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7<sup>th</sup> April 2010

To: NHS North Staffs & Stoke on Trent PCTs  
University Hospital of North Staffordshire  
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 **North Staffordshire**, the key points are

- decreased data ascertainment due to understaffing;
- record keeping is often substandard, with frequent omissions of essential information;
- early booking target is being achieved;
- FGR detection rates - below target, but currently one of the highest in the region;
- national smoking-in-pregnancy targets are not being met.

Also included are a preliminary set of indicators from the WM dataset, with demographics and characteristics of pregnancies for North 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](http://www.pi.nhs.uk/data))

PEER Team  
Perinatal Institute

March 2010



**Table 1: Data submitted from WM maternity units**

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%	
North Staffs (UHNS)	1.9	1.9	1.0WTE in post throughout, second 1.0WTE left in summer and not replaced until 26/10/09 (temp) New temp in post since Feb 2010	1365	1305	96%	1483	1362	92%	1399	719	51%	Good progress despite 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>PCTs</b>												
North Staffordshire	388	327	84.3%	412	352	85.4%	221	185	83.7%	1021	864	84.6%
Stoke on Trent	846	724	85.6%	851	715	84.0%	420	353	84.0%	2117	1792	84.6%
<b>Units</b>												
North Staffs (UHNS)	1289	1098	85.2%	1324	1115	84.2%	668	562	84.1%	3281	2775	84.6%

**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**

The 80% target has been achieved

**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 period Q2-Q3		
	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>PCTs</b>									
North Staffordshire	411	224	54.5%	221	126	57.0%	632	350	55.4%
Stoke on Trent	849	352	41.5%	422	175	41.5%	1271	527	41.5%
<b>Units</b>									
North Staffs (UHNS)	1321	589	44.6%	670	307	45.8%	1991	896	45.0%

**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](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 period Q2-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>PCTs</b>												
North Staffordshire	393	294	74.8%	413	312	75.5%	220	164	74.5%	1026	770	75.0%
Stoke on Trent	852	594	69.7%	861	590	68.5%	421	280	66.5%	2134	1464	68.6%
<b>Units</b>												
North Staffs (UHNS)	1300	919	70.7%	1336	936	70.1%	667	456	68.4%	3303	2311	70.0%

### Data quality

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

### Performance & Progress

Commentary from WM midwives suggest that this target is particularly challenging due to limited capacity. However continuity is much better than the WM average.

### 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](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 <b>one or more EFW &lt;10 cust. centile</b>		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	<b>29.4%</b>	1153	28.5%	714	<b>61.9%</b>	
<b>PCTs</b>														
North Staffordshire	1005	136	13.5%	46	33.8%	44	32.4%	53	<b>39.0%</b>	32	23.5%	24	<b>75.0%</b>	
Stoke on Trent	2086	327	15.7%	121	37.0%	115	35.2%	130	<b>39.8%</b>	87	26.6%	55	<b>63.2%</b>	
<b>Units</b>														
North Staffs (UHNS)	3230	480	14.9%	177	36.9%	168	35.0%	194	<b>40.4%</b>	126	26.3%	85	<b>67.5%</b>	

#### 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 plotted on customised charts was used as an additional indicator.

#### Performance & Progress

FGR rates of mothers booking at North Staffs are similar to those in WM (14.9 and 14.1%), but show variation between PCTs. Rates vary with factors such as deprivation and smoking.

Antenatal detection **based on the actual record in the notes** is low, has been supplemented with the number of cases where at least one **EFW below the 10th centile has been recorded**.

The column in bold lists the either / or detection rate. Although suggesting still ample room for improvement, detection rates are currently **one of the highest** in the Region.

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)

## 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)

	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	%
<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>PCTs</b>												
North Staffordshire	393	86	21.9%	407	102	25.1%	223	45	<b>20.2%</b>	1023	233	<b>22.8%</b>
Stoke on Trent	852	230	15.9%	857	247	28.8%	431	139	<b>32.3%</b>	2140	616	<b>28.8%</b>
<b>Units</b>												
North Staffs (UHNS)	1289	324	24.9%	1328	361	27.2%	686	191	<b>27.8%</b>	3303	876	<b>26.5%</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 / 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	%
<b>West Midlands</b>	<b>6490</b>	<b>966</b>	14.9%	<b>9944</b>	<b>1456</b>	14.6%	<b>10147</b>	<b>1425</b>	<b>14.0%</b>	<b>26581</b>	<b>3847</b>	<b>14.5%</b>
<b>PCTs</b>												
North Staffordshire	393	66	16.8%	401	75	18.7%	224	39	17.4%	1018	180	17.7%
Stoke on Trent	847	185	21.8%	<b>838</b>	<b>179</b>	21.4%	432	121	28.0%	2117	485	22.9%
<b>Units</b>												
North Staffs (UHNS)	1289	255	19.8%	1300	258	19.8%	687	163	23.7%	3276	676	20.6%
<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>				
North Staffordshire	228	176	52	<b>22.8%</b>
Stoke on Trent	599	475	124	<b>20.7%</b>
<b>Units</b>				
North Staffs (UHNS)	852	662	190	<b>22.3%</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

The target has been not been achieved, and cessation rates are lower than 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/rpm/lfh\\_KPI\\_Evidence\\_Targets.pdf](http://www.pi.nhs.uk/rpm/lfh_KPI_Evidence_Targets.pdf)

	KPI 5 - Breast Feeding Initiated within 48hrs											
	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	%
<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>PCTs</b>												
North Staffordshire	387	239	61.8%	400	258	64.5%	216	142	<b>65.7%</b>	1003	639	<b>63.7%</b>
Stoke on Trent	825	455	55.2%	843	455	54.0%	435	235	<b>54.0%</b>	2103	1145	<b>54.4%</b>
<b>Units</b>												
North Staffs (UHNS)	1256	722	57.5%	1300	758	58.3%	682	400	<b>58.7%</b>	3238	1880	<b>58.1%</b>

### West Midlands

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

Breastfeeding initiation is similar to the regional average but varies between the PCTs

### Additional comments

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

## NORTH STAFFS AND STOKE ON TRENT cases submitted in Q2 &amp; Q3, 2009/10: n=2,426

<b>Multiple pregnancies</b>	1.3%	<b>Maternal age</b>		<b>Place of birth</b>			
<b>Ethnic origin (main groups)</b>					Hospital	75.1%	
British-European	82.2%	<18	2.2%	Midwife led unit	22.1%		
Eastern Europe	2.1%	<20	8.9%	Home	1.8%		
African	1.9%	35+	10.6%	Born before arrival	1.0%		
African Caribbean	0.3%	40+	1.4%				
Bangladeshi	0.6%	<b>Obesity: BMI</b>		<b>Labour induced</b>		25.4%	
Indian	0.8%	>30	22.5%	<b>Mode of birth</b>			<b>All parities</b> <b>Primips</b>
Pakistani	6.5%	>35	9.0%	Normal	66.6%		66.6%
Other	5.7%	>40	2.8%	Ventouse	5.3%		58.5%
				Forceps	2.7%		10.5%
<b>Country of birth (main groups)</b>		<b>Smoker</b>		Breech	0.6%		5.4%
UK	85.5%	at booking	27.4%	C Section	24.8%		24.9%
Poland	1.4%	of these, referred to advisor	43.8%	<b>Caesarean Section</b>			
Bangladesh	0.6%	at delivery	21.6%	Emergency	12.6%		20.1%
India	0.6%	other smokers in household	36.8%	Urgent	1.4%		2.1%
Pakistan	4.1%	<b>Drug misuse</b>		Scheduled	0.2%		0.0%
Yemen & Horn of Africa	0.4%	of these, referred	1.7%	Elective	10.5%		2.7%
Other	7.4%	<b>Asked about domestic abuse</b>		Undocumented	0.3%		0.0%
<b>Interpreter required</b>	3.9%	of these, DA disclosed	54.3%				
<b>Father is blood relation</b>			1.3%	<b>Episiotomy</b>			14.3%
Average	4.7%	<b>Mental health problems</b>		<b>Perineum (excl episiotomy)</b>			
British-European	1.1%		12.5%	Intact	62.5%		
Pakistani	45.7%	<b>Diabetes</b>		Tear - degree: 1st	8.7%		
Bangladeshi	0.0%	<b>Heart disease</b>		2nd	27.3%		
Middle East	21.4%	<b>Pre-existing hypertension</b>		3rd	1.4%		
				4th	0.0%		
<b>Employed</b>		<b>Folic acid taken antenatally</b>		Undocumented	0.1%		
full time	33.0%	<b>Pregnancy dated by ultrasound</b>	78.4%	<b>Fetal growth restriction (bwt &lt;10th cust.centile)</b>			14.8%
part time	18.7%	<b>Screening for Down's offered</b>	99.4%	<b>Prematurity</b>			
looking after home	23.9%	<b>Antenatal visits</b>	93.6%	<37 weeks	8.9%		
student	5.0%	median	8	mean	8.6		
unemployed	14.7%	<b>Antenatal visits - same midwife</b>		<34 weeks	2.5%		
other	4.7%	median	7	mean	6.9		
<b>Housing</b>		<b>Seen for decreased fetal movements</b>		<b>Apgar at 1 &lt;4</b>			2.5%
owner	43.8%		24.0%	<b>Apgar at 5 &lt;7</b>			1.3%
rents	36.6%	<b>Pregnancy complications:</b>		<b>Put to breast</b>			59.6%
with family/friends	16.7%	Antepartum haemorrhage	5.8%	<b>Postnatal visits</b>			
other	3.0%	Pregnancy induced hypertension	9.4%	median	3	mean	3.6
<b>No partner</b>	6.5%	Pre-eclampsia	1.5%	<b>Postnatal visits - same midwife</b>			
		HELLP Syndrome	0.2%	median	2	mean	2.5
		Gestational Diabetes	4.7%				

**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.