

Response to TSA Birth Rate Forecast and Flow Assumptions

1.0 Introduction

1.1 This paper will set out concerns held by Lewisham Healthcare NHS Trust regarding the validity of the data being utilised in the decision making process for the future of maternity services in southeast London. The concerns relate specifically to the following:

1. Birth rate forecast data
2. Assumed Patient flows under the dispersal model

2.0 Birth rate forecast data

2.1 The Trust believes that the forecast assumptions for birth activity numbers in 2015/2016, as provided by the TSA, have been underestimated. This belief is based on a review of the HES data for the three years 2009/10 – 2011/2012 and a review of the birth rate across the six boroughs for the four years 2008 – 2011.

Table 1 shows the HES activity data from all provider sites in South East London that deliver intra partum care:

Table 1 – Provider birth numbers¹

		Lewisham	QEH	PRUH	QMS	GSTT	KCH	Total
HES Data 1	2009/2010	3259	4126	3921	3821	6524	4320	25971
	2010/2011	3476	4386	4219	2094	6879	5366	26420
	2011/2012	3907	4844	4893	0	6739	6000*	26383

2.2 Table 2 below shows the ONS birth rate by borough for the six boroughs that form South East London.

Table 2 – Birth rate for SE London by borough²

	Birth rate by borough			
	2008	2009	2010	2011
Bromley	3983	4104	4070	4141
Bexley	2975	3029	2993	3172
Greenwich	4361	4480	4674	4561
Lewisham	4872	4888	4982	4896
Lambeth	4837	4863	4929	4784
Southwark	5008	4873	5131	5089
Total	26036	26237	26779	26643

¹ HES Online: <http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1941> * 11/12 HES data for KCH states 1251 deliveries. This is incorrect and has been substituted with a figure of 6000 based on the KCH internet site statement

² ONS: <http://www.ons.gov.uk/ons/publications/index.html>

Table 2 demonstrates that across the years 2008-2011, the total live birth rate in the six boroughs increased by 607 deliveries. This represents an increase in live births of 2.33% across the three years.

- 2.3** Table 3 shows the forecast assumptions for births in 2015/2016 as presented at the TSA Maternity Workshop meeting on Wednesday 5th December:

Table 3 – TSA Forecast Assumptions for Births³

		Lewisham	QEH	PRUH	GSTT	KCH	Total
TSA 15/16 forecast	4 Site Model	0	5798	5691	7099	7308	25896
	5 Site Model	4335	4542	4685	6865	5691	26118

- 2.4** Table 3 identifies that the 4 site model assumes 25,895 births, 487 births less than in 2011/12. This represents a 1.84% reduction in the birth rate across the four years to 2015/2016.

Table 3 also identifies that the 5 site model assumes that in 2015/2016 births will be 26,118, 265 less births than in 2011/2012. This represents a 1.0% reduction in the birth rate across the four years to 2015/2016.

2.5 Summary

The ONS data presented above indicates that the birth rate in South East London is rising, a view that is supported by both public health and the local authority.

Therefore Lewisham Healthcare Trust finds it inconceivable that the TSA birth rate calculations assume a 1.8% decrease in the birth rate for the four site model and a 1.0% decrease in the birth rate for the five site model in the four years to 2015/2016.

3.0 Assumed Patient Flows under the Dispersal Model

- 3.1** LHT also believes that the patient flow assumptions for the dispersal model are incorrect, with an inexplicably low apportionment of births to St. Thomas's which does not reflect the current flows.
- 3.2** Table 4 shows the four and five site TSA projections and the apportionment of dispersed LHT births in the 4 site model:

Table 4 – Dispersal of LHT births in TSA 4 site model⁴

	LHT	St.T	Kings	PRU	QE	Other	Total
Births in 2015/16 [5 site]	4335	6865	5691	4685	4542	n/a	26,118
Births in 2015/16 [4 site]	0	7099	7308	5691	5798	n/a	25,896
Additional births by site in 4 site model	(4335)	234	1617	1006	1256	222	0
% of dispersed LHT births	n/a	5.4%	37.3%	23.2%	29%	5.1%	100%

³ TSA Maternity Workshop presentation 5th December 2012

⁴ TSA Maternity Workshop presentation 5th December 2012

- 3.3** LHT believes that this modelling does not represent the likely birth flows that would occur in the event of the closure of Lewisham’s Maternity Unit. Our alternative modelling is based on our in-depth knowledge of the local maternity market, competition and flows of births, which has been built up over the last three years, and is detailed to neighbourhood and GP practice level. We therefore feel strongly that our projections for likely dispersal of births are grounded in real local knowledge and market intelligence.
- 3.4** In the first six months of 2012/13, 70.6% of Lewisham women gave birth in Lewisham. However, 720 births happened outside of borough, 13.6% of Lewisham mothers gave birth at St. Thomas’ compared to 2.4% at PRUH and 1.6% at QEH. The apportionment of births at these sites gives a good indication of the choices women currently make and is shown below:

Table 5 - Apportionment of non-LHT births by Lewisham mothers, April-September 2012⁵

Delivery site	Actual number of births 2012/13 Q1-2	% of non-LHT births by Lewisham mothers
St. Thomas’	332	46.1%
Kings	248	34.4%
PRU	58	8.1%
QE	40	5.6%
Others	42	5.8%
Total	720	100%

- 3.5** This market intelligence is consistent with previous years and shows that St.Thomas’ is the alternative provider of choice for Lewisham mothers not choosing to birth at LHT. We do not feel this is reflected in the TSA four site modelling, which suggests that only 5% of the dispersed Lewisham births will go to St. Thomas’.

Lewisham is divided into four geographical boroughs and we know that in Neighbourhood 1 (North Lewisham), a much higher proportion of non-LHT births take place at St.Thomas’ (78%, compared to 1% each at PRUH and QEH), whereas in Neighbourhood 4 (South-west Lewisham), 63% of non-LHT births occur at Kings compared to 22% St.Thomas’, 6% PRU and 2% QEH. St.Thomas’ is the alternative provider of choice in Neighbourhood 2, with a 41% share of non-LHT Lewisham births. We also know from the Local Authority that the biggest population growth in Lewisham over the next 10 years is going to take place in Neighbourhood 1.

- 3.6** We believe it would be reasonable to assume that, the distribution of actual non-LHT births in the current flows will be replicated in the event of the closure of the LHT Maternity Unit. If these percentage flows are applied to the forecast birth rates at each of the four remaining provider sites, the predicted birth rates for each provider would be very different to those predicted by the TSA team. Table 6 below shows the potential dispersal of births based on current flows.

⁵ Dr Foster HMM

Table 6 – LHT birth dispersal based on current flows of non-LHT Lewisham births

	LHT	St. Thomas'	Kings	PRU	QE	Other
TSA 2015/16 5 site forecast	4335	6865	5691	4685	4542	n/a
Dispersal of LHT births based on current flows	-4335	1999 (46.1%)	1493 (34.4%)	349 (8.1%)	241 (5.6%)	253 (5.8%)
Total 4 site forecast births 2015/16	0	8864	7184	5034	4783	253

3.7 Table 6 identifies that, based on current flows, the number of births that would take place at St.Thomas' in the 4 site model has been considerably underestimated and that, even using the TSA's own figures for the forecast births, the number of births at St.Thomas' would be over 8000 per annum. The Royal College of Obstetrics and Gynaecology (RCOG) guidance is that a birth rate over 8000 requires a double Obstetric Consultant rota⁶.

4.0 Conclusion

4.1 There are two significant issues to be considered based on the information detailed in this paper:

- I. The risk that the baseline capacity required to deliver the maternity activity in South east London has been underestimated and, therefore, that the available capacity will be insufficient to meet demand and maintain safety and quality.
- II. The potential that the birth rate has been underestimated and the likelihood that the patient flow assumptions are incorrect. It is the LHT view that, in the four site option, GSTT, and potentially also KCH, will reach a level of activity that will necessitate the creation of double Obstetric rotas. This poses a financial risk to the model but also challenges the assumption that the five site model would be more costly and require more obstetricians than the four site model.

⁶ *The Future Workforce in Obstetrics and Gynaecology, RCOG 2009*