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8th April 2010

To: South Staffordshire PCT
Queens Hospital Burton & Stafford 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 totals for the first 3 quarters. KPI3, the indicator concerning detection of IUGR, is now also included.

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

- excellent case ascertainment at both units;
- however record keeping is often substandard, with frequent omissions of essential information;
- early booking target exceeded in both units;
- IUGR detection rates vary significantly between units;
- smoking-in-pregnancy targets are met overall.

Also included are a preliminary set of indicators from the WM dataset, with demographics and characteristics of pregnancies for Staffordshire. 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%	
Queens Burton	1.2	1	0.8WTE commenced in July. 0.2WTE commenced Aug	831	34	4%	856	822	96%	856	809	95%	Excellent progress
Samuel Johnson		0.2	0.2WTE commenced August (Funding from Burton)	93	81	87%	104	96	92%	98	93	95%	Excellent progress
Stafford	0.8	0.8	0.8WTE commenced in June.	554	518	94%	619	565	91%	534	534	100%	Excellent progress

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		
	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												
South Staffordshire	744	649	87.2%	1141	1028	90.1%	1349	1207	89.5%	3234	2884	89.2%
Units												
Queens Burton & Samuel Johnson	80	72	90.0%	750	658	87.7%	697	612	87.8%	1527	1342	87.9%
Stafford Hospital	510	455	89.2%	553	511	92.4%	528	473	89.6%	1591	1439	90.4%

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 have exceeded 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									
South Staffordshire	1224	368	30.1%	1446	557	38.5%	2670	925	34.6%
Units									
Queens Burton & Samuel Johnson	884	384	43.4%	885	525	59.3%	1769	909	51.4%
Stafford Hospital	554	49	8.8%	530	46	8.7%	1084	95	8.8%

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.

Documentation around dating scan can make this KPI difficult to assess.

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

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 Q1-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												
South Staffordshire	779	256	32.9%	1241	480	38.7%	1434	654	45.6%	3454	1390	40.2%
Units												
Queens Burton & Samuel Johnson	105	32	30.5%	898	355	39.5%	854	394	46.1%	1857	781	42.1%
Stafford Hospital	517	142	27.5%	555	163	29.4%	529	206	38.9%	1601	511	31.9%

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; 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)
(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

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													
South Staffordshire	3285	437	13.3%	116	26.5%	133	30.4%	145	33.2%	134	30.7%	99	73.9%
Units													
Queens Hospital Burton & Samuel Johnson	1746	213	12.1%	50	23.5%	59	27.7%	63	29.6%	64	30.0%	46	71.9%
Stafford Hospital	1561	212	13.6%	72	34.0%	84	39.6%	90	42.5%	73	34.4%	64	87.7%

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 South Staffs are slightly lower than West Midlands as a whole (13.3 and 14.1%). Rates vary with factors such as deprivation and smoking. Antenatal detection rates are calculated on the basis of the actual record in the notes and / or a record of EFW below the tenth centile. The overall (either/or) detection rate varies significantly between units: in Burton it is equal to the regional average, while at Stafford it is 42.5%, currently one of the highest in the Region. Also presented are the referrals for scan on the basis of fundal height measurement; 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)

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.ppt

	KPI 4 - 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	%
West Midlands	6977	1438	20.6%	11231	2181	19.4%	12008	2302	19.2%	30216	5921	19.6%
PCTs												
South Staffordshire	771	157	27.0%	1235	224	18.1%	1453	287	19.8%	3459	668	19.3%
Units												
Queens Hospital Burton & Samuel Johnson	106	16	15.1%	897	148	16.5%	866	147	17.0%	1869	311	16.6%
Stafford Hospital	506	104	20.2%	556	113	20.3%	530	125	23.6%	1592	342	21.5%

West Midlands

British Europeans	4826	1327	27.5%	8351	2130	25.5%	8533	2105	24.7%	21710	5562	25.6%
Teenagers (< 18 at delivery)	160	73	45.6%	248	248	44.4%	251	99	39.4%	659	282	42.8%
British Teenagers (<18)	136	66	48.5%	220	103	46.8%	216	93	43.1%	572	262	45.8%

	KPI 4 - Smoking at Delivery											
	Q1			Q2			Q3			Total		
	West Midlands	6490	966	14.9%	9944	1456	14.6%	10147	1425	14.0%	26581	3847
PCT												
South Staffordshire	749	116	15.5%	1194	159	13.3%	1431	206	14.4%	3374	481	14.3%
Units												
Queens Hospital Burton & Samuel Johnson	112	10	8.9%	862	102	11.8%	881	109	12.4%	1855	221	11.9%
Stafford Hospital	514	80	15.8%	547	75	13.7%	526	101	19.2%	1587	256	16.1%

West Midlands

British Europeans	4486	907	20.2%	7426	1419	19.1%	7237	1323	18.3%	19149	3649	19.1%
Teenagers (< 18)	139	50	36.0%	213	73	34.3%	213	68	31.9%	565	191	33.8%
British Teenagers (<18)	119	43	36.1%	192	70	36.5%	180	62	34.4%	491	175	35.6%

Smoking Cessation

	Cases with booking and delivery information present			
	Smokers at booking	Smokers at delivery	Cessation rate	
	n	n	n	%
West Midlands	4904	3676	1228	25.0%
PCT				
South Staffordshire	628	459	169	26.9%
Units				
Queens Hospital Burton & Samuel Johnson	300	204	96	32.0%
Stafford Hospital	328	248	80	24.4%
West Midlands				
British Europeans	4619	3511	1108	24.0%
Teenagers (< 18)	233	187	46	19.7%
British Teenagers (<18)	215	173	42	19.5%

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 at delivery rates in South Staffs have met target, although there is wide variation between the units. Cessation rates are similar to 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

	KPI 5 - Breast Feeding Initiated within 48hrs											
	Q1			Q2			Q3			Total / average over period Q1-Q3		
	Number of cases with data	n	%	Number of cases with data	n	%	Number of cases with data	n	%	Number of cases with data	n	%
West Midlands	5671	3279	57.8%	10340	6051	58.5%	10246	5895	57.5%	26257	15225	58.0%
PCTs												
South Staffordshire	747	456	61.0%	1179	738	62.6%	1330	748	56.2%	3256	1942	59.6%
Units												
Queens Hospital Burton & Samuel Johnson	106	86	81.1%	849	544	64.1%	744	400	53.8%	1699	1030	60.6%
Stafford Hospital	510	290	56.9%	551	323	58.6%	517	284	54.9%	1578	897	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%

Data quality

Collection of this indicator is difficult because:

1. Reliance on the labour record is insufficient as 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 are similar to the regional average.

Additional comments

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

SOUTH STAFFORDSHIRE cases submitted in Q2 & Q3, 2009/10: n= 2,827

	%		%		%			
Multiple pregnancies	1.4%	Maternal age		Place of birth				
Ethnic origin (main groups)		<18	1.7%	Hospital	92.2%			
British-European	88.8%	<20	7.1%	Midwife led unit	6.0%			
Eastern Europe	2.3%	35+	13.8%	Home	1.2%			
African	0.5%	40+	2.1%	Born before arrival	0.6%			
African Caribbean	0.3%	Obesity: BMI		Labour induced	26.6%			
Bangladeshi	0.3%	>30	18.3%	Mode of birth		All parities	Primips (45.6%)	
Indian	1.2%	>35	6.6%	Normal	65.2%	65.2%	54.0%	
Pakistani	2.5%	>40	2.2%	Ventouse	8.1%	8.1%	13.7%	
Other	4.1%	Smoker		Forceps	5.0%	5.0%	8.8%	
Country of birth (main groups)		at booking	19.1%	Breech	0.3%	0.3%	0.4%	
UK	91.3%	of these, referred to advisor	54.1%	C Section	21.3%	21.3%	23.1%	
Poland	2.1%	at delivery	13.9%	Type of CS				
Bangladesh	0.1%	other smokers in household	31.8%	Emergency	7.9%	7.9%	11.0%	
India	0.5%	Drug misuse		Urgent	3.4%	3.4%	4.7%	
Pakistan	1.4%	of these, referred	55.6%	Scheduled	2.3%	2.3%	2.4%	
Yemen & Horn of Africa	0.0%	Asked about domestic abuse		Elective	7.6%	7.6%	4.8%	
Other	4.7%	of these, DA disclosed	1.2%	Undocumented	0.5%	0.5%	0.2%	
Interpreter required	2.0%	Mental health problems	9.9%	Episiotomy	16.4%			
Father is blood relation		Diabetes	0.9%	Perineum (excl episiotomy)				
Average	2.3%	Heart disease	2.3%	Intact	61.3%			
British-European	0.7%	Pre-existing hypertension	2.8%	Tear				
Pakistani	46.4%	Folic acid taken antenatally	85.5%	degree: 1st	13.1%			
Bangladeshi	25.0%	Pregnancy dated by ultrasound	99.3%	2nd	22.3%			
Middle East	30.0%	Screening for Down's offered	94.3%	3rd	2.0%			
Employed		Antenatal visits	median 8 mean 8.3	4th	0.0%			
full time	42.4%	Antenatal visits - same midwife	median 6 mean 5.6	Undocumented	1.3%			
part time	23.0%	Seen for decreased fetal movements	18.6%	Fetal growth restriction (bwt <10th cust.centile)				
looking after home	17.5%	Pregnancy complications:		detected antenatally	28.0%			
student	3.6%	Antepartum haemorrhage	7.7%	Prematurity				
unemployed	11.7%	Pregnancy induced hypertension	4.3%	<37 weeks	7.7%			
other	1.8%	Pre-eclampsia	0.5%	<34 weeks	2.3%			
Housing		HELLP Syndrome	0.1%	Apgar at 1 <4	1.5%			
owner	51.2%	Gestational Diabetes	1.8%	Apgar at 5 <7	0.9%			
rents	32.5%	Put to breast	61.7%	Postnatal visits				
with family/friends	14.6%	Postnatal visits - same midwife	median 4 mean 4.1	median	4	mean	4.1	
other	1.7%		median 3 mean 2.7	median	3	mean	2.7	
No partner	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.