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8th April 2010

To: Solihull PCT
Solihull Hospital and HEFT / Heartlands
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 **Solihull**, the key points are:

- poor ascertainment of cases;
- record keeping often substandard, with frequent omissions of essential information;
- early booking target achieved on data submitted;
- FGR detection rates appear poor, but more data are required for full assessment;
- smoking-in-pregnancy targets are not being met, with cessation rates low.

Also included are a preliminary set of indicators of the WM dataset, with demographics and characteristics of pregnancies for Solihull. 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)

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%	
Solihull	0.8	0.8	Clerk moved from BHH to Solihull in November	699	27	4%	699	147	21%	699	260	37%	Data collection at Solihull commenced November - Large backlog to address. Clerk will be assisting from other unit
Heartlands	1.7	1.7	BHH & Solihull- 1.5WTE commenced July. 1.0WTE commenced Sept 09	1242	870	70%	1242	1144	92%	1242	825	66%	No permanent base for data clerks, IT problems, difficulty accessing Q3 notes that have gone off site

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

	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	%
West Midlands	6774	5052	74.6%	10875	8545	78.6%	11697	9592	82.0%	29346	23189	79.0%
PCT												
Solihull	137	108	78.8%	237	201	84.8%	237	207	87.3%	611	516	84.5%
Units												
Heartlands Hospital	855	623	72.9%	1096	803	73.3%	694	535	77.1%	2645	1961	74.1%
Solihull Hospital	27	22	81.5%	134	107	79.9%	242	200	82.6%	403	329	81.6%

Percentages in grey represent small numbers (n < 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

Units are making good progress towards, or have already achieved, the 80% project target.

Additional comments

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

	KPI 1b - Two antenatal contacts before 13 weeks								
	Q2			Q3			Total / average over period Q2-Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
West Midlands	11065	4548	41.1%	11843	5785	48.8%	22908	10333	45.1%
PCT									
Solihull	241	78	32.4%	256	99	38.7%	497	177	35.6%
Units									
Heartlands Hospital	1107	306	27.6%	752	206	27.4%	1859	512	27.5%
Solihull Hospital	136	50	36.8%	245	101	41.2%	381	151	39.6%

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.

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

	KPI 2 - Continuity of Carer (75% of visits by the same midwife)											
	Q1			Q2			Q3			Total / average over period Q2-Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
West Midlands	7037	3020	42.9%	11317	4335	38.3%	11911	4425	37.2%	30265	11780	38.9%
PCT												
Solihull	139	44	31.7%	243	112	46.1%	254	130	51.2%	636	286	45.0%
Units												
Heartlands Hospital	864	346	40.0%	1127	509	45.2%	752	382	50.8%	2743	1237	45.1%
Solihull Hospital	27	7	25.9%	137	63	46.0%	242	109	45.0%	406	179	44.1%

Percentages in grey represent small numbers (n <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

Performance in this indicator below target but better than regional average.

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 care across the city 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/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
West Midlands	28617	4048	14.1%	885	21.9%	1021	25.2%	1191	29.4%	1153	28.5%	714	61.9%
PCT													
Solihull	614	84	13.7%	25	4.1%	29	34.5%	33	39.3%	43	51.2%	26	60.5%
Units													
Heartlands Hospital	2623	386	14.7%	106	27.5%	121	31.3%	136	35.2%	183	47.4%	117	63.9%
Solihull Hospital	421	46	10.9%	5	1.2%	8	17.4%	9	19.6%	22	47.8%	8	36.4%

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 Solihull are similar to those in the West Midlands as a whole (13.7 vs.14.1%). Rates vary with factors such as deprivation and smoking.

Antenatal detection is calculated on the basis of the actual record in the notes and the number of cases where at least one EFW below the 10th centile was recorded.

Numbers for Solihull Hosp are **too low to allow conclusive statements but appear to be well below average**.

In contrast, detection rates at Heartlands, although still short

We also present the referrals for scan on the basis of fundal height measurement plotted on customised charts; this shows that, **for those referred, the 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)

The 2008/9 Birmingham audit has highlighted concerns about protocols for serial scanning in high risk pregnancy (www.pi.nhs.uk/ultrasound/Birmingham_FGR_Audit_-_Summary.pdf)

The Community Growth Scanning Project (CoGS) is due to commence soon in all three Birmingham units, and is expected to address some of these issues

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

	Smoking at Booking											
	Q1			Q2			Q3			Total / average over period Q2-Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
West Midlands	6977	1438	20.6%	11231	2181	19.4%	12008	2302	19.2%	30216	5921	19.6%
PCTs												
Solihull	138	43	22.0%	242	61	25.2%	258	48	18.6%	638	152	23.8%
Units												
Heartlands Hospital	701	141	16.4%	1121	195	17.4%	756	117	15.5%	2736	453	16.6%
Solihull Hospital	24	3	11.5%	138	26	18.8%	246	33	13.4%	408	62	15.2%

West Midlands

Teenagers (< 18)	139	50	36.0%	213	73	34.3%	213	68	31.9%	565	191	33.8%
British-Europeans	4486	907	20.2%	7426	1419	19.1%	7237	1323	18.3%	19149	3649	19.1%

	Smoking at Delivery											
	Q1			Q2			Q3			Total / average over period Q2-Q3		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
West Midlands	6490	966	14.9%	9944	1456	14.6%	10147	1425	14.0%	26581	3847	14.5%
PCT												
Solihull	104	19	18.3%	187	37	19.8%	209	35	16.7%	500	91	18.2%
Units												
Heartlands Hospital	859	77	11.0%	908	113	12.4%	699	96	13.7%	2308	286	12.4%
Solihull Hospital	26	3	11.5%	94	13	13.8%	177	16	9.0%	297	32	10.8%

West Midlands

Teenagers (< 18)	139	50	36.0%	213	73	34.3%	213	68	31.9%	565	191	33.8%
British Europeans	4486	907	20.2%	7426	1419	19.1%	7237	1323	18.3%	19149	3649	19.1%

Percentages in grey represent small numbers (n < 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	%
West Midlands	4904	3676	1228	25.0%
PCT				
Solihull	107	89	18	16.8%
Units				
Heartlands Hospital	340	281	59	17.4%
Solihull Hospital	37	30	7	18.9%
West Midlands				
Teenagers (< 18)	233	187	46	19.7%
British Europeans	4619	3511	1108	24.0%

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

The target has not been achieved for the PCT, and cessation rates are lower than the regional average. Unit targets are influenced by the high proportion of South Asian mothers in Birmingham who have very low smoking rates

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

	KPI 5 - Breast Feeding Initiated within 48hrs											
	Q1			Q2			Q3			Total		
	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%	Cases with required data	n	%
West Midlands	5671	3279	57.8%	10340	6051	58.5%	10246	5895	57.5%	26257	15225	58.0%
PCT												
Solihull	125	64	51.2%	200	92	46.0%	206	92	44.7%	531	248	46.7%
Units												
Heartlands Hospital*	788	451	57.2%	928	483	52.0%	452	113	25.0% *	2168	1047	48.3% *
Solihull Hospital	26	11	42.3%	129	68	52.7%	220	134	60.9%	375	213	56.8%

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%

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

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.

* In the case of Heartlands, lack of availability of postnatal notes, and poor documentation of time of first feed, resulted in low rates shown for Q3

Performance & Progress

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

Overall breastfeeding initiation rates at Solihull are similar to the regional average. They appear to have improved in Q3.

Additional comments

Birmingham Health & Wellbeing partnership have instigated a baby friendly task group to support and monitor progression towards city-wide 'baby friendly status'.

SOLIHULL PCT cases submitted in Q2 & Q3, 2009/10: n=602

Multiple pregnancies	1.5%	Maternal age		Place of birth			
Ethnic origin (main groups)							
British-European	82.7%		<18 2.7%		Hospital	94.5%	
Eastern European	0.7%		<20 8.9%		Midwife led unit	1.5%	
African	1.5%		35+ 16.2%		Home	2.5%	
African Caribbean	1.4%		40+ 2.4%		Born before arrival	1.5%	
Bangladeshi	0.0%	Obesity: BMI		Labour induced		19.7%	
Indian	4.1%		>30 25.1%	Mode of birth			All parities
Pakistani	3.4%		>35 10.3%				Primips (45.9%)
Other	6.3%		>40 4.6%				Normal 61.5% 57.8%
Country of birth (main groups)		Smoker					Ventouse 5.2% 9.1%
UK	91.3%	at booking	21.7%				Forceps 3.8% 6.9%
Poland	0.3%	of these, referred to advisor	70.7%				Breech 0.2% 0.0%
Bangladesh	0.0%	at delivery	18.1%	Caesarean Section			C Section 29.3% 26.2%
India	1.0%	other smokers in household	25.8%				Emergency 13.3% 17.1%
Pakistan	1.5%	Drug misuse					Urgent 0.8% 1.1%
Yemen & Horn of Africa	0.2%	of these, referred	25.0%				Scheduled 0.2% 0.0%
Other	5.6%	Asked about domestic abuse					Elective 14.7% 7.3%
Interpreter required	2.2%	of these, DA disclosed	4.9%	Episiotomy			Undocumented 1.1% 0.7%
Father is blood relation		Mental health problems	12.6%	Perineum (excl episiotomy)			
Average	2.2%			Intact			68.2%
British-European	1.1%	Diabetes	1.0%	Tear - degree: 1st			8.6%
Pakistani	20.0%	Heart disease	2.5%	2nd			21.4%
Bangladeshi	0.0%	Pre-existing hypertension	2.2%	3rd			1.4%
Middle East	0.0%	Folic acid taken antenatally	86.2%	4th			0.2%
Employed		Pregnancy dated by ultrasound	99.0%	Undocumented			0.0%
full time	39.9%	Screening for Down's offered	90.1%	Fetal growth restriction (bwt <10th cust.centile)			12.8%
part time	20.8%	Antenatal visits					
looking after home	18.5%	median	8	mean			
student	4.2%	Antenatal visits - same midwife		mean			
unemployed	13.7%	median	5	mean			
other	2.9%						
Housing		Seen for decreased fetal movements	23.8%	Appgar at 1 <4			3.6%
owner	48.4%	Pregnancy complications:		Appgar at 5 <7			2.4%
rents	30.6%	Antepartum haemorrhage	8.6%	Put to breast			54.9%
with family/friends	18.7%	Pregnancy induced hypertension	4.4%	Postnatal visits			
other	2.3%	Pre-eclampsia	2.0%	median		4	mean 4.6
No partner	2.1%	HELLP Syndrome	0.0%	Postnatal visits - same midwife			
		Gestational Diabetes	3.7%	median		2	mean 2.6

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.