

Paediatric Rota Gaps and Vacancies 2016

Findings of a survey carried out between January and March 2016

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Executive Summary

This is the report of the seventh survey in the last seven years that the RCPCH has conducted to monitor rota vacancies and gaps and to assess rota compliance with Working Time Regulations (WTR). This data provides us with the opportunity to look at trends in terms of vacancy rates and compliance with WTR and to monitor the potential impact of service changes.

Since the full introduction of Working Time Regulations (WTR)[1] took effect in 2009, the RCPCH has carried out regular winter surveys of compliance with the regulations and an assessment of the vacancies on paediatric and neonatal rotas in the UK[2]. Vacancies and gaps, especially those at tier 2 (middle grade) continue to raise concern about the sustainability of services and to trainees' wellbeing.

Key findings

Vacancies and gaps

- The rota vacancy rate is 10.4% on tier 1 rotas and 20.3% on tier 2 rotas. Averaged across both tiers, there has been an increase in the vacancy rate from 12.1% in January 2015 to 14.9% in January 2016
- The vacancy rate is highest on tier 2 general paediatric rotas (27.6%) where the recorded vacancy rate has risen from 18% in January 2015.
- Across both rota tiers, 46.5% of vacant posts are filled by locums (47.3% in January 2015).
- The highest vacancy rates are on tier 2 rotas in England (21.7%) and on tier 1 rotas in Northern Ireland (19.2%).
- 60% of tier 1 rotas and 77% of tier 2 rotas comprise of fewer than 10 whole time equivalent staff.

Compliance with Working Time Regulations

- Overall compliance of tier 1 and 2 rotas with EWTR on paper is high at 98.8% - a slight improvement on January 2015 when it was 98.1% slight increase in comparison to December 2012 (1.0%).
- Non-compliance in practice is highest on tier 2 rotas (11.4%) and in particular shared general paediatric and neonatal rotas (17.3%). Overall, rates of non-compliance in practice have changed little - 9% in January 2015 and 9.4% in January 2016.

Consultants working resident shift and unplanned cover

- 138 consultants were reported as permanently working resident shifts, weighting this figure implies there are 410 consultants filling these roles representing an estimated 27.5% of the general and neonatal consultant population in the UK.
- Where consultants were working resident shifts they were resident on consultant rotas in 65.2% (15/23) of these units and on tier 2 rotas in 60.9% (14/23) of units.
- Unplanned cover occurred in a higher proportion of units (38%) compared to January 2015 (35%) and with higher average frequency - 3.1 occasions over the 4 weeks preceding the survey compared to 2.4 in January 2015.

Concern about the future

- 89% of respondents were either very or moderately concerned about how the service will cope in the next 6 months; an increase on January 2014 (77.7%) and on December 2012 (71.8%).

Conclusion

The results of this survey provide evidence that the concerns of those responsible for organising safe paediatric services for children in hospital, be they consultants, trainees or directorate management are well-founded and that acute service provision for children remains under considerable strain across the UK.

Aims of the Survey

The purpose of the survey was to collect evidence on the extent of rota vacancies and gaps, the current state of compliance with the Working Time Regulations (WTR), the extent to which consultants are working resident shifts and the concerns of those responsible for managing these services.

Methodology

In January 2016 a short questionnaire, similar to previous surveys, was sent via SurveyMonkey® to clinical directors/leads responsible for all units in the UK providing general paediatric inpatient and neonatal services. The survey closed in mid-March 2016 and obtained a response rate of 43.5% (93/214).

The data were downloaded to an MS Access database and analysed by the RCPCH workforce team using MS Access and MS Excel. The report was compiled by the workforce team and reviewed by the RCPCH Officer for Workforce Planning, Dr Simon Clark.

A proportion of the rota data received was excluded due to poor quality or inconsistency; responses which have omitted either the posts/WTE on the rota or the vacant posts, or where data is inconsistent have not been included in this analysis. This should be borne in mind when interpreting the results. Across both tiers, data from 78.2% (205/262) rotas was deemed to be good quality and included in analysis. This compares to 51.4% (196/381) which were deemed to be good quality in the previous survey of 2014/15.

Detailed findings

1. Compliance with WTR

For each tier 1 (junior) and tier 2 (middle grade) rota for general paediatrics, shared general/neonatal and neonatal services we asked if the rota was compliant with WTR on paper and in practice. The results are shown in tables 1 and 2.

Table 1: Compliance with WTR on paper by rota tier and service

	Yes		No		Total
	No.	%	No.	%	No.
Tier 1 General Paediatrics	46	100.0%	0	0.0%	46
Tier 1 General/Neonatal	48	98.0%	1	2.0%	49
Tier 1 Neonatal	38	100.0%	0	0.0%	38
Tier 1 overall	132	99.2%	1	0.8%	133
Tier 2 General Paediatrics	40	100.0%	0	0.0%	40
Tier 2 General/Neonatal	50	96.2%	2	3.8%	52
Tier 2 Neonatal	31	100.0%	0	0.0%	31
Tier 2 overall	121	98.4%	2	1.6%	123
Tier 1 and Tier 2 overall	253	98.8%	3	1.2%	256

* 6 respondents did not answer this question

Overall, 99.2% of tier 1 rotas and 98.4% of tier 2 rotas are compliant with WTR on paper. The overall the level of compliance on paper of 98.8% has remained broadly similar since December 2014 when compliance was 98.1%. Non-compliance on paper across both rota tiers is 1.2%; a decrease on December 2014 (1.9%).

Table 2: Compliance with WTR in practice by rota tier and service

	Yes		No		Total
	No.	%	No.	%	No.
Tier 1 General Paediatrics	43	93.5%	3	6.5%	46
Tier 1 General/Neonatal	45	91.8%	4	8.2%	49
Tier 1 Neonatal	35	92.1%	3	7.9%	38
Tier 1 overall	123	92.5%	10	7.5%	133
Tier 2 General Paediatrics	37	92.5%	3	7.5%	40
Tier 2 General/Neonatal	43	82.7%	9	17.3%	52
Tier 2 Neonatal	29	93.5%	2	6.5%	31
Tier 2 overall	109	88.6%	14	11.4%	123
Tier 1 and Tier 2 overall	232	90.6%	24	9.4%	256

* 6 respondents did not answer this question

In practice, 92.5% of tier 1 rotas and 88.6% of tier 2 rotas are compliant with WTR. Non-compliance in practice is highest among tier 2 general/neonatal rotas, where 17.3% are non-compliant compared to 14.6% in December 2014. Overall non-compliance on tier 2

rotas has fallen to 11.4% since December 2014 (14.4%). Across both tiers non-compliance is 9.4%; a 0.4% increase since December 2014 (9.0%).

This year, 19.3% of reporting units stated that they had at least one non-compliant tier 2 rota, an increase compared to 16.6% in December 2014 and 11.3% in December 2012.

Table 3: Compliance with WTR on paper and in practice by country

	No. of rotas	Compliance on paper	Compliance in practice
Tier 1			
England	116	99.1%	93.1%
Northern Ireland	3	100.0%	66.7%
Scotland	2	100.0%	50.0%
Wales	12	100.0%	100.0%
United Kingdom	133	99.2%	92.5%
Tier 2			
England	107	99.1%	88.8%
Northern Ireland	2	100.0%	100.0%
Scotland	2	100.0%	50.0%
Wales	12	91.7%	91.7%
United Kingdom	123	98.4%	88.6%

Table 3 compares compliance with the working time regulations in the four UK nations. Low numbers of respondents in both Northern Ireland and Scotland make useful comparisons difficult, 99.1% of tier 1 rotas are compliant on paper in England while in the other 3 nations there is 100% compliance. In tier 2 rotas, only those in Northern Ireland and Scotland are all compliant on paper, although the compliance on paper rates for England (99.1%) and Wales (91.7%) are high.

Both of the reported tier 2 rotas in Northern Ireland are compliant on paper and in practice; Scotland which was 100% compliant in 2014 now have one non-compliant on paper and in practice tier 2 rota. The compliance rate in practice for tier 2 in England has increased from 86.5% in 2014 to 88.8% and from 81.8% to 91.7% in Wales.

2. Plans for becoming compliant

Of those who responded to the survey, there were a total of 24 non-compliant (in practice) rotas in 16 units. Where units had non-compliant rotas, they were asked whether there was an agreed plan for becoming compliant. 15 respondents answered this question of which 9 respondents reported there was an agreed compliance plan in place while 6 stated that there was no compliance plan.

Of the 9 respondents who had an agreed compliance plan, 6 had stated that the plan was funded and a further 3 respondents stated that the plans were not funded.

3. Rota vacancies and gaps

For each rota, clinical directors and leads were asked to indicate:

- the number of vacancies due to failure to recruit;
- the number of gaps due to out of programme (OOP);
- the total number of positions and WTE on the rota and;
- how many of the vacancies and gaps were filled by a locum;

Table 4 shows the number of vacancies and gaps, along with the vacancy rate for each type of rota on tier 1 and tier 2. For this analysis we have only included rotas where the quality of data is good quality (see methodology). Across both tiers, data 78.2% (205/262) rotas was deemed to be good quality and included in this analysis.

In the UK in 2013 there were a total of 278 tier 1 rotas and 245 tier 2 rotas (RCPCH Census 2013). Although there may have been a small reduction in the total number of rotas since 2013, we can estimate, assuming a constant proportion of vacancies, that there are approximately 270 and 405 vacancies and gaps on tier 1 and tier 2 rotas respectively.

Table 4: Rota vacancies, gaps and rate by tier and service

	Vacancies due to failure to recruit	Gaps due to OOP	Total vacancies and gaps	Vacancies and gaps %
Tier 1 general paediatrics	25.6	15.9	41.5	11.6%
Tier 1 general/neonatal	32.8	7.4	40.2	9.8%
Tier 1 neonatal	15.6	4.5	20.1	9.4%
Tier 1 overall	74.0	27.8	101.8	10.4%
Tier 2 general paediatrics	45.3	21.6	66.9	27.6%
Tier 2 general/neonatal	48.1	19.7	67.8	18.7%
Tier 2 neonatal	21.6	9.0	30.6	14.7%
Tier 2 overall	115.0	50.3	165.3	20.3%
Tier 1 and 2 overall	189.0	78.1	267.1	14.9%

Table 4 indicates that there is a 10.4% vacancy rate on tier 1 rotas due to failure to recruit and gaps due to out of programme reasons, an increase on December 2014 when the vacancy rate was 6.9%. Vacancy rates on tier 1 rotas are highest in general paediatrics only rotas.

The vacancy rate is considerably higher among tier 2 rotas – 20.3% overall; this represents a small increase on January 2015 when 19.5% of tier 2 rota posts were vacant. In December 2012 the rate was 15.2%. The vacancy rate is highest on general paediatric rotas (27.6%).

70.8% (189/267.1) of the total wte vacancies and gaps are reported to be due to failure to recruit. This represents an increase from 66.6% (141.5/212.5) in January 2015.

Table 5: Number and percentage of rota vacancies and gaps filled by locums

	Total vacancies and gaps	Number filled by locum	Filled by locum %
Tier 1 general paediatrics	41.5	14.0	33.7%
Tier 1 general/neonatal	40.2	29.2	72.6%
Tier 1 neonatal	20.1	8.1	40.3%
Tier 1 overall	101.8	51.3	50.4%
Tier 2 general paediatrics	66.9	21.7	32.4%
Tier 2 general/neonatal	67.8	37.1	54.7%
Tier 2 neonatal	30.6	14.1	46.1%
Tier 2 overall	165.3	72.9	44.1%
Tier 1 and 2 overall	267.1	124.2	46.5%

Respondents were asked how many of their vacancies and gaps were filled by locums, and the results are shown in Table 5.

On tier 1 rotas, 50.4% of vacancies are filled by locums and on tier 2 rotas 44.1% of rotas are filled by locums. This compares to December 2014, when 39.7% of tier 1 vacancies and 51.0% of tier 2 vacancies were filled with locums.

“Facing the Future”[3] Standard 8 for acute general paediatric services states that all general paediatric training rotas are made up of at least ten whole time equivalent (wte) posts. For the rota compliance survey, units were asked to state the whole time equivalent staff on each rota. Analysis of the good quality data reveals that 60% (63/105) of tier 1 rotas and 77% (77/100) of tier 2 rotas had fewer than 10 wte staff. In addition to shortages created by vacancies and gaps, there is therefore an additional shortage factor to be considered due to rota size failing to meet published standards.

Table 6: Vacancies, gaps and locum cover by country

	Total vacancies and gaps	Vacancies and gaps %	Number of locums	Filled by locum %
Tier 1				
England	81.6	10.0%	41.3	50.6%
Northern Ireland	5	19.2%	5	100.0%
Scotland	2	10.0%	0	0.0%
Wales	13.2	11.2%	5	37.9%
United Kingdom	101.8	10.4%	51.3	50.4%
Tier 2				
England	146.4	21.7%	65.7	44.9%
Northern Ireland	3	18.8%	1	33.3%
Scotland	2	11.8%	0	0.0%
Wales	13.9	13.1%	6.2	44.6%
United Kingdom	165.3	20.3%	72.9	44.1%

Table 6 breaks down vacancy rates and locum cover by UK country. The response rates for Scotland and Northern Ireland are low so conclusions are hard to make, but the vacancy rate is highest in Northern Ireland for tier 1 (19.2%) and England for tier 2 (21.7%). The vacancy rate on both tiers in Scotland is also of concern as none of those vacancies were filled by locums at the time of the survey, although this is based on a small number of responses from Scotland.

4. Consultants working resident shifts

Table 7 shows the number of units who have consultants permanently working resident shifts by country and the number of resident consultants recorded.

Table 7: Units with consultants permanently working resident shifts

Country	Units with resident consultants	Units without resident consultants	No. of resident consultants
England	20	41	130
	32.8%	67.2%	94.2%
Northern Ireland	0	3	0
	0.0%	100.0%	0.0%
Scotland	0	2	0
	0.0%	100.0%	0.0%
Wales	3	3	8
	50.0%	50.0%	5.8%
Total	23	49	138
	31.9%	68.1%	100.0%

* 21 units did not answer this question

23 (31.9%) of the responding units reported that they have consultants who permanently work resident shifts – this represents a proportionate decrease from 35.6% in December 2014, although fewer units answered this question in this survey. Wales has the highest proportion of units with permanent resident consultants – 50.0% (3 units) whereas none of the responding units in Northern Ireland and Scotland have any units with resident consultants.

A total of 138 consultants permanently working resident shifts were reported. If this rate of resident shift working is applied to all non-responding units we estimate there are approximately 410 consultants filling these roles, approximately 27.5% of the general and neonatal consultant workforce recorded in the RCPCH 2013 Workforce Census[4]. This represents a small fall in our estimate from 29.8% in January 2015.

Units were asked to supply an average number of PAs that each consultant worked resident shifts. We calculate that consultants permanently working resident shifts spent on average 2.35 PAs undertaking resident duties in comparison to winter 2014 when the average was 2.43. RCPCH guidance on the role of the consultant paediatrician recommends a maximum of 4 PAs for resident on call duties [5].

Type of Resident Shifts Worked

The 23 units in which consultants work resident shifts, were asked whether they were resident as part of the consultant rota or as part of the tier 2 (middle grade rota) and which shifts were worked by the consultants.

Table 8: Number of Units where consultants work resident shifts by type of shifts worked

	Weekday - during day time	Weekend shifts	Twilight shifts (7-10pm)	Night shifts	Any shifts
Consultant	13	12	13	6	15
	56.5%	52.2%	56.5%	26.1%	65.2%
Tier 2 rota	5	10	9	11	14
	21.7%	43.5%	39.1%	47.8%	60.9%
Total	15	17	20	11	23
	65.2%	73.9%	87.0%	47.8%	100%

The data analysed for table 8 shows that in some units resident consultants worked on both rotas and worked on a variety of shifts. Overall consultants were resident on consultant rotas in 65.2% (15/23) of these units and on tier 2 rotas in 60.9% (14/23) of units. When resident on tier 2 rotas, consultants were more commonly working night shifts (47.8%) or weekend shifts (43.5%). When resident on the consultant rota, they only undertook resident nights in 26.1% (6/23) of units. In 56.5% (13/23) of units consultants worked on weekday day-time resident shifts and twilight shifts.

5. Unplanned cover

Survey respondents were asked how many times consultants have provided unplanned cover for rotas in the four weeks before the survey. Table 9 shows the number of units providing unplanned cover and how many instances. 22 of the 93 units did not answer this question and 44 units did not report any instances of unplanned consultant cover.

Table 9: How many times have consultants provided unplanned cover for your rotas in the last 4 weeks?

Country	Instances of unplanned cover							
	0	1	2	3	4	6	8	10
England	37	7	5	4	3	1	2	1
Northern Ireland	3	0	0	0	0	0	0	0
Scotland	1	0	1	0	0	0	0	0
Wales	3	0	1	0	2	0	0	0
Total	44	7	7	4	5	1	2	1

* 22 units did not answer this question. 44 units did not have any instances of unplanned cover.

Unplanned cover occurred in 27 units representing 38% of the 71 units responding to this question. This compares to 35% (45/127) in January 2015.

The average number of times consultants provided unplanned cover in the 27 units where it occurred was 3.1. This compares to 2.4 times in January 2015 over the 4 week period.

6. Concern about the future

Clinical directors were asked “How concerned are you that your service will not be able to cope with demands placed on it during the next 6 months?” and the response is reported in table 10 below with the data sub-divided for each UK country.

Table 10: Concern that service will not be able to cope during next 6 months by UK country

Country	Very concerned	Moderately concerned	Unconcerned	Total
England	25	29	7	61
	41.0%	47.5%	11.5%	100.0%
Northern Ireland	1	2	0	3
	33.3%	66.7%	0.0%	100.0%
Scotland	1	1	0	2
	50.0%	50.0%	0.0%	100.0%
Wales	3	3	1	7
	42.9%	42.9%	14.3%	100.0%
Total	30	35	8	73
	41.1%	47.9%	11.0%	100.0%

* 20 units did not respond to this question

Overall, 41.1% of clinical directors/leads who answered this question, reported being very concerned, this figure rising to 50.0% in Scotland and 42.9% in Wales – a considerable increase in comparison to 29.6% reported in December 2014. Overall 11.0% reported being unconcerned.

The number of respondents stating they were either moderately or very concerned has increased since December 2014 from 77.7% to 89%.

7. References

1. Executive, H.a.S., *The Working Time Regulations*. 1998.
2. RCPCH. *Rota vacancies and compliance survey*. 2009-2015 10 July 2015]; Available from: <http://www.rcpch.ac.uk/rotas>.
3. RCPCH, *Facing the Future: Standards for Acute General Paediatric Services*. 2015.
4. RCPCH, *RCPCH Medical Workforce Census 2013*. 2014.
5. D, S., *RCPCH guidance on the role of the consultant paediatrician in providing acute care in the hospital*. 2009.