|  |  |  |  |
| --- | --- | --- | --- |
| Meeting / committee: |  | Meeting date: |  |

|  |  |
| --- | --- |
| Title: | *Expansion of Cardiothoracic Specialist Nurses and Surgical Care Practitioners Team Out of Hours* |

|  |  |
| --- | --- |
| Purpose: | *To seek approval to establish a 24/7 service of SPNs & SCPs in order to provide high quality of care to cardiothoracic patients including continuity of care and adequate time for discharge* |

|  |  |
| --- | --- |
| Key issues / items for consideration in the report: |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Prepared by: |  | Presented by: |  |

|  |  |
| --- | --- |
| Recommendations: |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Implications (please mark an X) | Legal | Financial | Safety & Quality | Strategic | Risk & Assurance |



**BUSINESS CASE**

|  |  |  |
| --- | --- | --- |
| **BUSINESS CASE REFERENCE** | **Available from Sue Kendal, Finance,  or Jackie Smith, Planning** | |
| **BUSINESS CASE TITLE** | Expansion of Cardiothoracic Specialist Nurses and Surgical Care Practitioners Team Out of Hours | |
| **DIVISION(S) & DIRECTORATE(S)[[1]](#footnote-1)** | Cardiothoracic Division – Tertiary Services | |
| **AUTHOR(S)** | Simon Kendall (Cardiothoracic Consultant Surgeon) and Cristina Ruiz Segria (Surgical Care Practitioner Lead) | |
| **FINANCE LEAD** |  | |
| **PLANNING LEAD** |  | |
| **DIVISIONAL SIGN-OFF[[2]](#footnote-2)**  **Chief of Service / DM** |  | Date: |
| **FINANCIAL SIGN-OFF**  **Senior Finance Lead** |  | Date: |
| **VERSION** |  | |
| **DATE** |  | |

**1 EXECUTIVE SUMMARY**

The Specialist Nurses team roles have historically grown from the need for expert or advanced nurse skills for a defined group of patients and in response to the EWTD and junior doctor hours. They cover a variety of skills and competences that puts the role very much between those of nurses and doctors, and in most cases fulfils a junior doctor remit.

The Specialist Nurse Practitioner (SPN) and Surgical Care Practitioner (SCP) are highly skilled nurses who work as part of the multidisciplinary team to deliver high quality care to elective and emergency patients receiving cardiac and thoracic surgery procedures.

Fully trained nurse practitioners work closely with the medical team undertaking some of the roles previously performed solely by junior doctors, in the care and management of patients from admission to discharge. These include skilled assessments of patients on admission, attending medical ward rounds, planning of ongoing care, ordering of appropriate tests, prescribing and discharge planning.

This role means that the process from admission to discharge can be smoothly managed by facilitating communication between the medical, nursing and allied teams. Service development is key to the role and the practitioners are all working continuously to improve practice by identifying inefficiencies, developing policies, procedures and building relationships with referring hospitals.

**2 ISSUE / OPPORTUNITY**

The Cardiothoracic Surgical directorate is structured in a way that there is no layer of junior doctors and the SPN and SCP take the entire burden of this work.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monday** | | **Tuesday** | | **Wednesday** | **Thursday** | | **Friday** | |
| ***Firms ward rounds*** | | | | | | | | |
| ***Ward*** ***(on-call)***  Includes:  Wound clinic / drop-in / drain clinic service | | | | | | | | |
| ***Preadmission clinic (Cardiac)*** | ***Preadmission clinic (Thoracic)*** | | ***Preadmission clinic (Cardiac)*** | | | ***Preadmission clinic (Thoracic)*** | | ***Preadmission clinic (Cardiac)*** |
| ***Theatre***  (3 lists) | ***Theatre***  (3 lists) | | ***Theatre***  (3 lists) | | | ***Theatre***  (3 lists) | | ***Theatre***  (2 lists) |
| ***Outpatients clinic***  (Mr Kendall/ Owens/White) | ***Outpatients clinic***  (Mr Akowuah/ Ferguson) | | ***Outpatients clinic***  (Mr Goodwin) | | | ***Outpatients clinic***  (Mr Dunning) | |  |
| ***In-house list review*** | | | | | | | | |

The current Surgical team comprises 10 staff – 6 SCPs fully qualified; 4 SPNs. All are Band 7 level and work full time (10.0 WTE). Current working patterns are Monday – Friday, generally covering 07.45–18.15 hours. All members of the team currently are nurse prescribers and are educated to Masters level.

The 6 SCPs and 2 Cardiac SPNs tend to work closely together, cross-covering elements of their roles. The 2 Thoracic SPNs tend to work more autonomously in terms of their nursing roles and patient care. However, since December 2013 due to maternity cover, the 2 Cardiac SPNs became Cardiothoracic, covering cardiac and thoracic patients’ care.

Core components of the Cardiothoracic surgical role:

|  |  |
| --- | --- |
| Firm ward round  (8am) | Review patients on the ward after surgery and in-house patients  Check and order new investigations  Review medication  Organise discharge documentation  Liaise with other specialties for further treatment |
| HDU ward round  (8am and 2pm) | Review medically ill patients  Management of pain, fluid balance, renal function and respiratory needs  Inotropes wean  Arrhythmias/temporary pacing wires |
| Ward on call  (8-6pm) | Review patients as per nursing/medical demand  Attend emergencies on the ward and HDU  IV cannulation, venipuncture, NG tubes  Prescribe analgesia for pain management, arrhythmias, blood pressure management and secondary prevention  Rewrite drug kardex  Order and interpret investigations  Organise transfer to other centres for convalescence or rehabilitation  Clerk elective admissions and transfers from other hospitals  Organise discharge documentation  Cardiac and Thoracic MDTs and Divisional meetings |
| Drop-in clinic  (12-6pm) | Advice to GPs and district nurses about patients’ treatment  See patients on demand after cardiac surgery  Order and interpret investigations (bloods, chest X-ray, ECG) |
| Drain management  (12-6pm) | Review patients with drains in situ for empyema or air leak  Order and interpret chest X-rays  Pain management and antibiotic review |
| Wound review clinic  (12-6pm) | Review patients’ wound due to infection  Prescribe antibiotics and analgesia  Dress surgical wounds  Debridement of wounds  Order investigations (bloods, cultures, wound swabs) |
| Theatre  (8-6pm) | First and second assistant for cardiac/thoracic surgery  Vein and radial harvesting  *(Role performed only by SCPs)* |

**3 OUTLINE OPTIONS**

* 1. **Option 1 – Do nothing, *SPN & SCP team providing service Monday to Friday (8-18h)***

**Description:** The table below is an example of a weekly rota for the surgical team and shows the number of nursing staff on shift per day, the areas in the department that are currently covered and how many hours are assigned to each area on a daily basis.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Surgery** |  |  |  |  |  |  |  |  |  |
|  | **Mon** | **Tue** | **Wed** | **Thu** | **Fri** | **Sat** | **Sun** |  | **Total hours** |
| **Ward day (SPN)**  **Cardiac** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |  |  | 47.50 |
| **Ward day (SPN)**  **Thoracic** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |  |  | 47.50 |
| **Preadmissions (SPN)** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |  |  | 47.50 |
| **Theatres (SCP)** | 28.50 | 28.50 | 28.50 | 28.50 | 28.50 |  |  |  | 142.50 |
| **Outpatients clinic (SCP)** | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |  |  |  | 22.50 |
| **In-house waiters (SCP)** | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  | 25.00 |
|  | **66.50** | **66.50** | **66.50** | **66.50** | **66.50** |  |  |  | **332.50** |
| **Number of nurses** | **7** | **7** | **7** | **7** | **7** | **0** | **0** |  |  |
|  | | | | | | | | **Convert to WTE** | **8.86** |
| **Sickness/holidays** | | | | | | | | **21%** | **2.04** |
| **Admin (fax, phone calls, letters)** | | | | | | | | **0.5%** | **0.04** |
| **Training and professional development** | | | | | | | | **0.5%** | **0.04** |
| **Audit** | | | | | | | | **0.5%** | **0.04** |
| **Management** | | | | | | | | **0.5%** | **0.04** |
|  | | | | | | | | **Total WTE** | **11.06** |

* + - Advantages**:**

Cost

* + - Disadvantages:

Continuity of care out of hours

Quality of care out of hours

Service efficiency out of hours

Increase length of stay over weekends

No drop-in service over weekends

Patient at risk when SpR oncall attending other emergencies over weekends/nights. SHO lack of knowledges of current unit protocols and skills in reopening/drain management in postoperative cardiac and thoracic patients

Lack of discharge over weekends

Inappropriate clerking of patients over weekend/nights

* 1. ***Option 2 – Expansion of the SPN & SCP team to provide day weekends with a SpR oncall***

**Description:** The table below is an example of a weekly rota covering weekends with SPNs during the week and SCPs covering the out-of-hours care. For this option, the team should increase in one SCP.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Surgery** |  |  |  |  |  |  |  |  |  |
|  | **Mon** | **Tue** | **Wed** | **Thu** | **Fri** | **Sat** | **Sun** |  | **Total hours** |
| **Ward day (SPN)**  **Cardiac** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  | 114.00 |
| **Ward day (SPN)**  **Thoracic** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |
| **Preadmissions (SPN)** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |  |  | 47.50 |
| **Theatres (SCP)** | 28.50 | 28.50 | 28.50 | 28.50 | 28.50 |  |  |  | 142.50 |
| **Outpatients clinic (SCP)** | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |  |  |  | 22.50 |
| **In-house waiters (SCP)** | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  | 25.00 |
|  | **66.50** | **66.50** | **66.50** | **66.50** | **66.50** | **9.50** | **9.50** |  | **351.50** |
| **Number of nurses** | **7** | **7** | **7** | **7** | **7** | **1** | **1** |  |  |
|  | | | | | | | | **Convert to WTE** | **9.37** |
| **Sickness/holidays** | | | | | | | | **21%** | **2.04** |
| **Admin (fax, phone calls, letters)** | | | | | | | | **0.5%** | **0.04** |
| **Training and professional development** | | | | | | | | **0.5%** | **0.04** |
| **Audit** | | | | | | | | **0.5%** | **0.04** |
| **Management** | | | | | | | | **0.5%** | **0.04** |
|  | | | | | | | | **Total WTE** | **11.57** |

* + - Advantages:

Continuity of care 7 days a week

Easy accessibility to SPN&SCPs to the staff, patients and relatives due to constant present on the ward

Improve quality of care

Enhance service efficiency

Improve management of complex patients and their discharges

Decrease length of stay

Experience and highly skilled professional to assist in emergency situations (ie arrest, reopenings, etc)

Reduce readmission rates – continuity of drop in service 7 days a week

Appropriate clerking of transfer/elective admissions 7 days a week

* + - Disadvantages:

Cost

* 1. ***Option 3 – Expansion of the SPN & SCP team to provide weekends days and nights with a non-resident oncall SpR***

**Description:** In order to reduce the number of SpRs, the surgical team of SCPs should increase in numbers up to a total of 9 or 10 as well as their banding due to their autonomous working patterns. The table below is an example of a weekly rota covering weekends and nights with a non-resident SpR oncall.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Surgery** |  |  |  |  |  |  |  |  |  |
|  | **Mon** | **Tue** | **Wed** | **Thu** | **Fri** | **Sat** | **Sun** |  | **Total hours** |
| **Ward day**  **Cardiac** | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 |  | 128.00 |
| **Ward day (SPN)**  **Thoracic** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |
| **Ward nights (SCP)** | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 |  | 80.50 |
| **Preadmissions** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 |  |  |  | 47.50 |
| **Theatres (SCP)** | 28.50 | 28.50 | 28.50 | 28.50 | 28.50 |  |  |  | 142.50 |
| **Outpatients clinic** | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |  |  |  | 22.50 |
| **In-house waiters** | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |  |  |  | 25.00 |
|  | **80.00** | **80.00** | **80.00** | **80.00** | **80.00** | **23.00** | **23.00** |  | **446.0** |
| **Number of nurses** | **8** | **8** | **8** | **8** | **8** | **2** | **2** |  |  |
|  | | | | | | | | **Convert to WTE** | **11.89** |
| **Sickness/holidays** | | | | | | | | **21%** | **2.04** |
| **Admin (fax, phone calls, letters)** | | | | | | | | **0.5%** | **0.04** |
| **Training and professional development** | | | | | | | | **0.5%** | **0.04** |
| **Audit** | | | | | | | | **0.5%** | **0.04** |
| **Management** | | | | | | | | **0.5%** | **0.04** |
|  | | | | | | | | **Total WTE** | **14.09** |

The number of SpRs needed with a full SPN/SCP cover will be 6. This is based on 48hrs/week contracted hours plus 1 oncall non-resident per week.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Surgery** |  |  |  |  |  |  |  |  |  |
|  | **Mon** | **Tue** | **Wed** | **Thu** | **Fri** | **Sat** | **Sun** |  | **Total hours** |
| **Ward day** | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 6.00 | 6.00 |  | 74.50 |
| **Ward night** | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |  |
| **Theatres** | 28.50 | 28.50 | 28.50 | 28.50 | 28.50 |  |  |  | 142.50 |
| **Outpatients clinic/ firm ward (optional)** | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |  |  |  | *22.50* |
| **Oncall non-resident** | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 18.00 | 18.00 |  | 93.50 |
|  | **41.00** | **41.00** | **41.00** | **41.00** | **41.00** | **6.00** | **6.00** |  | **217.00** |
| **Number of nurses** | **5** | **5** | **5** | **5** | **5** | **1** | **1** |  |  |
|  | | | | | | | | **Convert to WTE (48hrs/wk)** | **4.52** |
| **Sickness/holidays** | | | | | | | | **21%** | **2.04** |
|  | | | | | | | | **Total WTE** | **6.56** |

* + - Advantages:

Continuity of care 24/7

Easy accessibility to SPNs & SCPs for the staff, patients and relatives due to constant presence on the ward

Improve quality of care

Enhance service efficiency

Improve management of complex patients and their discharges

Decrease length of stay

Experience and highly skilled professional to assist in emergency situations (i.e. arrest, reopenings, etc)

Reduce readmission rates – continuity of drop-in service 24/7

Appropriate clerking of transfer/elective admissions 24/7

* + - Disadvantages:

Cost

Training

**4 PREFERRED OPTION**

Option 3 should be the aim of this unit because it will ensure that high quality care is provided by the surgical team 24/7. Also, it will ensure that trainee SpRs gain adequate surgical training.

**5 FINANCE**

**Notes:**

1. This section should be completed with the Divisional Accountant, and early engagement with Finance and Planning to agree the issues and presentation is strongly recommended.

2. All assumptions described below must be consistent with the description of the preferred option above.

3. Sections should, where appropriate, compare the financial implications of the current and proposed services, both in year 1 (PYE) and beyond (FYE). This should include implications for all areas of the Trust affected by the BC.

4. Sections must be consistent with the full financial template (which must be embedded as Appendix 1).

5. All costs must include VAT at the appropriate rate.

**5.1 Income**

Assumptions: *Describe assumptions for income (activity FYE/PYE, tariffs (HRG, PoD), current vs new service) for all divisions affected.*

Table: *Insert table to quantify the impact on income of the preferred option for all divisions affected. Example table provided below, but adapt as required for particular BC:*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Current Activity** | **Current Income** | **Proposed activity under this BC** | **Proposed Income under this BC** | **Change in Activity** | **Change in Income** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**5.2 Revenue expenditure**

Assumptions: *Describe assumptions for revenue (workforce and pay costs, consumables, maintenance, PFI etc) for all divisions affected.*

Table: *Insert tables for pay and non-pay costs to quantify the impact on revenue of the preferred option for direct service impact and support divisions where applicable. Example tables provided below, but adapt as required for particular BC:*

**Pay**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Division** | **Discipline** | **Recurrent / non-recurrent** | **Grade** | **WTE** |
|  | ***e.g. A&C, Physio, Consultant etc*** |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Non-pay**

|  |  |  |  |
| --- | --- | --- | --- |
| **Division** | **Description** | **Recurrent / non-recurrent** | **Total £** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**5.3 Cost savings** (if applicable to the BC; delete section if not)

Assumptions: *Describe assumptions for savings (workforce and pay, consumables, maintenance, facilities & estates, PFI, IT) for all divisions affected.*

Table: *Insert tables to quantify cost savings from the preferred option. Example tables provided below, but adapt as required for particular BC:*

**Pay savings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Division** | **Job title** | **Recurrent / non-recurrent** | **Grade** | **WTE** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Non-pay savings**

|  |  |  |
| --- | --- | --- |
| **Division** | **Description** | **Recurrent / non-recurrent** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**5.4 Capital expenditure**

Assumptions: *Describe assumptions for capital (medical equipment, facilities & estates, PFI fees, IT) for all divisions affected.*

Table: *Insert table to quantify capital costs (including VAT) of the preferred option. Add additional lines for each category of capital to the table below as required (or include cost build up from Planning as appendix):*

|  |  |  |
| --- | --- | --- |
| **Category** | **Description** | **Total £** |
| **Equipment** |  |  |
| **Building / engineering fees** |  |  |
| **IT** |  |  |
| **Total** |  |  |

**Trust fund contribution** – If there is any contribution from trust funds to the scheme, please complete the following:

|  |  |  |
| --- | --- | --- |
| **Trust fund number** | **Cap number** | **£** |
|  |  |  |
|  |  |  |
|  |  |  |

**5.5 Finance summary**

*Insert summary worksheet from finance template (attach full finance template as Appendix 1).*

*If necessary also insert a summary table which compares current vs proposed services for year 1 (PYE) and beyond (FYE).*

**6 BENEFITS REALISATION (KPI)**

*State the benefits from this project and the KPIs which will be measured to demonstrate that those benefits have been delivered. Benefits could include quality (e.g. mortality, patient safety etc), operational performance (e.g. 18-week targets, LoS, readmissions), finance (income generation, savings, contribution). Benefits are likely to be linked to the trust strategic objectives this project supports and the KPIs are likely to be existing performance or quality measures.*

|  |  |  |  |
| --- | --- | --- | --- |
| **KPI** | **Description** | **Current** | **Target** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**7 IMPLEMENTATION PLAN**

|  |  |  |
| --- | --- | --- |
| **Deliverable** | **Activity** | **Start Date** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**8 RISK**

Risk of not approving

Risk of approving

Implementation risk

**9 ASSURANCE**

**9.1 Quality impact assessment (QIA)**

*Does this BC have a direct link to clinical care? – If* ***Yes****, a QIA must be completed (embedded below)*

Has a QIA been done for this business case? **Yes/No**

- If **Yes**, please attach as an appendix. If **No**, please explain why a QIA is not required.



**State below the overall risk assessment from the QIA**

**Actions to mitigate risks identified in QIA**

**The completed QIA should be saved by the originating division, in the divisional QIA folder on the all users shared drive**

**9.2 Equality impact assessment (EqIA)**

Is this business case for a new service/change of service? **Yes/No**

* + - 1. If **Yes**, please attach the completed EqIA as an appendix. Your business case will not be progressed unless an EqIA is completed.
      2. If **No**, there is no requirement to complete the EqIA.

*The EqIA assessment document available on the trust intranet under Trust Policies, Equality Impact Assessment.*

***It is the originating Division’s responsibility to forward the completed EqIA to Michelle Bowman in HR.***

**9.3 Patient involvement**

Have patients been involved in developing this proposal and the preferred option? **Yes/No**

- If **Yes**, briefly outline how patients have been involved and their views considered.

- If **No**, please explain why patient involvement was not necessary for this business case.

* 1. **Project assurance office (PAO)**

Has a PAO template been completed for this project and approved by the PAO manager?

**YES / NO**

Will this project be actively tracked by the PAO? **YES / NO**

**APPENDICES**

*Must include full finance template*

*Could include: Quality impact assessment, QIA assessment, EqIA screening or full assessment, clinical standards approval, Consultant job descriptions, detailed activity data, capital cost build up etc*

|  |  |  |
| --- | --- | --- |
| **Appendix 1** | Finance template |  |
| **Appendix 2** |  |  |
| **Appendix 3** |  |  |
| **Appendix 4** |  |  |

1. If BC affects more than one Division or Directorate, then all should be shown here, with authors below. [↑](#footnote-ref-1)
2. Divisional & Financial sign-off should be completed before BC is considered by Corporate Directors. [↑](#footnote-ref-2)