**SOUTH EAST AND TAYSIDE PAEDIATRIC WORKFORCE**

**Aim**

To provide the Board with an update on the current paediatric workforce issues across the SEAT (South East and Tayside) regional planning area alongside an update on the implementation of a redesigned local service in NHS Borders.

**Background**

**REGIONAL POSITION**

Key problems in sustaining Paediatric and Neonatal Services across SEAT have been identified since 2008. The services rely on a sustainable supply of middle grade paediatric trainees, however there has been a high vacancy level resulting from maternity leave, Out of Programme Research/Experience and resignations from the programme. The problem has been compounded by difficulties in recruiting locums due to lack of availability of suitable candidates and immigration restrictions on overseas recruitment.

Vacancies experienced in the paediatric middle grade rotas have a potential significant knock on effect upon maternity services that are dependent upon the provision of neonatal services at hospitals within all three NHS Boards. Since 2008 the SEAT Boards have worked collaboratively to manage paediatric middle grade trainee gaps and to sustain paediatric services at all sites across the region.

Currently training in acute paediatrics can be obtained at all District General Hospitals in the South East of Scotland. However, the Royal College of Paediatrics and Child Health Report on Training in 2012 made a number of recommendations in order to maintain the high quality of the regional paediatric training programme. Key recommendations included proposing that trainees should not work out of hours at St John’s Hospital and possibly Borders General Hospital, due to the low volume of cases and the limited case mix of activity being insufficient to provide the training experience required. Releasing trainees from these rotas would then give an opportunity to cohort trainees in out of hours to the hospitals with the greatest requirement and best educational experience.

In order to move to models of care that are less dependent on trainees SEAT has launched a major recruitment campaign (including media advertising, overseas contacts and a microsite) seeking both Advanced Practice and Medical candidates to address the vacancies across the region. A more detailed paper outlining the regional position is attached in Appendix 1.
LOCAL ISSUES

OVERVIEW

Within Borders, in anticipation of the service sustainability issues a number of redesign options were considered in 2008 and were subject to full option appraisal with stakeholder involvement (including patient and public representation). This resulted in a five year redesign plan and significant investment by the Board of £682,000 to secure three additional Consultants, seven Advanced Nurse Practitioners and a training plan to develop a sustainable cohort of Nurse Practitioners to support out of hours care. The redesign was planned to enable out of hours paediatric and neonatal services to be provided by a non training grade workforce by February 2014.

QUALITY ASSURANCE

Evidence demonstrating the competence of Paediatric & Neonatal Nurse Practitioners is in place prior to the Practitioners’ provision of overnight cover with non-resident consultant on call. Assessment processes and mentorship is established and is similar to the signing off for competencies currently undertaken for junior doctors.

Development of children’s and neonate’s early warning signs and escalation policies has been a key part of the infrastructure to ensure a safe service as we move away from a junior doctor delivered model.

In addition NHS Borders has commissioned Napier University to carry out an external review of the Paediatric and Neonatal Nurse Practitioner service including Clinical and Staff Governance arrangements, managerial arrangements and future workforce planning and capacity:

CURRENT POSITION

NHS Borders has now received confirmation that the Borders General Hospital will be allocated three senior trainees in Paediatrics in February 2013 – previously we had 5 trainees allocated. In light of this and the continued high level of paediatric trainee vacancy levels and the service sustainability issues across SEAT, NHS Borders has brought forward the implementation date of the locally redesigned service to August 2013.

The paediatric service provided by NHS Borders is therefore sustainable for the next 6 months whilst we continue implementing the redesigned service. Whilst there no indications that the number of trainees allocated from February to NHS Borders will further reduce, the service is in discussion to ensure any unexpected reduction does not compromise service sustainability locally until the new model is fully operational in August 2013.

PUBLIC ENGAGEMENT

Given the regional position on paediatrics across SEAT, it has been agreed that an engagement process will be carried out within each member Board. For NHS Borders this will be an opportunity to remind members of the public and other stakeholders of the redesigned model which was agreed in 2008 and an update on progress towards implementation of this model.
Initial engagement will be via the NHS Borders Public Reference Group at its next meeting on 21st January 2013. This Group will also advise on further engagement requirements. The Public Partnership Forum will also discuss progress at the meeting on 15th February 2013. NHS Borders Public Involvement Team meet with Scottish Health Council representatives on a monthly basis. They will review the engagement proposal for NHS Borders future Paediatric model and submit a response with a suggested course of action. Managers and project leads may attend this meeting. It may be necessary to establish a short life patient focus group to act as a public engagement resource specifically for this project as the proposals and plans progress.

Summary

Key problems in sustaining Paediatric Services across SEAT have been identified since 2008, the services rely on a sustainable supply of middle grade paediatric trainees and there has been a high vacancy level resulting from maternity leave, Out of Programme Research/Experience and resignations from the programme. The problem has been compounded by difficulties in recruiting locums due to lack of availability of suitable candidates and immigration restrictions on overseas recruitment.

There is confirmation that the Borders General Hospital will be allocated three senior trainees in Paediatrics in February 2013. The service is therefore sustainable for the next 6 months whilst we finalise implementation of the redesigned service with non training grade doctor workforce providing out of hours services. The implementation date for this has been brought forward from February 2014 to August 2013.

Recommendation

The Board is asked to note this update on paediatric workforce in Borders and across SEAT.

<table>
<thead>
<tr>
<th>Policy/Strategy Implications</th>
<th>This is being submitted to the Board to remind members of work already undertaken locally by NHS Borders to update members on work within SEAT to ensure stability of paediatric services.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>NHS Borders stakeholder involvement in identifying options (including patient and public representation) in October 2008. Planned engagement exercise January 2013 onwards to update on current position. Regional discussions held at SEAT group.</td>
</tr>
<tr>
<td>Consultation with Professional Committees</td>
<td>As above.</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>The SEAT report highlights risks. Ongoing risk assessments have been and will continue to be carried out.</td>
</tr>
<tr>
<td>Compliance with Board Policy requirements on Equality and Diversity</td>
<td>In compliance.</td>
</tr>
<tr>
<td>Resource/Staffing Implications</td>
<td>Investment to achieve new local model was secured in 2008.</td>
</tr>
</tbody>
</table>
## Approved by

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation</th>
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<tr>
<td>Dr Sheena MacDonald</td>
<td>Medical Director</td>
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</tbody>
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## Author(s)

<table>
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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Bob Salmond</td>
<td>Head of Medical Workforce</td>
<td>Angela MacLean</td>
<td>Planning &amp; Performance Manager</td>
</tr>
</tbody>
</table>
Appendix 1 South East and Tayside Regional Planning Group Paper

Paediatric Workforce Planning and Future Sustainability of Acute Paediatric and Neonatal Services - December 2012

1. Purpose

1.1. The purpose of this paper is to:

- Summarise the position regarding the paediatric workforce in the South East as at December 2012.
- Summarise the profile of paediatric, neonatal and obstetric services in the South East and the impact of the current workforce difficulties upon patient safety and service delivery/sustainability.
- Identify the risks associated with sustaining the current workforce and service configuration.
- Summarise the forecasted position regarding gaps in the paediatric middle grade rotas in the South East of Scotland from February 2013 and the resulting service and patient safety risks.
- Recommend next steps required to mitigate the impact of staffing vacancies in order to maintain safe and sustainable services in the region.

2. Background

2.1. Over the last five years the key changes in the paediatric clinical workforce have been the reduction in the number of available paediatric medical trainees and the amount of hours available per trainee for service delivery. This is a result of the changes in medical training, the increased feminisation of the medical workforce, the implementation of European Working Time Regulations (EWTR) and changes in UK immigration regulations. These paediatric medical trainee issues have been a recognised problem in NHS Scotland since the summer of 2008 and have been the key driver for ongoing workforce redesign in paediatric and neonatal services.

2.2. SEAT identified problems in the paediatric workforce in the South East (SE) in June 2008 and met with Scottish Government (SG) in July 2008 to brief them on the issues and provide detailed background information on the difficulties being experienced in staffing middle grade paediatric rotas. SEAT members have continued to meet with SG colleagues on a regular basis since to keep them informed on the ongoing workforce issues in the SE. The key problem identified was the high level of gaps resulting from maternity leave, Out of Programme Research/Experience and resignations from the programme. The problem was compounded by difficulties in recruiting locums due to lack of availability and restrictions on overseas recruitment.

2.3. SEAT also informed the SG that the problems being experienced in the paediatric middle grade rotas had a potential significant knock on effect upon maternity services. Paediatric trainees are a key component of the neonatal workforce and cover the SE neonatal units out of hours. In St John’s, Victoria Hospital, Kirkcaldy and Borders General Hospital the paediatric trainees cover both paediatric and neonatal services out of hours. If the neonatal service on any site is not sustained then maternity services for that site, as currently configured, would also not be sustainable.

2.4. Since 2008 the SEAT Boards have worked collaboratively to manage paediatric middle grade trainee gaps and to sustain paediatric services across the region. Detailed descriptions of the problems faced by the SEAT Boards and solutions that have been implemented have been detailed in previous briefing papers to SEAT. Over the past 4-5
years a number of solutions have been implemented regionally to sustain services, including:

- Middle grade rota redesign
- Board investment in Consultant and Specialty Doctor posts
- Recruitment, training and integration of Advanced Neonatal Nurse Practitioners (ANNPs) and Advanced Paediatric Nurse Practitioners (APNPs) into middle grade rotas
- Relocation of paediatric services in NHS Fife onto a single site in order to reduce the number of rotas
- Temporary derogation, for one year, from EWT Regulations in NHS Borders and NHS Fife (this allowed middle grade trainees to work over the 48 hours per week maximum in order to support OOH rotas)
- Deployment of trainees out of hours (OOH) across the region to cover service requirements
- Extensive use of medical locums
- Extended working day for trained medical staff
- Use of consultants to cover resident OOH shifts
- Community trainees working OOH shifts on different sites from their daytime work (prior to implementation of EWTR)

2.5. In light of the difficulties in staffing middle grade rotas and the need to ensure a sustainable service NHS Borders developed and are in the process of implementing a five year plan from 2008 to move to a paediatric workforce model that is not dependent upon medical trainees working OOH by February 2014. The plan involved major workforce redesign and a significant investment in three additional consultants and in 7.24 wte advanced nurse practitioners to cover paediatric and neonatal services OOH. Implementation of the plan has enabled NHS Borders to significantly reduce the OOH hours covered by trainees (currently 36 hours per week) and sustain services even when there have been a significant number of a gaps in their middle grade rotas. NHS Borders investment in training, some in house and some external, has now delivered a cohort of Nurse Practitioners who are providing 50% of the out of hours care.

2.6. NHS Borders considered a number of redesign options, which were subject to full option appraisal with stakeholder involvement including patient and public representation in October 2008. They identified an investment of £682,000 recurringly was required to achieve this new model. NHS Borders has recently invited an external review by HIS and NES to assess the quality and safety of this staffing model.

2.7. NHS Fife and Lothian have similarly invested in the recruitment of Nurse Practitioner roles (5.8 WTE and 7.0 WTE respectively) but not yet to the extent that current services can be sustained without reliance on trainees to staff Out of Hours rotas.

2.8. Modelling work carried out in 2008-9 indicated that SEAT should plan middle grade rotas on the basis of having an average of 6 wte gaps out of 47 wte (13%). It was acknowledged that there would be significant risk of variation in this average level of gaps given the variables involved. After a relatively stable period during late 2010 and early 2011 the SE Paediatric Training Programme Director (TPD) predicted that that the number of gaps was likely to rise over and above 13%, from August 2012. Boards implemented plans to manage the increased level of gaps. However during October/November 2011 further gaps emerged at middle grade level due to additional maternity leave.

2.9. The Paediatric TPD informed SEAT that the additional maternity leave and ill health absence would result in a 30% level of gaps in the middle grade rota between February 2012 and August 2012. This level of gaps in middle grade rotas was unprecedented in the SE Deanery, outside existing planning assumptions and significantly higher than that experienced in other Deaneries in Scotland and the UK.
2.10. Prioritisation of services on the grounds of clinical risk and safety was paramount. SEAT Boards’ Medical Directors and the Post Graduate Dean agreed that, where possible (given training requirements), paediatric trainees would be deployed to sustain services on this basis. The full SEAT Planning Group confirmed this prioritisation. The first priority for SEAT is to sustain the paediatric and neonatal intensive care units in Edinburgh and the general and specialist paediatric services based at the Royal Hospital for Sick Children (RHSC) in Edinburgh. These highly specialist services support Lothian, the East of Scotland and, at times, all of Scotland. It is therefore essential that these services be maintained to support very ill babies and children from across Scotland. Failure to do so would result in significant clinical risk.

2.11. The next priority for SEAT is to sustain the paediatric and neonatal services at the Victoria Hospital, NHS Fife given it also has a neonatal intensive care unit and a wide range of paediatric services. Neonatal services at St Johns and Borders General Hospital would be the next priority given the number of deliveries in these units which could not safely be accommodated in Edinburgh or Fife. Inpatient paediatric services at Borders General Hospital and St John’s Hospital, with relatively low levels of inpatient activity, were therefore the sites where the loss of paediatric trainees for out of hours working would have the least impact on the delivery of safe services. Given its more rural location and the longer travel time to services based in Edinburgh the SEAT Boards’ Medical Directors agreed the next priority would be the Borders General Hospital.

2.12. St John’s Hospital presents least clinical risk if trainee gaps were to lead to closure of the paediatric inpatient service given its proximity to services in Edinburgh, that an alternative paediatric service model could be implemented quickly and safely if required (as demonstrated by the temporary closure of the paediatric inpatient unit for a three week period over July/August 2012) and that full neonatal and maternity services could be safely sustained.

2.13. The prioritisation above also takes account of the potential regional impact of any service change and how this could be managed should trainee gaps necessitate change. For example if trainee gaps resulted in an unsustainable OOH rota at Borders General Hospital (BGH) then this would have a significant impact upon paediatric, neonatal and maternity services in Borders and Edinburgh. Paediatric cases presenting OOH at the BGH would require to be transferred to RHSC, Edinburgh; the Special Care Baby Unit (SCBU) would not be sustainable resulting in this activity transferring to the Simpson’s Memorial Maternity Pavilion (SMMP), Edinburgh and, if there is no SCBU, then c350 ‘at risk’ births would also be transferred for delivery at the SMMP. This additional activity would place significant pressures on already busy services in Edinburgh. Should OOH services at the Victoria Hospital become unsustainable then the impact across the region would be even more significant.

2.14. In November 2011 the SEAT Chief Executives, based on the agreed prioritisation of services above, agreed to work together to support NHS Lothian in moving towards a trained doctor and advanced nurse workforce model at St John’s. It was hoped this would sustain paediatric, neonatal and maternity services on the St John’s site. NHS Lothian immediately attempted to recruit Consultant Paediatricians, Neonatologists and Advanced Nurse Neonatal and Paediatric Practitioners to work at St John’s. Recruitment was difficult due to a lack of suitable applicants. However, following extensive advertising and redesign of the consultant job plans, three consultant neonatologists and two consultant paediatricians were recruited and have recently commenced working at St John’s between July and November 2012. Recruitment to the advanced nursing roles has been more problematic with no external candidates recruited despite strenuous efforts and numerous recruitment campaigns.
2.15. In January 2012, the Post Graduate Dean (PGD), following discussion and agreement with SEAT Medical Directors and the General Medical Council (GMC), decided to temporarily withdraw the two remaining trainees from St John’s Hospital. This would allow the trainees to be redeployed to other sites and thus sustain rotas and services on these sites. The PGD also invited the Royal College of Paediatrics and Child Health to visit the SE Deanery and undertake an external review of training in the region. SEAT Chief Executives endorsed this approach.

2.16. Unfortunately during this period it became clear that NHS Lothian could not safely sustain the full 24/7 paediatric service in the peak staff summer holiday period at St John’s. In consultation with NHS Borders and NHS Fife it was decided to temporarily change the inpatient paediatric service at St John’s to an 8am to 8pm service Monday to Friday, closing the inpatient admission service for three weeks during late July and early August. The assessment, ambulatory care, outpatient, community child health and neonatal services were maintained as normal. As the paediatric trainee position improved the PGD was able to return trainees to St John’s Hospital from August. The St John’s paediatric service resumed a full 24/7 paediatric service from 6th August 2012.

2.17. The future number of paediatric medical trainees in NHS Scotland and therefore in the SE Deanery region remains unclear. In light of growing workforce pressures and the impact upon service delivery the SG has agreed to ‘pause’ the reduction in trainee numbers across many specialities, including paediatrics. There is also a concern across NHS Scotland about the sustainability of the community medical paediatric workforce in light of its age profile, reliance upon Non Consultant Career Grade staff and lack of a future ‘supply chain’ in light of the changes in the medical training programme.

3. Medical Training considerations

3.1. Placement of paediatric trainees within the various units within South East Scotland is largely dictated by the training curriculum for paediatrics, written by RCPCH and approved by GMC. In broad terms, first and second year trainees are not “emergency safe” and are placed in the RHSC and Simpsons, where the level of staffing and high throughput allows them to gain the competencies stipulated and become competent in the acute care of children and neonates. There follows a period of consolidation and further training where they are largely placed in the DGHs for experience. After another two years, they can sub-specialise, either gaining experience in specialties, or by applying to the paediatric GRID in order to obtain formal subspecialty training in the majority of cases in units outside of South East Scotland.

3.2. Through the auspices of the Regional Medical Workforce Group (RMWG), all options for internal redistribution of trainees have been explored over the last four years. It was apparent early on in this work that the issue of paediatric services could not be considered in isolation from maternity services, and that the units were dependent on each other for the total care of mothers and children in SE Scotland. Temporising measures were put in place to keep all services open, but this option was closed off with the introduction of EWTR legislation, which effectively put a halt to internal locums covering extra shifts outside their base hospital.

3.3. Moving trainees around to fill service gaps would not be in the interests of the paediatric trainees, and was likely to lead to a GMC visit, with withdrawal of training status being the ultimate outcome.

3.4. Paradoxically, the current medical staffing position is partly a result of the success of SE Scotland attracting the best trainees; our high achieving senior trainees are very successful in obtaining GRID posts for sub specialty training. All trainees can apply in
open competition for these posts, which are largely in the big teaching hospitals in SE England.

4. SEAT Paediatric, Neonatal and Maternity Activity Profile

4.1. Paediatric services are provided across a number of sites in the SEAT region, the main centres being Royal Hospital for Sick Children, St John's Hospital, Borders General Hospital and the Victoria Hospital in Fife. Neonatal services are also provided on the Simpsons, St John’s, Borders General and Victoria Hospital sites.

4.2. The paediatric population in the SEAT Boards in 2011-12 was 250,887. In 2011-12 there were:

- A&E attendances c72,301
- Inpatients episodes 14,619
- Outpatient episodes 68,515
- Neonatal admissions c1,050
- Births 14,694

4.3. A detailed breakdown of activity by board and site for 2010-11 and 2011-12 can be found in appendix 1.

5. SEAT Paediatric Medical and Advanced Nurse Practitioner Workforce

5.1. The key workforce issue within the paediatric and neonatal workforce across SEAT has been the number of gaps in paediatric middle grade staffing. The priority has therefore been to ensure that each site has had sufficient staff with the necessary clinical skills to ‘fill the gaps’ and maintain paediatric and neonatal services. This requires trained medical staff (consultants or specialty doctors), middle/senior grade medical trainees or qualified and experienced advanced paediatric and neonatal nurse practitioners.

5.2. Career grade medical workforce

The career grade medical workforce as at August 2012 for each of the units is summarised below. This is expressed as Direct Clinical Care Programmed Activity (DCC PA) sessions. A session is 4 hours (three hours for out of hours work). Consultant contracts are usually for 10 contracted PA sessions of which 7.5-8.0 are usually designated for Direct Clinical Care. However individuals’ contracts will vary for a range of reasons.
Consultant Paediatricians

<table>
<thead>
<tr>
<th>Unit</th>
<th>Consultant Paediatrician</th>
<th>Consultant Neonatologist</th>
<th>NCCG Paediatricians</th>
<th>NCCG Neonatologists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borders Hospital DCC PA</td>
<td>43.58 per week</td>
<td>Included in above figures</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Victoria Hospital DCC PA</td>
<td>42.5 per week includes on call and general paediatric clinics*</td>
<td>31.5 includes on call and clinics*</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>RHSC DCC PA</td>
<td>35 per week includes on call, acute receiving unit and general paediatric clinics</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PICU DCC PA</td>
<td>15.5 per week including on call</td>
<td>48 per week including on call</td>
<td>7/8</td>
<td>8</td>
</tr>
<tr>
<td>Simpson's Hospital DCC PA</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>St John's Hospital DCC PA</td>
<td>38 per week including on call, resident out of hours shifts, acute receiving and outpatient clinics</td>
<td></td>
<td></td>
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</tbody>
</table>

The total number of PAs in each of the units is made up from a number of consultants on a rotational basis. Consultants will contribute to a range of direct and indirect clinical activities in addition to acute and general paediatric neonatal care i.e. outpatient activity, community child health services, clinical supervision, teaching and research. The majority of consultants at RHSC are subspecialists and a high proportion of their clinical work is related to their subspecialty expertise, e.g. gastroenterology, which supports children from all over the South East region. As a result, a smaller proportion of their time is available for general paediatrics.

5.3. Trainee Medical Workforce

The middle grade trainee medical workforce establishment as at August 2012 for each of the units is summarised below.

<table>
<thead>
<tr>
<th>Trainee Type</th>
<th>Borders Foundation Years 1 &amp; 2</th>
<th>Victoria, Hospital Foundation Years 1 &amp; 2</th>
<th>RHSC Foundation Years 1 &amp; 2</th>
<th>Paediatric ICU Foundation Years 1 &amp; 2</th>
<th>Simpsons Foundation Years 1 &amp; 2</th>
<th>St John's Foundation Years 1 &amp; 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainees</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>GP Specialty Trainees</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Junior (ST1 &amp; 2)</td>
<td>0</td>
<td>0</td>
<td>7/8</td>
<td>0</td>
<td>7/8</td>
<td>0</td>
</tr>
<tr>
<td>Middle/ Senior (ST3+)</td>
<td>5</td>
<td>10</td>
<td>13</td>
<td>5</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Foundation, GP and ST1 & 2 trainees are not competent/safe to work on the middle grade rotas.

5.4. Advanced Nursing Workforce

This table details the number of trained Advanced Neonatal Nurse Practitioners (ANNPs) and Advanced Paediatric Nurse Practitioners (APNPs), both of whom contribute to the medical rotas. These are expressed as whole time equivalents (wte). The small numbers reflect the lack of training provision, the length of time required for Practitioners to be fully trained to the level required to contribute to a middle grade rota and concerns about career progression.
6. Risks associated with current Position

6.1. Service sustainability and patient safety

The priority for all the SEAT boards is to sustain existing paediatric, neonatal and maternity services whilst continuing to meet the highest standards of quality and patient safety standards. However business continuity planning for the staffing issues in St John’s over the summer of 2012 made clear that it would be difficult to maintain high quality and safe patient care if there was to be an unplanned, short notice service change. The business continuity planning identified that the risks associated with a service collapse or unplanned, short notice change were significantly greater than implementing a planned change which could be managed carefully with all key stakeholders, patients and the public. It is therefore important to recognise that should the paediatric workforce situation deteriorate as happened during the summer of 2012 then it is highly likely that further planned service changes, such as the three week closure of inpatient ward in St John’s, will be required in order to maintain patient safety until staffing levels can be restored.

6.2. Recurring medical trainee gaps

Due to Out of Programme for research and experience, maternity leave, personal circumstances and part-time working it is anticipated that there will continue to be gaps at middle grade trainee level. The level of gaps is difficult to predict but experience suggests this could range from 10% to 30%. In effect this will mean that there will be between 33 wte and 42 wte available out of the 47 wte establishment. At the higher level of gaps this would leave insufficient middle grade trainees to staff all the existing rotas.

The level of trainee gaps is also increasing in the South East Deanery Obstetrics & Gynaecology (O&G) training programme. Two training posts were disestablished in August 2012, in line with SG Medical Workforce Reshaping Plan, taking the funded establishment from 48 to 46. These trainees cover four rotas at the RIE, St John’s, Victoria Hospital and Borders General Hospital. Trainee gaps are currently running at between 10% and 22%. The problem is exacerbated in O&G as there is a ‘bulge’ of senior trainees due to acquire a certificate of completion of training (CCT) over 2012-13. This will result in a significant reduction in senior trainees available to staff middle grade OOH rotas across the region.

In both paediatrics and O&G it is increasingly difficult to recruit and retain high quality locums to ‘fill the gaps’ in order to maintain safe, EWTR compliant rotas. There is a significant clinical and financial risk associated with use of short term locums to fill rota gaps.

The recurring level of gaps also has a potential negative impact upon the quality of training provided to medical trainees. To date the SEAT boards and the Post Graduate Dean have worked closely to minimise any negative impact on training quality, however this may prove difficult in the future if the level of gaps is sustained.

6.3. Recruitment & Retention difficulties

Recent experience across SEAT Boards has been that it is difficult to recruit to consultant posts in paediatrics and neonatology in St Johns and Fife, particularly those that require
resident OOH working. This is a result of the shortage of suitably qualified staff and increasing demand across the UK which has also affected the supply of locum doctors. Recruitment to consultant posts at St John’s has been partially successful but required redesign of the job plans to reduce OOH working required and to ensure candidates were able to pursue sub-specialty interests at the RHSC Edinburgh. The maximum amount of OOH work in a job plan consistent with being able to recruit was 4.5 programmed activities (out of ten) which equates to 11 hours per week when annual and study leave are taken in to account. This provides six weeks of out of hours work per consultant per year i.e. 42 night shifts and 12 weekend day shifts.

There has been more success in recruitment of consultant neonatologists in NHS Lothian with three appointments in July 2012. Again candidates have been attracted to posts that are designed to support cross site working in St John’s and the RIE allowing candidates to contribute to DGH work whilst retaining sub specialty interests.

Retention of consultants in DGH posts that require resident OOH working is a concern. Other sites in England where this model has been introduced have seen significant turnover and in some cases the model has not been sustainable. There is a concern that individuals may apply for alternative posts that do not require resident OOH or that, after a period of time, they will request a reduction in their OOH commitment for family friendly or health reasons.

Despite numerous adverts over the past four years, the development of a web based recruitment site and engagement in NHSS wide recruitment initiatives, SEAT boards have been unable to recruit to specialty doctor posts in paediatrics. It is difficult to predict that this will change in the foreseeable future.

SEAT boards have also had limited success in recruiting to ANNP/APNP posts, despite UK wide advertising. Having tested the market on a number of occasions it is now accepted that a reliable future supply of ANNP/APNPs will have to be recruited and trained locally to meet future demand. A commitment to establish Scottish based programmes of training has now been announced by the Scottish Government and SEAT Boards will now plan to promote these locally based training opportunities to existing paediatric nursing staff when they become available, recognising that there will be a limit to how many existing nursing staff can released for advanced training without denuding safe staffing levels on the wards. This initiative will take some years to have a significant impact on middle grade rota gaps and will not produce an immediate solution in 2013, but it is an essential element of strategic workforce planning which should have a positive effect on sustaining services into the medium and long term.

6.4. Scope of Advanced Neonatal and Paediatric Nursing roles

It is important to note that advanced nursing roles are an important element of a multi disciplinary workforce but will not entirely replace the need for experienced medical staff. The training and consolidation period is short compared with medical undergraduate training (five years), foundation posts (two years) and junior registrar posts (2-4 years). In particular the ability to assess and make decisions on undifferentiated acute paediatric and neonatal presentations is likely to be at a less advanced level for some years requiring additional consultant support compared with experienced trainees. A further issue is that the advanced practitioner roles are dedicated to paediatric or neonates but not both meaning that one advanced practitioner cannot replace a registrar on those sites where out of hours cover is required for both paediatric and neonatology. There is also another issue with hours of work as full time medical trainee will work for 48 hours a week compared with 37.5 for nursing staff.

Across the UK, the Maternity units which have moved to a full ANNP model (ie one which completely replaces middle grade doctors) are smaller than the St John’s service. The most
appropriate model for the St John’s neonatal and paediatric services may be a hybrid model, with a mixture of experienced Advanced Nurse Practitioners and trained Doctors staffing the out of hours service.

6.5. **Financial risks**

The financial cost to SEAT boards of sustaining paediatric and neonatal services given the middle grade trainee gaps is significant. Boards are utilising a range of solutions to ‘fill the gaps’ and sustain services including the use of medical locums, employing additional consultants, paying premia for OOH work ranging from time and a third to triple time of basic pay to consultants. The costs being incurred by Boards vary considerably but have as an example peaked at c£65,000 additional pay costs per month to sustain services at St John’s between April and July 2012.

Medical trainees are the most cost effective workforce for sustaining paediatric and neonatal services OOH on the DGH sites across SEAT. Moving to either a consultant delivered model or an ANNP/APNP (both are required to replace a medical trainee on an OOH shift) model is more expensive than the existing medical trainee workforce model.

6.6. **Royal College of Paediatrics and Child Health Report**

The College were invited by the PGD to review the paediatric training programme in the South East Deanery given the ongoing problems with trainee gaps. The College acknowledged that the programme was of a very high standard and was in the ‘top 3’ in the UK. The College made a number of recommendations in order to maintain the high quality of the programme, the key one being that, given the level of gaps, trainees should not work OOH at St John’s Hospital and possibly Borders General Hospital due to the low volume of cases and the limited case mix of activity being insufficient to provide the training experience required. However they note that trainees should continue to benefit from the excellent training provided in hours on both these sites. The College report noted the excellent community and outpatient training experience in St John’s. It also noted the good feedback on training and the ability to deliver this within the context of a novel workforce structure at Borders General Hospital. This has made good use of advanced nurse practitioners and the consultant body who are noted to be keen teachers and who are working across the hospital/community practice. This they believe provides a fertile area for trainee experience and advancement. A copy of the RCPCH Report is attached.

The General Medical Council which oversees postgraduate medical training in the UK will expect the PGD to implement the recommendations of this report. The PGD has indicated that he plans to ensure that trainees are not working OOH on these sites by August 2013.

6.7. **NEAG Quality Framework**

The SG has developed a Quality Framework for Neonatal services which is due for publication in early 2013. These recommendations will need to be considered carefully and the potential implications factored into the future staffing and service model for neonatal, maternity and paediatric services across South East Scotland.

6.8. **HR Risks**

Sustaining services OOH has required staff to work flexibly to cover rotas overnight and at weekends. For example on the St John’s site OOH cover has been provided by ANNPs/APNPs, medical trainees, medical locums, consultants whose job plan includes resident OOH working and consultants who are working additional shifts at triple time. Pay rates for a 12.5 hour shift OOH have ranged from c£350 to c£1,800. The variation in pay
rates has been raised by staff and could lead to further tensions or employment relations
issues.
Existing medical and nursing staff have worked very flexibly in order to fill gaps in OOH
rotas on all sites across SEAT. Many have voluntarily worked additional shifts or been on-
call to sustain services. However this has required key staff to work long hours. This has
required some staff to voluntarily ‘opt out’ of ETWR requirements. There is no provision for
medical trainees to derogate from EWTR. Employers have monitored their working hours to
ensure staff health and welfare is not compromised. Whilst these arrangements have
sustained services for short periods of time they are not a reliable, sustainable solution for
the medium to longer term as they tend to involve a small number of staff working
excessive hours.

7. Current Paediatric Medical Trainee Workforce Issues

7.1. The full complement of paediatric middle grade trainees (ST3+) is 47wte and these are
used to staff six rotas that operate on a 24/7 basis. As previously discussed, there is a
recurring level of gaps at middle grade trainee level. At the start of the rotation in August
2012 there were 8.5 gaps, as detailed below:

<table>
<thead>
<tr>
<th></th>
<th>Borders General</th>
<th>Victoria, Kirkcaldy</th>
<th>RHSC</th>
<th>PICU Edinburgh</th>
<th>Simpsons Edinburgh</th>
<th>St Johns Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle grade trainee establishment</td>
<td>5</td>
<td>10</td>
<td>13</td>
<td>5</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Middle grade gaps August 2012</td>
<td>2</td>
<td>2.5</td>
<td>0</td>
<td>0</td>
<td>1.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

7.2. Previous experience suggests that August usually has fewer gaps and that the number of
gaps tend to increase during the academic year. For example in 2011 there were 11 gaps
in August/September but this increased to over 14 gaps by May 2012, as shown in the
table below. Whilst the level of gaps is unpredictable it would be prudent to assume that
this pattern will continue.

<table>
<thead>
<tr>
<th></th>
<th>Aug 11</th>
<th>Feb 12</th>
<th>Mar 12</th>
<th>Apr 12</th>
<th>May 12</th>
<th>June 12</th>
<th>July 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Grade wte available</td>
<td>38.0</td>
<td>36.1</td>
<td>37.1</td>
<td>36.5</td>
<td>34.7</td>
<td>35.2</td>
<td>35.2</td>
</tr>
<tr>
<td>Gap</td>
<td>11.0</td>
<td>12.9</td>
<td>11.9</td>
<td>12.5</td>
<td>14.3</td>
<td>13.8</td>
<td>13.8</td>
</tr>
</tbody>
</table>

7.3. Since the SEAT review was initiated there has been a further deterioration in the paediatric
medical trainee middle grade numbers forecast for February 2013. The Post Graduate
Dean (PGD) notified the Medical Directors in NHS Borders, Fife and Lothian during the
week beginning 15th October 2012 of further maternity leave and resignations from the
programme. The details of the emerging gaps and their impact upon middle grade rotas
were confirmed and discussed in detail with SG colleagues on the 23rd October 2012. As a
result the PGD informed colleagues that he would be unable to staff all existing middle
grade rotas to meet the minimum safe staffing levels from February. This is detailed in the
table below:
<table>
<thead>
<tr>
<th></th>
<th>Borders General</th>
<th>Victoria Kirkcaldy</th>
<th>RHSC Edinburgh</th>
<th>PICU Edinburgh</th>
<th>Simpson’s Neonatal Edinburgh</th>
<th>St John’s Hospital</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle grade trainee establishment</td>
<td>5.0</td>
<td>10.0</td>
<td>13.0</td>
<td>5.0</td>
<td>8.0</td>
<td>6.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Middle Grade wte available from February 2013</td>
<td>3.0</td>
<td>8.1</td>
<td>11.6</td>
<td>3.6</td>
<td>5.0</td>
<td>3.1</td>
<td>34.4</td>
</tr>
<tr>
<td>Middle grade gaps Feb 2013</td>
<td>2.0</td>
<td>1.9</td>
<td>1.4</td>
<td>1.4</td>
<td>3.0</td>
<td>2.9</td>
<td>12.6</td>
</tr>
</tbody>
</table>

7.4. The above is a ‘best case’ scenario; it is highly likely that further gaps will emerge between now and February 2013. In addition to the above, gaps are also emerging in the advanced nursing workforce with two ANNP’s in Edinburgh having planned maternity leave during the same period. The position in February differs from previous occasions. Due to the training requirements of trainees, there are gaps emerging in the middle grade rotas in both the paediatric and neonatal Intensive Care Units in Edinburgh as well as in the District General Hospitals. These intensive care units support the region, the East of Scotland and on occasions the West with provision of neonatal and paediatric intensive care on a Scotland-wide basis. Both units run at near 100% occupancy.

7.5. Boards continue to use a range of options for filling the gaps including asking trained medical staff to ‘work down’ and the employment of locums to cover overnight or weekend rota gaps. These options are expensive. For example existing consultants are currently paid ‘triple time’ to provide resident overnight cover at St John’s Hospital, costing £1,800 per twelve and a half hour shift. The cost of providing additional staffing to maintain services at St John’s Hospital reached £65k per month between April and July 2012.

8. Recommendations and Next Steps

8.1. The above analysis summarises the current position regarding the paediatric workforce in the South East. The ongoing difficulties with the level of gaps in the middle grade paediatric medical trainee workforce will continue and there is a high risk that the circumstances that led to the temporary closure of the inpatient paediatric services at St John’s Hospital will recur unless rota gaps left by the withdrawal of trainee cover out of hours can be filled with alternative arrangements. Should the level of gaps worsen then services at Borders General Hospital would also be at risk. The current workforce model is therefore unsustainable.

8.2. As a result of the predicted level of paediatric middle grade trainee gaps for February 2013 and the planned withdrawal of trainees from OOH work at St Johns Hospital and Borders General Hospital from August 2013, SEAT Boards agreed a number of specific actions with the SG in November 2012 to help address the short and medium/long term paediatric workforce issues in the SEAT Boards. These are outlined below:

- Funding approved for the recruitment of paediatric/neonatal Fellows.
- Commissioning a local and international recruitment initiative using external agency support for recruitment of Clinical Fellows in Neonatology and Paediatrics, Neonatal and Paediatric Nurse Practitioners and Advanced Practitioners, Specialty Doctors and Consultants.
- Establishment by the Scottish Government of Scottish based education programmes for Advanced Practitioners in paediatrics and neonatal nursing.
8.3. Based on the above we recommend that:

8.3.1. SEAT commission a comprehensive engagement process with stakeholders between December 2012 and February 2013 to explore all the options for achieving a long term and sustainable workforce and service model for the SEAT boards.

8.3.2. The engagement process is prioritised given the gaps forecast in the paediatric trainee numbers from February 2013 and the need to ensure safe, sustainable and affordable paediatric and neonatal services at St John's Hospital.

8.3.3. Individual SEAT boards discuss this report with their respective Boards members and also develop appropriate Business Continuity Plans given the predicted level of paediatric trainee gaps in February 2013.

NHS Lothian has already discussed the key issues contained within this report with their Board on the 28th November 2012. As a result, NHS Lothian Board has:

- Reaffirmed its absolute commitment to working to ensure the sustainable delivery of 24/7 paediatric and neonatal services at St John’s and to ensure the continued provision of safe services for babies and children in all acute facilities in South East Scotland.
- Approved the immediate launch of an international recruitment initiative using medical recruitment specialists, with targeted campaigns including India, USA, Canada and Australia, seeking to recruit Consultant Paediatricians and Neonatologists, Paediatric and Neonatal Clinical Fellows, Specialty Doctors and Advanced Neonatal Nurse Practitioners and Advanced Paediatric Nurse Practitioners. This campaign will also use social media networks such as Linkedin, and Google search mechanisms.
- Welcomed the commitment to develop Scottish based training programmes for Advanced Nurse Practitioners, which it will encourage and support staff to access.
- Scoped out the potential for GPs to support the service at St John’s.
- Arranged to meet with the Paediatrician workforce to scope out any further opportunities for cross site support in Lothian.
- Agreed that until these initiatives produce results and staff are recruited, available staffing levels will be closely monitored and contingency plans developed, to ensure the safe delivery of patient services at all times, on all sites.

8.3.4. NHS Borders and Fife have discussions planned with their respective Board members

8.3.5. In support of the development of the Scottish based education programmes for Advanced Practitioners in paediatrics and neonatal nursing NES and SG are currently developing a ‘core’ and ‘pathway’ model of advanced nursing education provision. This will help to address issues of sustainability and viability of the specialist education required by nursing staff in paediatric and neonatal services. In addition, they are assessing the potential to support nurses to undertake ‘top up’ modules at Advanced Practice level and to seek Recognition of Prior Learning (RPL) from relevant universities for related Advanced Practice modules. NES are also currently working with Board Executive Nurse Directors to assess future demand for education provision in 2013 onwards to inform the commissioning process.
8.3.6. Following the engagement process and based on the feedback received, a more detailed option appraisal for paediatric, neonatal and maternity services across South East Scotland may be required.
Appendix 1A Detailed breakdown of paediatric and neonatal activity across SEAT

Paediatric Population by Board

<table>
<thead>
<tr>
<th>Board</th>
<th>Paediatric population 2011-12</th>
<th>% of Regional Population 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borders</td>
<td>20,524</td>
<td>8%</td>
</tr>
<tr>
<td>Lothian</td>
<td>161,000</td>
<td>64%</td>
</tr>
<tr>
<td>Fife</td>
<td>69,363</td>
<td>28%</td>
</tr>
<tr>
<td>SE TOTAL</td>
<td>250,887</td>
<td>100%</td>
</tr>
</tbody>
</table>

Paediatric A&E Attendances 2010-11 & 2011-12

<table>
<thead>
<tr>
<th>Location</th>
<th>Total attendances 2010-11</th>
<th>Total attendances 2011-12</th>
<th>% of Regional Activity 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHSC*</td>
<td>38,831</td>
<td>40,135</td>
<td>55%</td>
</tr>
<tr>
<td>St Johns Hospital</td>
<td>10,130</td>
<td>10,000</td>
<td>14%</td>
</tr>
<tr>
<td>Borders General Hospital</td>
<td>4,109</td>
<td>4,176</td>
<td>6%</td>
</tr>
<tr>
<td>Queen Margaret Hospital</td>
<td>8,309</td>
<td>8,707</td>
<td>12%</td>
</tr>
<tr>
<td>Victoria Hospital</td>
<td>9,496</td>
<td>9,283</td>
<td>13%</td>
</tr>
<tr>
<td>SE TOTAL</td>
<td>70,875</td>
<td>72,301</td>
<td>100%</td>
</tr>
</tbody>
</table>

* RHSC A&E service is up to 14 year olds. Other sites are up to 16.
# Estimate

Paediatric Inpatients 2010-11 & 2011-12

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Inpatients 2010-11</th>
<th>Total Inpatients 2011-12</th>
<th>% of Regional Activity 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHSC</td>
<td>10,392</td>
<td>10,157</td>
<td>69%</td>
</tr>
<tr>
<td>St John’s Hospital*</td>
<td>1,000</td>
<td>900</td>
<td>6%</td>
</tr>
<tr>
<td>Borders General Hospital</td>
<td>1,892</td>
<td>1,859</td>
<td>13%</td>
</tr>
<tr>
<td>Victoria Hospital*</td>
<td>807</td>
<td>462</td>
<td>3%</td>
</tr>
<tr>
<td>Forth Park*</td>
<td>1,189</td>
<td>1,241</td>
<td>9%</td>
</tr>
<tr>
<td>SE TOTAL</td>
<td>15,280</td>
<td>14,619</td>
<td>100%</td>
</tr>
</tbody>
</table>

* St Johns
2010-11 inpatient activity originally shows 2,846 but this includes c1,846 patients who attended PIU but did not stay overnight. Figures have been adjusted to show approximate number of true inpatients.

2011-2012 inpatient activity is 2783. This includes 266 admissions for planned, investigations, around 100 patients admitted to SCBU and 2517 unplanned admissions to the ward of which about 40% become inpatients. This gives a figure of c900 for unscheduled paediatric inpatient admissions at St Johns.

# All paediatric inpatient activity is now based at the Victoria Hospital in Kirkcaldy

Paediatric Outpatients 2010-11 & 2011-12

<table>
<thead>
<tr>
<th>Location</th>
<th>Total Outpatients 2010-11</th>
<th>Total Outpatients 2011-12</th>
<th>% of Regional Activity 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHSC</td>
<td>44,634</td>
<td>49,154</td>
<td>72%</td>
</tr>
<tr>
<td>St Johns Hospital</td>
<td>5,401</td>
<td>4,955</td>
<td>7%</td>
</tr>
<tr>
<td>Borders General Hospital</td>
<td>2,708</td>
<td>2,993</td>
<td>4%</td>
</tr>
<tr>
<td>Queen Margaret Hospital</td>
<td>2,587</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forth Park Hospital</td>
<td>3,617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victoria Hospital</td>
<td>6,057</td>
<td>11,413</td>
<td>17%</td>
</tr>
<tr>
<td>SE TOTAL</td>
<td>65,004</td>
<td>68,515</td>
<td>100%</td>
</tr>
</tbody>
</table>
## Deliveries 2010-11 & 2011-12

<table>
<thead>
<tr>
<th></th>
<th>Total Deliveries 2010-11</th>
<th>Total Deliveries 2011-12</th>
<th>% Regionally 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Johns Hospital</td>
<td>2,919</td>
<td>2,797</td>
<td>19%</td>
</tr>
<tr>
<td>Simpsons, RIE</td>
<td>6,906</td>
<td>7,006</td>
<td>48%</td>
</tr>
<tr>
<td>Borders General Hospital</td>
<td>1,202</td>
<td>1,105</td>
<td>8%</td>
</tr>
<tr>
<td>Forth Park Hospital *</td>
<td>3,750</td>
<td>2,866</td>
<td>20%</td>
</tr>
<tr>
<td>Victoria Hospital</td>
<td></td>
<td>920</td>
<td>6%</td>
</tr>
<tr>
<td>SE TOTAL</td>
<td><strong>14,777</strong></td>
<td><strong>14,694</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

* Maternity activity from Forth Park is now at Victoria Hospital, Kirkcaldy
Appendix 2 NHS Borders Engagement Exercise Dates

An engagement process will be carried out in accordance with NHS Borders engagement process, which is consistent with the Scottish Government Guidance on Informing, Engaging and Consulting the Public.

The original redesign was subject to consultation when it was proposed in 2008. This engagement exercise provides an opportunity to update stakeholders on progress of the local model and to engage on the regional position.

Initial engagement will be via the NHS Borders Public Reference Group at its next meeting on 21st January 2013, followed by a discussion at the Public Partnership Forum at its meeting on 15th February 2013.

NHS Borders Public Involvement Team meets with Scottish Health Council representatives on a monthly basis and this will be discussed at the January meeting. Further opportunities for engagement may be identified.

Key Dates
Public Reference Group 21st January 2013
Scottish Health Council 28th January 2013
Public Partnership Forum 15th February 2013
Patient Focus Group(s) As advised by Public Reference Group/SHC

NHS Borders Public Governance Committee is responsible for reporting to the Board on Patient Focus Public Involvement work, as the engagement exercise progresses the committee will be kept up to date with the discussions.