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To: Sandwell PCT  
Sandwell and City Hospitals  
NHS West Midlands

Dear Colleague,

This is the **third interim report of the IfH data collection programme**. We present results from Q3 as well as a total for the first 3 quarters. KPI3, the indicator concerning detection of IUGR, is now also included.

For **Sandwell PCT**, the key points are

- decreased ascertainment of data due to understaffing;
- record keeping is often substandard, with frequent omissions of essential information;
- early booking rates vary between the two provider units;
- wide variation also of IUGR detection rates, suggesting room for improvement.

Also included are a preliminary set of indicators from the WM dataset, with demographics and characteristics of pregnancies for Sandwell. A detailed analysis will follow in the 12 month report, due June 2010.

With sincere regards

Professor Jason O. Gardosi  
Director, Perinatal Institute

## West Midlands Investing for Health - Perinatal Data Collection Project Q3 Report (October – December 2009)

This is the third quarterly report on the regional perinatal data collection established under the WM Investing for Health Perinatal & Infant Mortality Programme (2c). In this interim report we present also totals for the first 3 quarters.

- 1. Data quality:** Over the last few months, a team from the Perinatal Institute have been undertaking a case note audit in each unit to assess the accuracy of the process and validity of the data entered on the Institute's Perinatal Episode Electronic Record (PEER) . **The audit has demonstrated good overall accuracy.** Individual detailed reports are being sent to each maternity unit during April 2010.
- 2.** However the same audit has shown **deficiencies in the quality of record keeping** in the maternity record. This can affect each of the indicators presented in this report. The importance of accurate recording is also being highlighted in each of the Confidential Enquiries into perinatal deaths we are currently reporting on. The SHA's IfH programme has commissioned PI to develop a quality assurance toolkit for maternity records.
- 3.** Submission rates have improved significantly, but ascertainment is still only around 70% for the region. There are still staffing issues in relation to data clerks which we feed back on regularly, together with a fortnightly activity report on whether the submission targets are being achieved. **It is essential that data clerks are fully supported locally and their posts maintained through contract negotiations.**
- 4.** The information collected is allowing us to develop a baseline for KPIs as well as demographics, characteristics of pregnancies and factors affecting outcome. At the end of this report, we are providing preliminary rates for the main data items being collected through the WM maternity dataset. **PEER has rapidly established itself as the largest uniform maternity data collection system in England,** and will be an important source of information about the quality of care, equity and causes of adverse outcome.
- 5.** Since early this year, we have been running a series of workshops for representatives from PCTs and maternity units, and provided them with 'data wizards' which **facilitate direct access to their respective organisations' data collected on PEER.**
- 6.** In the coming weeks, we are commencing **pilots for Digital Pens,** which will allow real time data collection and reporting. This will be particularly important for data items such as Early Booking rates, which we can currently only provide after delivery, i.e. 6 or more months in arrears. It will also provide snapshots of current caseloads and levels of maternal medical and social risk, to facilitate effective workforce planning.

The next report will be in June 2010 and will include 12 months of data together with a comprehensive subgroup analysis. In the meantime, the PI team will continue to respond to individual queries as best possible (for details on submitting data requests, see [www.pi.nhs.uk/data](http://www.pi.nhs.uk/data))

PEER Team  
Perinatal Institute

March 2010



**Table 1: Data submitted**

Unit	WTE funded	WTE employed (Feb 2010)	Recruitment details	Q1			Q2			Q3			Comments
				Est. Births Q1	Submissions		Est. Births Q2	Submissions		Est. Births Q3	Submissions		
					(n)	(%)		(n)	(%)		(n)	(%)	
<b>West Midlands</b>	23.7	23.2		17973	7385	41%	18154	12769	70%	18229	12985	71%	
<b>City</b>	1.2	0	1.0WTE left in October. 1.2WTE to be advertised	901	674	75%	901	679	75%	901	532	59%	3 temporary clerks recently trained and working on bank, no permanent clerk in post
<b>Sandwell</b>	0.8	0.5	0.5WTE commenced April. 0.3WTE advertised	652	524	80%	652	620	95%	652	541	83%	progress difficult due to understaffing

**Interim (Q1) submission target**

<60%	60-79%	≥80%
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**Project submission target**

<80%	80-89%	≥90%
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Submission rates are calculated as the number of cases submitted from each quarter, as a proportion of all births in that quarter (estimated on the basis of last available data from 2008). Data received is dependant upon the completeness of notes recorded by care providers, and sustained capacity of data clerks ensured by Units and respective PCTs. The PI are about to commence pilots of Digital Pens for community midwives to facilitate ascertainment of real-time data.

## KPI 1a: Completed health & social assessment before 13 weeks

Target: 80%

< 60%	60-79%	≥ 80%
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[www.pi.nhs.uk/rpnm/lfh\\_KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpnm/lfh_KPI_Evidence_Targets.pdf)

	KPI 1a - Completed Assessment < 13 Weeks											
	Q1			Q2			Q3			Total / average over period Q1-Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
<b>West Midlands</b>	6774	5052	74.6%	10875	8545	78.6%	11697	9592	82.0%	29346	23189	79.0%
<b>PCT</b>												
Sandwell	788	594	75.4%	915	705	77.0%	815	666	81.7%	2518	1965	78.0%
<b>Units</b>												
City Hospital	591	414	70.1%	633	410	64.8%	498	306	61.4%	1722	1130	65.6%
Sandwell Hospital	500	379	75.8%	607	475	78.3%	533	426	79.9%	1640	1280	78.0%

### Data quality

The gestation at booking is validated by dating scans. However, standards of record keeping, and in particular the record of completion of medical and social risk assessment, vary in quality, as demonstrated by our recent regional audit.

### Performance & Progress

Early booking rate steady at Sandwell Hospital but appears to be dropping at City. The higher PCT rate is likely due to contribution from women booked elsewhere.

### Additional comments

Further improvement needs to be maintained as the DH's aim is to increase the national target to 90% by end 2010/11.

Units offering a home booking service tend to have a higher attainment rate and a more comprehensive assessment of social needs.

A locality based community midwifery service model offers economies of scale and increased capacity in achieving this target.

The forthcoming annual report will contain analyses according to subgroups such as parity, maternal age and ethnic origin.

We will also be able to provide rates according to midwifery caseloads and how they relate to medical and social risk.

## KPI 1b: Two antenatal contacts before 13 weeks

Target: 60%

< 40%	40-59%	≥ 60%
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[www.pi.nhs.uk/rpnm/lfh\\_KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpnm/lfh_KPI_Evidence_Targets.pdf)

	KPI 1b - 2 Antenatal contacts before 13 weeks								
	Q2			Q3			Total / average Q2-3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
<b>West Midlands</b>	11065	4548	41.1%	11843	5785	48.8%	22908	10333	45.1%
<b>PCT</b>									
Sandwell	899	428	47.6%	773	389	50.3%	1672	817	48.9%
<b>Units</b>									
City Hospital	642	187	29.1%	483	148	30.6%	1125	335	29.8%
Sandwell	529	291	55.0%	441	274	62.1%	970	565	58.2%

### Comment:

KPI 1b is added as a secondary indicator based on recommendation within NSF Standard 11 (collected since Q2).

It reflects practice in some units, however many do not have the capacity currently to fulfil this target.

Particularly low rates may be because there is no routine midwifery contact at the time of the dating scan.

Results show marked difference in this indicator between the two units.

## KPI 2: Antenatal continuity of carer

Target: 75% of visits by the same midwife

< 40%	40-74%	≥ 75%
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[www.pi.nhs.uk/rpnm/lfh\\_KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpnm/lfh_KPI_Evidence_Targets.pdf)

	KPI 2 - Continuity of Carer (75% of visits by the same midwife)											
	Q1			Q2			Q3			Total / average Q1 - Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
<b>West Midlands</b>	7037	3020	42.9%	11317	4335	38.3%	11911	4425	37.2%	30265	11780	38.9%
<b>PCT</b>												
Sandwell	866	240	27.7%	978	255	26.1%	845	218	25.8%	2689	713	26.5%
<b>Units</b>												
City Hospital	662	195	29.5%	679	215	31.7%	496	101	20.4%	1837	511	27.8%
Sandwell Hospital	520	99	19.0%	614	120	19.5%	531	107	20.2%	1665	326	19.6%

### Data quality

Ascertainment of this data item is sometimes difficult because of illegible signatures or care providers' names not being recorded.

### Performance & Progress

Results show variation between units in the West Midlands; commentary from midwives suggest that this target is particularly challenging due to limited capacity.

### Additional comments

Attainment of this target depends to a large extent also on the way the service is configured. Dispersed service models of community maternity impact upon continuity. Commissioners and providers should consider a locality based service to increase economies of scale, reduce travel and permit greater cohesion of maternity care within the community. The IfH Project Board have agreed to review this indicator upon completion of 12 months of data collection.

**KPI 3: Antenatal detection of fetal growth restriction**

(FGR = fetal growth restriction; IUGR = intrauterine growth restriction; SGA = small for gestational age, (EFW = estimated fetal weight based on ultrasound scan)

Target: increase by >10% per year

IfH 3-year project target: 60% detection

[www.pi.nhs.uk/rpnm/ifh\\_KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpnm/ifh_KPI_Evidence_Targets.pdf)

KPI 3: Antenatal detection of fetal growth restriction													
Q1-Q3													
	Cases with required data (Q1-Q3)	Births with FGR (birthweight <10th cust.centile)		Of all births with FGR, cases where SGA, FGR or IUGR was recorded in antenatal notes		Of births with FGR, cases with one or more EFW <10 cust. centile		Record of <i>either</i> SGA/FGR/IUGR in the notes, <i>or</i> : EFW <10th customised centile		Subgroup: of births with FGR, cases scanned following fundal height assessment		Of cases scanned following fundal height assessment, cases diagnosed as FGR	
		Total	n	%	n	%	n	%	n	%	n	%	n
<b>West Midlands</b>	28617	4048	14.1%	885	21.9%	1021	25.2%	1191	29.4%	1153	28.5%	714	61.9%
<b>PCT</b>													
Sandwell	2455	367	14.9%	105	28.6%	100	27.2%	116	31.6%	105	28.6%	79	75.2%
<b>Units</b>													
City Hospital	1649	259	15.7%	43	16.6%	58	22.4%	67	25.9%	48	18.5%	25	52.1%
Sandwell Hospital	1508	227	15.1%	78	34.4%	70	30.8%	81	35.7%	76	33.5%	63	82.9%

**Data quality**

Because this indicator describes a subgroup (antenatal detection) of a subgroup (cases with FGR), we present combined data for Q1-3.

'Antenatal detection' is based on close scrutiny of case notes and growth charts. Case note audit of FGR cases has shown that ascertainment by data clerks is reliable. However, clinicians' recording of detection of SGA / FGR / IUGR is often poor; therefore an EFW <10th centile was used as an additional indicator.

**Performance & Progress**

FGR rates are slightly higher at City than Sandwell, where the rate is similar to that in the West Midlands. FGR rates vary with factors such as deprivation and smoking. There is wide variation between the units, with antenatal detection based on the actual record in the notes particularly low at City (16.6%).

The overall detection rate at Sandwell (35.7%) is currently one of the better ones in the Region, as is the antenatal diagnosis rate after referral for scan (82.9%).

**Additional comments**

More detailed analysis will be presented within the 12 month report.

Confidential enquiries into perinatal deaths have highlighted importance of GROW training for all staff (provided in twice-monthly workshops by PI)

## KPI 4a: Smoking in pregnancy

Target: to reduce smoking at  
delivery to  
< 15% by 2010 or 1% per year

> 18%	15-18%	< 15%
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[www.pi.nhs.uk/rpnm/lfh\\_KPI\\_Evidence\\_Targets.p](http://www.pi.nhs.uk/rpnm/lfh_KPI_Evidence_Targets.p)

	Smoking at Booking											
	Q1			Q2			Q3			Total		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
<b>West Midlands</b>	6977	1438	20.6%	11231	2181	19.4%	12008	2302	<b>19.2%</b>	30216	5921	<b>19.6%</b>
<b>PCT</b>												
Sandwell	855	176	20.6%	969	187	19.3%	836	164	<b>19.6%</b>	2660	527	<b>19.8%</b>
<b>Units</b>												
City Hospital	600	94	14.5%	657	78	11.9%	496	62	<b>12.5%</b>	1803	234	<b>13.0%</b>
Sandwell Hospital	446	114	22.1%	609	149	24.5%	531	110	<b>20.7%</b>	1656	373	<b>22.5%</b>
<b>West Midlands</b>												
British Europeans	4826	1327	27.5%	8351	2130	25.5%	8533	2105	<b>24.7%</b>	21710	5562	<b>25.6%</b>
Teenagers (< 18 at delivery)	160	73	45.6%	248	248	44.4%	251	99	<b>39.4%</b>	659	282	<b>42.8%</b>
British Teenagers (<18)	136	66	48.5%	220	103	46.8%	216	93	<b>43.1%</b>	572	262	<b>45.8%</b>

	Smoking at Delivery											
	Q1			Q2			Q3			Total		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
<b>West Midlands</b>	6490	966	14.9%	9944	1456	14.6%	10147	1425	<b>14.0%</b>	26581	3847	<b>14.5%</b>
<b>PCT</b>												
Sandwell	764	88	11.5%	815	83	10.2%	781	98	<b>12.5%</b>	2360	269	<b>11.4%</b>
<b>Units</b>												
City Hospital	650	59	9.8%	509	41	8.1%	357	18	<b>5.0%</b>	1516	118	<b>7.8%</b>
Sandwell Hospital	516	48	10.8%	519	62	11.9%	526	80	<b>15.2%</b>	1561	190	<b>12.2%</b>
<b>West Midlands</b>												
British Europeans	4486	907	20.2%	7426	1419	19.1%	7237	1323	<b>18.3%</b>	19149	3649	<b>19.1%</b>
Teenagers (< 18)	139	50	36.0%	213	73	34.3%	213	68	<b>31.9%</b>	565	191	<b>33.8%</b>
British Teenagers (<18)	119	43	36.1%	192	70	36.5%	180	62	<b>34.4%</b>	491	175	<b>35.6%</b>



## Smoking Cessation

Cases where both booking and delivery information present				
	Smokers at booking	Smokers at delivery	Cessation rate	
	n	n	n	%
<b>West Midlands</b>	4904	3676	1228	<b>25.0%</b>
<b>PCTs</b>				
Sandwell	407	247	160	<b>39.3%</b>
<b>Units</b>				
City Hospital	170	110	60	<b>35.3%</b>
Sandwell Hospital	292	177	115	<b>39.4%</b>
<b>West Midlands</b>				
British Europeans	4619	3511	1108	<b>24.0%</b>
Teenagers (< 18)	233	187	46	<b>19.7%</b>
British Teenagers (<18)	215	173	42	<b>19.5%</b>

### Data quality

The information represents individual case-by case data and is therefore considered more accurate than unit estimates.

Wherever possible, the smoking-at-delivery information should be ascertained as part of the maternal history at the time of admission to delivery suite

### Performance & Progress

Smoking rates vary between the units, mainly because of different ethnic mix. Cessation rates are above the regional average.

Teenagers have higher smoking rates and lower cessation rates than the general maternity population.

Because of small numbers, WM figures only are given for this group.

### Additional comments

Further analysis of the effect of smoking on perinatal outcome, and its association with prematurity and fetal growth restriction, will be presented in the 12 month report.

NB regionally, referral and cessation rates are higher in units where an OPT-OUT policy is in operation for referral to smoking cessation services

### KPI 5: Initiation of breastfeeding within 48hrs

Target: increase by 2% per year

< 1%	1-2%	≥ 2%
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[www.pi.nhs.uk/rpnm/lfh/KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpnm/lfh/KPI_Evidence_Targets.pdf)

	KPI 5 - Breast Feeding Initiated within 48hrs											
	Q1			Q2			Q3			Total / average over period Q1-Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
<b>West Midlands</b>	5671	3279	57.8%	10340	6051	58.5%	10246	5895	<b>57.5%</b>	26257	15225	<b>58.0%</b>
<b>PCT</b>												
Sandwell	660	335	50.8%	900	395	43.9%	735	355	<b>48.3%</b>	2295	1085	<b>47.3%</b>
<b>Units</b>												
City Hospital	124	82	66.1%	568	312	54.9%	365	256	<b>70.1%</b>	1057	650	<b>61.5%</b>
Sandwell Hospital	479	206	43.0%	580	192	33.1%	492	219	<b>44.5%</b>	1551	617	<b>39.8%</b>
<b>West Midlands</b>												
Teenagers (< 18)	140	37	26.4%	228	77	33.8%	222	67	<b>30.2%</b>	590	181	<b>30.7%</b>
British-Europeans	4245	2299	54.2%	7747	4319	55.8%	7501	4036	<b>53.8%</b>	19493	10654	<b>54.7%</b>

#### Data quality

Collection of this indicator is difficult because:

1. Reliance on the labour record is insufficient as breastfeeding may not have commenced yet before discharge;
2. The postnatal notes are taken home by the mother and there is often a delay before they are available to the data clerks; or
3. The time of commencement is not recorded. Improved documentation around time of first breastfeed is vitally important.

#### Performance & Progress

Overall breastfeeding initiation rate is below the regional average and substantially worse at Sandwell Hospital

#### Additional comments

Target in terms of yearly increase will be able to be reported on next year, with current year used as a baseline

## SANDWELL PCT cases submitted in Q2 &amp; Q3, 2009/10: n=1,915

<b>Multiple pregnancies</b>	1.1%	<b>Maternal age</b>	<18	2.4%	<b>Place of birth</b>	Hospital	96.2%	
<b>Ethnic origin (main groups)</b>			<20	8.1%		Midwife led unit	3.2%	
British-European	58.3%		35+	8.5%		Home	0.2%	
Eastern Europe	4.0%		40+	1.8%		Born before arrival	0.4%	
African	3.9%	<b>Obesity: BMI</b>			<b>Labour induced</b>		21.0%	
African Caribbean	4.4%		>30	20.9%	<b>Mode of birth</b>	<b>All parities</b>		<b>Primips (44.1%)</b>
Bangladeshi	3.3%		>35	7.5%		Normal	65.8%	56.1%
Indian	12.5%		>40	1.9%		Ventouse	4.1%	6.6%
Pakistani	8.1%	<b>Smoker</b>				Forceps	5.2%	9.2%
Other	5.5%		at booking	19.3%		Breech	0.4%	0.4%
<b>Country of birth (main groups)</b>			of these, referred to advisor	52.2%		C Section	24.6%	27.7%
UK	75.4%		at delivery	11.2%	<b>Caesarean Section</b>	Emergency	11.5%	16.6%
Poland	2.9%		other smokers in household	24.7%		Urgent	2.9%	4.8%
Bangladesh	2.3%	<b>Drug misuse</b>				Scheduled	1.0%	0.6%
India	5.0%		of these, referred	72.7%		Elective	8.0%	4.5%
Pakistan	4.8%	<b>Asked about domestic abuse</b>				Undocumented	4.7%	1.2%
Yemen & Horn of Africa	1.0%		of these, DA disclosed	6.3%	<b>Episiotomy</b>		11.0%	
Other	8.6%	<b>Mental health problems</b>			<b>Perineum (excl episiotomy)</b>	Intact	63.4%	
<b>Interpreter required</b>	8.2%					Tear - degree: 1st	13.6%	
<b>Father is blood relation</b>		<b>Diabetes</b>				2nd	20.0%	
Average	7.3%	<b>Heart disease</b>				3rd	1.1%	
British-European	1.0%	<b>Pre-existing hypertension</b>				4th	0.0%	
Pakistani	44.7%	<b>Folic acid taken antenatally</b>				Undocumented	1.8%	
Bangladeshi	19.2%	<b>Pregnancy dated by ultrasound</b>			<b>Fetal growth restriction (bwt &lt;10th cust.centile)</b>		14.2%	
Middle East	35.3%	<b>Screening for Down's offered</b>			<b>Prematurity</b>	<37 weeks	6.2%	
<b>Employed</b>						<34 weeks	2.2%	
full time	34.5%	<b>Antenatal visits</b>	median	7	mean	7.4		
part time	14.6%	<b>Antenatal visits - same midwife</b>	median	4	mean	4.3		
looking after home	22.6%				<b>Seen for decreased fetal movements</b>		14.2%	
student	4.4%				<b>Pregnancy complications:</b>			
unemployed	22.0%				Antepartum haemorrhage		4.3%	
other	1.9%				Pregnancy induced hypertension		1.8%	
<b>Housing</b>					Pre-eclampsia		0.5%	
owner	37.2%				HELLP Syndrome		0.0%	
rents	39.3%				Gestational Diabetes		1.8%	
with family/friends	20.8%				<b>Put to breast</b>		49.3%	
other	2.7%				<b>Postnatal visits</b>	median	3	mean 3.7
<b>No partner</b>	3.6%				<b>Postnatal visits - same midwife</b>	median	2	mean 2.5

Note: These are preliminary rates of data based on WM maternity dataset collected in PEER (Perinatal Episode Electronic Record). Further analysis will be presented within the 12 month report.