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7<sup>th</sup> April 2010

To: Hereford PCT  
Hereford Hospital  
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 totals for the first 3 quarters. KPI3, the indicator concerning detection of IUGR, is also included.

For **Hereford**, the key points are:

- improved ascertainment of data;
- however record keeping is often substandard, with frequent omissions of essential information;
- good progress towards early booking target;
- antenatal detection of fetal growth restriction appears low, although numbers are still small;
- national smoking-in-pregnancy targets not quite met, and cessation rates low, although again small numbers.

Also included are a preliminary set of indicators from the WM dataset, with demographics and characteristics of pregnancies for Hereford. 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 (September – 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)	(%)	
West Midlands	23.7	23.2		17973	7385	41%	18154	12769	70%	18229	12985	71%	
Hereford	0.7	0.7	0.7WTE commenced Aug	477	0	0%	455	277	61%	495	480	97%	Good progress. Second clerk in training to assist with backlog

**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>												
Herefordshire	1	1	100.0%	231	180	77.9%	393	315	80.2%	625	496	79.4%
<b>Unit</b>												
Hereford Hospital	0	0		265	204	77.0%	453	359	79.2%	718	563	78.4%

Percentages in grey represent small numbers (n &lt;100) and should be interpreted with caution

**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**

PCT has achieved 80% project target in Q3.

**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 - Two antenatal contacts before 13 weeks								
	Q2			Q3			Total / average over 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>									
Herefordshire	230	141	61.3%	396	258	65.2%	626	399	63.7%
<b>Unit</b>									
Hereford Hospital	264	151	57.2%	456	272	59.6%	720	423	58.8%

### 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. For mothers living in Herefordshire, this target has been achieved

## 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 over 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>												
Herefordshire	1	0	0.0%	232	58	25.0%	395	89	22.5%	628	147	23.4%
<b>Unit</b>												
Hereford Hospital	0	0	*	272	75	27.6%	452	130	28.8%	724	205	28.3%

Percentages in grey represent small numbers (n &lt;100) and should be interpreted with caution

### 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 wide variation between WM units; commentary from midwives suggest that this target is particularly challenging due to limited capacity.

### Additional comments

IfH Project Board have agreed to review this indicator upon completion of 12 months of data collection.

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.

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

(FGR = fetal growth restriction; IUGR = intrauterine growth restriction; SGA = small for gestational age)

Target: increase by >10% per year  
IfH 3-year project target: 60% detection  
[www.pi.nhs.uk/rpm/lfh\\_KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpm/lfh_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>													
Herefordshire	586	78	13.3%	2	2.6%	9	11.5%	10	12.8%	2	2.6%	2	100.0%
<b>Unit</b>													
Hereford Hospital	673	89	13.2%	3	3.4%	11	12.4%	13	14.6%	2	2.2%	2	100.0%

Percentages in grey represent small numbers (n <100) and should be interpreted with caution

#### 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 in Herefordshire are slightly lower than in the West Midlands as a whole (13.3 and 14.1%). FGR rates vary with factors such as social deprivation and smoking.

At this stage, data are too few to be able to give conclusive detection rates. However, the preliminary figures (in grey) **suggest very low detection rates** -both in terms of the actual record in the notes or the record of at least one EFW below the 10th centile.

Also presented are referrals for scan on the basis of fundal height measurement plotted on customised charts; regionally, this shows that for those referred, detection rate is substantially higher.

#### 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.pdf](http://www.pi.nhs.uk/rpnm/lfh_KPI_Evidence_Targets.pdf)

	KPI 4 - Smoking at Booking											
	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>	6977	1438	20.6%	11231	2181	19.4%	12008	2302	<b>19.2%</b>	30216	5921	<b>19.6%</b>
<b>PCT</b>												
Herefordshire	1	0	0.0%	232	43	18.5%	396	80	<b>20.2%</b>	629	123	<b>19.6%</b>
<b>Unit</b>												
Hereford Hospital	0	0	*	271	51	18.8%	461	94	<b>20.4%</b>	732	145	<b>19.8%</b>

**West Midlands**

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>

	KPI 4 - Smoking at Delivery											
	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>	6490	966	14.9%	9944	1456	14.6%	10147	1425	14.0%	26581	3847	14.5%
<b>PCT</b>												
Herefordshire	1	0	0.0%	158	24	15.2%	272	41	15.1%	431	65	15.1%
<b>Unit</b>												
Hereford Hospital	0	0	*	179	25	14.0%	311	52	16.7%	490	77	15.7%

**West Midlands**

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>

Percentages in grey represent small numbers (n &lt;100) and should be interpreted with caution



## 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>				
Herefordshire	78	62	16	20.5%
<b>Units</b>				
Hereford Hospital	91	74	17	18.7%
<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

Numbers are low but preliminary results suggest that the target is close to being achieved, although smoking cessation rates seem below 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	57.5%	26257	15225	58.0%
<b>PCT</b>												
Herefordshire	0	0	*	118	83	70.3%	202	128	63.4%	320	211	65.9%
<b>Unit</b>												
Hereford Hospital	0	0	*	135	92	68.1%	241	150	62.2%	376	242	64.4%

### West Midlands

Teenagers (< 18)	140	37	26.4%	228	77	33.8%	222	67	30.2%	590	181	30.7%
British-Europeans	4245	2299	54.2%	7747	4319	55.8%	7501	4036	53.8%	19493	10654	54.7%

### 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

Breastfeeding initiation rates in Herefordshire are higher than the regional average.

### Additional comments

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

**HEREFORDSHIRE Cases submitted in Q2 & Q3, 2009/10: n=644**

<b>Multiple pregnancies</b>	1.3%	<b>Maternal age</b>		<b>Place of birth</b>			
<b>Ethnic origin (main groups)</b>		<18	2.0%	Hospital		93.8%	
British-European	87.3%	<20	6.0%	Midwife led unit		0.2%	
Eastern Europe	7.8%	35+	15.6%	Home		5.8%	
African	0.5%	40+	2.7%	Born before arrival		0.3%	
African Caribbean	0.2%	<b>Obesity: BMI</b>		<b>Labour induced</b>		17.9%	
Bangladeshi	0.2%	>30	17.7%	<b>Mode of birth</b>	<b>All parities</b>		<b>Primips</b>
Indian	0.8%	>35	6.7%	Normal	64.6%		54.2%
Pakistani	0.2%	>40	2.2%	Ventouse	5.2%		5.3%
Other	3.1%	<b>Smoker</b>		Forceps	5.6%		12.5%
<b>Country of birth (main groups)</b>		at booking	19.6%	Breech	0.0%		0.0%
UK	86.2%	of these, referred to advisor	49.4%	C Section	24.6%		28.0%
Poland	4.4%	at delivery	15.1%	<b>Type of CS</b>			
Bangladesh	0.2%	other smokers in household	29.8%	Emergency	11.6%		17.4%
India	0.8%	<b>Drug misuse</b>	0.5%	Urgent	0.3%		0.8%
Pakistan	0.0%	of these, referred	66.7%	Scheduled	0.2%		0.4%
Yemen & Horn of Africa	0.0%	<b>Asked about domestic abuse</b>	35.4%	Elective	12.2%		8.7%
Other	8.4%	of these, DA disclosed	0.5%	Undocumented	1.3%		0.8%
<b>Interpreter required</b>	5.2%	<b>Mental health problems</b>	11.1%	<b>Episiotomy</b>		10.6%	
<b>Father is blood relation</b>		<b>Diabetes</b>	0.3%	<b>Perineum (excl episiotomy)</b>			
Average	0.4%	<b>Heart disease</b>	1.6%	Intact		57.4%	
British-European	0.2%	<b>Pre-existing hypertension</b>	2.5%	Tear - degree: 1st		14.3%	
Pakistani	0.0%	<b>Folic acid taken antenatally</b>	87.4%	2nd		23.4%	
Bangladeshi	0.0%	<b>Pregnancy dated by ultrasound</b>	99.1%	3rd		3.2%	
Middle East	0.0%	<b>Screening for Down's offered</b>	92.0%	4th		0.0%	
<b>Employed</b>		<b>Antenatal visits</b>		Undocumented		1.7%	
full time	41.8%	median	8	mean	8.2		
part time	25.5%	<b>Antenatal visits - same midwife</b>		mean	4.7		
looking after home	17.5%	median	4				
student	2.5%	<b>Seen for decreased fetal movements</b>	16.2%	<b>Fetal growth restriction (bwt &lt;10th cust.centile)</b>		13.2%	
unemployed	12.7%	<b>Pregnancy complications:</b>		<b>Prematurity</b>			
other	0.0%	Antepartum haemorrhage	2.5%	<37 weeks		6.8%	
<b>Housing</b>		Pregnancy induced hypertension	1.3%	<34 weeks		2.6%	
owner	44.4%	Pre-eclampsia	1.1%	<b>Apgar at 1 &lt;4</b>		2.4%	
rents	41.9%	HELLP Syndrome	0.0%	<b>Apgar at 5 &lt;7</b>		1.1%	
with family/friends	11.9%	Gestational Diabetes	1.7%	<b>Put to breast</b>		81.6%	
other	1.8%	<b>Postnatal visits</b>		median	3	mean	3.4
<b>No partner</b>	0.3%	<b>Postnatal visits - same midwife</b>		median	2	mean	2.1

**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.