Stillbirths in the West Midlands
2011 Update

Executive Summary

- Stillbirths are the largest contributor to perinatal mortality. They are a central indicator of patient safety and quality of care, and an essential component of the NHS Outcomes Framework [1].
- West Midlands stillbirth rates have been consistently well above national rates for the last 50 years.
- Recent regional initiatives by the Perinatal Institute, in collaboration with SHA, PCTs and provider Trusts, have led to significantly fewer stillbirths; this has resulted in West Midlands rates falling, for the first time ever, to below the national average.
- This reduction is due to fewer deaths associated with fetal growth restriction and follows a comprehensive programme of audit, training, and implementation of protocols to increase antenatal detection of pregnancies at risk.
- The decrease is most marked in areas which have been at the forefront of implementation, and has led to reductions which, if extrapolated across the region, would lead to 78 fewer stillbirth each year.
- It is essential that this momentum is maintained and built upon, and that stillbirth prevention remains a continued priority in the West Midlands.

Section 1: Stillbirth rates - West Midlands and England & Wales
Figures 1 and 2 are based on ONS data [2].

**Figure 1** shows crude stillbirth rates since 2000 (3 year moving average) for West Midlands and England & Wales. Stillbirth rates have been consistently above the national average since the earliest available (1963) regional ONS data.

The 10 year average (2000-2009) West Midlands rate: 5.74 (CI 5.56-5.92) is significantly above that for England & Wales: 5.33 (CI 5.28-5.39) (Fig 2).

**Figure 2**: There has been a significant (p<0.05) downward trend in West Midlands stillbirth rates, while national rates have remained relatively static.

This reduction has resulted, for the first time, in the regional stillbirth rate falling below the national average in 2011: 5.01 vs 5.24 /1000.

Compared to the expected number based on the 10 year baseline, this drop represents 53 fewer stillbirths in the West Midlands in 2011.
Section 2: Subgroup Analysis
Data from the West Midlands Perinatal Mortality Register, based on regional Perinatal Death Notifications.

Figure 3 shows the relative proportion of stillbirths according to the main groups of the ReCoDe classification [3] for 2000-2009.

The largest groups are Fetal Growth Restriction (39%) Congenital Anomalies (17%) and Unclassified (18%), with a further 27% in smaller groups which have been combined in a 'Miscellaneous' category for Fig 4 (below).

Figure 4 illustrates the recent stillbirth trend compared to the preceding 10 year average, for the 4 main stillbirth groupings.

The overall decrease in stillbirth rates shown in Fig 2 is predominantly due to fewer deaths with fetal growth restriction (FGR), which dropped from a baseline of 2.28 to 1.79/1000 (22% reduction; OR 0.8; CI 0.7-0.9).

Figure 5 shows trends in FGR stillbirths by PCT Cluster. Most areas indicate downward trends, even though the incidence of FGR in the population has remained the same.

The largest reduction in stillbirths was in Birmingham & Solihull, where the rate dropped by 38% in 2011 vs. 2000-9 (OR 0.6; CI 0.4-0.9).

This sharp decrease is attributed to increased efforts in prevention, including the Community Growth Scanning project (CoGS) [4] commenced in 2010, which has led to significantly improved detection of FGR in at-risk pregnancies [5].

A similar reduction across the West Midlands would result in 78 fewer stillbirths per year.
Conclusions

The reduction of stillbirths in the West Midlands follows a concerted regional programme led by the Perinatal Institute, in association with many stakeholders, which has so far included:

- identification of avoidable causes of perinatal deaths through a series of Confidential Enquiries [6];
- designation of ‘antenatal detection of fetal growth restriction’ as a key performance indicator;
- rolling programme of implementation, training and support in the use of customised growth charts;
- benchmarking and reporting on performance, which demonstrated significant increases in detection;
- implementation of enhanced serial scan protocols for high risk pregnancies.

Uptake of these initiatives has varied throughout the region, and it is clearly evident that improvements are related and proportional to efforts put into co-ordinated strategies. Several commissioner and provider groups in the region are already working on adapting a CoGS model [4] in their area.

In addition to improved overall outcome for mothers and babies, detection of fetal growth restriction facilitates QIPP [7]. Furthermore, the devastating impact of stillbirth upon the mother and family leads to additional healthcare needs, including psychological support and added surveillance in future pregnancies.

It is hoped that the momentum generated to reduce avoidable stillbirths is maintained and built upon, and that stillbirth prevention through improving quality and safety of maternity care remains a continued priority in the West Midlands.

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References

6. West Midlands Confidential Enquiries – Perinatal Institute www.pi.nhs.uk/pnm/clinicaloutcomereviews/