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Crystal Court, Aston Cross
Birmingham, B6 5RQ

Telephone: 0121 687 3400
Facsimile: 0121 687 3401
E-mail: office@pi.nhs.uk
Website: www.pi.nhs.uk

Director

Professor Jason O Gardosi MD FRCOG FRCSED

Direct Line: 0121 687 3500
E-mail: gardosi@pi.nhs.uk

To: Dudley PCT
Russells Hall Maternity Unit
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, concerning detection of IUGR, is for the first time also included.

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

- good case ascertainment;
- however record keeping is often substandard, with frequent omissions of essential information;
- good progress towards early booking target;
- FGR detection rates are significantly lower than the West Midlands average;
- smoking-in-pregnancy targets are met, with cessation rates well above the regional average.

Also included are a preliminary set of indicators from the WM dataset, with demographics and characteristics of pregnancies for Dudley. 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)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
West Midlands	23.7	23.2		17973	7385	41%	18154	12769	70%	18229	12985	71%	
Russells Hall	1.5	1.6	1.6WTE commenced June	1080	832	77%	1144	1112	97%	1144	952	83%	Good 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/lth_KPI_Evidence_Targets.pdf

	KPI 1a - Completed Assessment < 13 Weeks											
	Q1			Q2			Q3			Total / average over period Q1-3		
	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												
Dudley	564	192	34.0%	581	254	43.7%	721	461	63.9%	1866	907	48.6%
Unit												
Russells Hall Hospital	776	326	42.0%	966	462	47.8%	901	611	67.8%	2643	1399	52.9%

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

Some progress is demonstrated towards the 80% project target.

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

	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									
Dudley	643	139	21.6%	730	173	23.7%	1373	312	22.7%
Unit									
Russells Hall Hospital	1085	198	18.2%	920	183	19.9%	2005	381	19.0%

Comment:

KPI 1b is added as a secondary indicator based on recommendation within NSF Standard 11 (collected in PEER 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>IfH_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												
Dudley	592	430	72.6%	655	414	63.2%	732	452	61.7%	1979	1296	65.5%
Unit												
Russells Hall Hospital	819	565	69.0%	1102	655	59.4%	916	533	58.2%	2837	1753	61.8%

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. Although 'Amber', results shown here are one of the best in the Region.

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/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 either SGA/FGR/IUGR in the notes, or: 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													
Dudley	1844	271	14.7%	41	15.1%	49	18.1%	61	22.5%	59	21.8%	37	62.7%
Unit													
Russells Hall Hospital	2653	396	14.9%	63	15.9%	81	20.5%	94	23.7%	94	23.7%	59	62.8%

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 Dudley are similar to those in the West Midlands as a whole (14.7 and 14.1%). FGR rates vary with factors such as deprivation and smoking.

Antenatal detection based on the actual record in the notes is low, and lower than in WM overall.

For further assessment, we also report on the number of cases where at least one EFW below the 10th centile was recorded. This is again lower than the WM average.

The column in bold lists the either / or detection rate which is **significantly lower than the WM average**.

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
 < 15% by 2010 or 1% per year

> 18%	15-18%	< 15%
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www.pi.nhs.uk/pnm/IIF_KPI_Evidence_Targets.pdf

	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	%
West Midlands	6977	1438	20.6%	11231	2181	19.4%	12008	2302	19.2%	30216	5921	19.6%

PCT

Dudley	591	114	19.3%	645	116	18.0%	729	147	20.2%	1965	377	19.2%
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Unit

Russells Hall Hospital	786	156	19.1%	1089	196	18.0%	921	181	19.7%	2796	533	19.1%
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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%

	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	%
West Midlands	6490	966	14.9%	9944	1456	14.6%	10147	1425	14.0%	26581	3847	14.5%

PCT

Dudley	567	71	12.5%	585	51	8.7%	674	61	9.1%	1826	183	10.0%
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Unit

Russells Hall Hospital	816	91	11.6%	989	88	8.9%	857	68	7.9%	2662	247	9.3%
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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 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%
PCTs				
Dudley	318	172	146	45.9%
Units				
Russells Hall Hospital	433	231	202	46.7%
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

Smoking at delivery rates in Dudley are well ahead of the target, and cessation rates are one of the best in the Region.

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		
	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%
PCTs												
Dudley	558	361	64.7%	606	378	62.4%	699	391	55.9%	1863	1130	60.7%
Units												
Russells Hall Hospital	776	521	67.1%	1026	667	65.0%	879	498	56.7%	2681	1686	62.9%
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 Dudley are slightly above 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

DUDLEY Cases submitted in Q2 & Q3, 2009/10: n = 1,509

	%		%		%
Multiple pregnancies	1.3%	Maternal age			
			<18	2.3%	
			<20	7.7%	
			35+	11.3%	
			40+	1.9%	
Ethnic origin (main groups)		Obesity: BMI			
British-European	82.2%		>30	21.2%	
Eastern Europe	1.1%		>35	7.6%	
African	1.6%		>40	2.8%	
African Caribbean	0.5%	Smoker			
Bangladeshi	0.2%		at booking	19.0%	
Indian	2.3%		of these, referred to advisor	51.0%	
Pakistani	8.4%		at delivery	9.0%	
Other	3.7%		other smokers in household	23.9%	
Country of birth (main groups)		Drug misuse			
UK	93.1%		of these, referred	0.8%	
Poland	0.3%			54.5%	
Bangladesh	0.0%				
India	0.4%	Asked about domestic abuse			
Pakistan	2.5%		37.9%	2.7%	
Yemen & Horn of Africa	0.9%		of these, DA disclosed		
Other	2.7%	Mental health problems			
Interpreter required	1.8%		4.6%		
Father is blood relation		Diabetes			
Average	4.1%		0.5%		
British-European	1.3%	Heart disease			
Pakistani	28.7%		1.1%		
Bangladeshi	33.3%	Pre-existing hypertension			
Middle East	35.0%		1.4%		
Employed		Folic acid taken antenatally			
full time	40.3%		90.0%		
part time	19.9%	Pregnancy dated by ultrasound			
looking after home	18.3%		99.8%		
student	2.8%	Screening for Down's offered			
unemployed	16.5%		96.8%		
other	2.2%	Antenatal visits			
			median	8	mean
				8.2	
Housing		Antenatal visits - same midwife			
owner	49.1%		median	6	mean
rents	32.8%			6.4	
with family/friends	16.6%	Seen for decreased fetal movements			
other	1.5%		10.8%		
No partner	5.7%	Pregnancy complications:			
		Antepartum haemorrhage			
		Pregnancy induced hypertension			
		Pre-eclampsia			
		HELLP Syndrome			
		Gestational Diabetes			
		1.8%			
		0.6%			
		0.4%			
		0.0%			
		0.8%			

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.