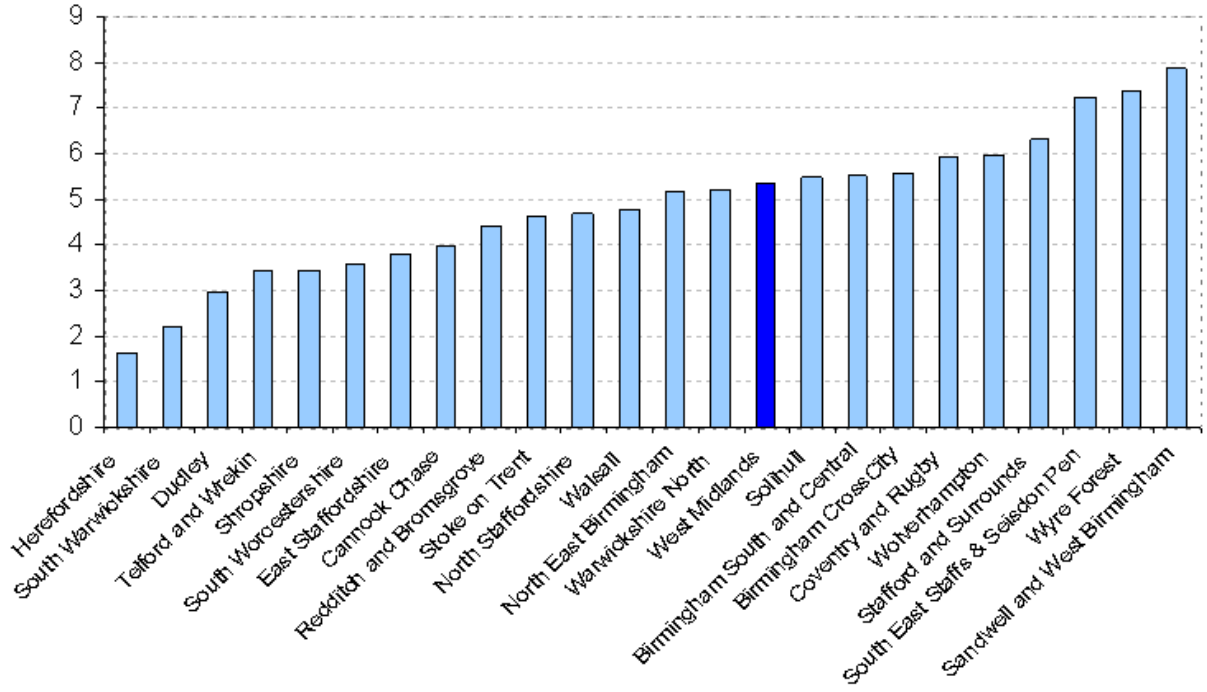
	2000-09	2010	2011
Fetal Growth Restriction	2.28	2.15	1.79
Miscellaneous	1.57	1.70	1.36
Congenital Anomalies	1.00	0.79	0.98
Unclassified	1.04	0.90	1.04

Table 4.1: Stillbirths (rate per 1,000 births) by CCG, West Midlands 3-year average 2009-11

Clinical Commissioning Group	Rate /000	95% CI
West Midlands	**5.3**	**5.0 - 5.6**
Birmingham CrossCity	5.6	5.4 - 7.2
Birmingham South and Central	5.5	4.7 - 7.9
Cannock Chase	4.0	1.7 - 5.1
Coventry and Rugby	5.9	3.6 - 5.6
Dudley	3.0	3.4 - 5.9
East Staffordshire	3.8	3.8 - 8.2
Herefordshire	1.6	1.3 - 4.0
North East Birmingham	5.2	2.1 - 5.8
North Staffordshire	4.7	2.7 - 6.0
Redditch and Bromsgrove	4.4	3.1 - 6.6
Sandwell and West Birmingham	7.8	6.7 - 9.0
Shropshire	3.5	3.2 - 6.0
Solihull	5.5	3.8 - 7.4
South East Staffs & Seisdon Pen	7.2	4.2 - 7.8
South Warwickshire	2.2	2.3 - 5.2
South Worcestershire	3.6	2.4 - 4.9
Stafford and Surrounds	6.3	2.1 - 5.8
Stoke on Trent	4.6	3.7 - 6.3
Telford and Wrekin	3.4	3.1 - 6.4
Walsall	4.8	4.0 - 6.7
Warwickshire North	5.2	2.6 - 5.6
Wolverhampton	6.0	5.0 - 8.0
Wyre Forest	7.4	2.9 - 7.8

Data Source: ONS

Figure 4.3: Stillbirths (rate per 1,000 births) by CCG, West Midlands 3-year average 2009-11



We hope that, after the discontinuation of WMPI's regional funding from April 2013, the CCGs as new commissioners will ensure that improvements in quality, safety and equity in maternity care remain a priority in the West Midlands, and that providers will have the resources to maintain the momentum which has been generated in stillbirth prevention.

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Version 1.0
18 March 2013

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