

Agenda Item: Meeting:			29 April 2022			
Position Paper on Helideck at Royal Sussex County Hospital, Brighton Report Title:						
Sponsoring Executive Director:	Karen Geoghegan					
Author(s):						
Report previously considered by and date:	Report previously submitted to 3Ts Programme Board (June 2019)		d (June			
Purpose of the report:						
Information	✓	7 ISSUITATION		✓		
Review and Discussion	✓	Approval / Agreement				
Reason for submission to Trust Board in Private only (where relevant):						
Commercial confidentiality		Staff confidentiality				
Patient confidentiality		Other exceptional circumstances				
Link to Trust Strategic Themes:						
Patient Care	✓	Sustainability		✓		
Our People	✓	Quality		√		
Systems and Partnerships	✓					
Any implications for:						
	There are clear and direct links to the quality of patient care with faster transfer of the critically ill patient to a place of definitive care and treatment.					
Financial There are significant costs attached for the operation of the Helideck. These will be partially offset from previous considerations through the use of volunteers.						
Workforce Volunteers will be linked to the new the Trust Fire Sat	Volunteers will be recruited to operate the Helideck whilst management will be linked to the new Fire Advisor's Role whilst managerial oversight will be included in the Trust Fire Safety Manager's Role.					
Link to CQC Domains:						
Safe	✓	Effective		✓		
Caring	✓	Responsive				
Well-led		Use of Resources		✓		
Communication and Consultation:						
Yes						

Executive Summary:

This paper sets out the current position with the operational and clinical commissioning of the helideck at the Royal Sussex County Hospital (RSCH), Brighton and highlights the key operational and clinical issues that require consideration and resolution before the helideck can be brought into operational use.

The paper also outlines the preferred method for operating the helideck, in particular the preferred staffing model, and sets out the running costs for the helideck which are potentially £453k pa. of which £124k relates to potential staff costs.

Work is currently underway to progress the clinical issues that need to be addressed before the helipad can be used, including development of clinical pathways, standard operating procedures and simulation exercises.

Key Recommendation(s):

3Ts Steering Group is asked to:

- 1. Note the contents of this paper.
- 2. Note the request for start-up funding to purchase essential helideck equipment and to enable recruitment and training of helideck staff to commence as soon as possible.





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1.0 Introduction

1.1 The purpose of this paper is to provide the 3Ts Steering Group with a position statement on the operation, cost and clinical management of the helideck at the RSCH site. The paper highlights both operational and clinical readiness issues which require resolution before the helideck can become fully operational.

2.0 Background

- 2.1 To promote the timely transition of patients that have been involved in serious incident to a place of definitive care, a Helideck has been constructed on the RSCH site. The transport of patients by helicopter to the hospital, which is a designated Major Trauma Centre for the population of Sussex, will is expected to have a significant impact on the survival rate of those that are suffering from life-threatening conditions/injuries.
- 2.2 The RSCH Brighton Helideck was initially constructed in 2018 with an expectation that the deck would be brought into operational use in June 2019. As of April 2022 the Helideck is still not operational and a number of operational and clincal issues and considerations remain to be addressed as detailed below.
- 2.3 In January 2019 the 3Ts Oversight and Assurance Board was advised that, in addition to patients already conveyed to RSCH by air ambulance with a secondary transfer by ambulance or by car, an additional 23-25 patients per annum (adults and paediatrics) would be conveyed to RSCH following the opening of the helideck; this is predictated on air ambulance arrivals in daylights hours only which vary according to the time of year. A recent review of data from the Trauma Network and the Kent Surrey Sussex Air Ambulance Trust (KSSAAT) indicates this projected figure is correct however it should be noted that up to 10 further patients a year may be conveyed by other operators including the local coastguard.
- 2.4 The Trust is required to follow guidance from the Civil Aviation Authority (CAA) to ensure that the Helideck is capable of being operated in a competent and effective manner; the CAA makes specific recommendations around policies procedures and crewing of the Helideck in the event of a helicopter being required to bring patients to the hospital.
- 2.5 The Trust has appointed Greendeck Operations Ltd (Greendeck) to act as Technical Authority (TA) for the Trust; GOL provide both technical advice to the Trust and support the development of operational policies and procedures and the training of support staff. Greendeck Operations Ltd also act as a technical consultant to the Civil Aviation Authority and specialise in commissioning Helidecks and the writing of CAA guidance, policies and procedures.

3.0 Operational Readiness

- 3.1 Following a review of the helideck infrastructure and its operation by Greendeck Operations Ltd the following areas remain outstanding and need to be addressed before full operational capability can be signed off:
- Building Cladding
- 3.2 The high level TKT cladding was found to be in a state whereby, in the event of a helicopter landing, the pressure exerted by the helicopter down draft could cause the fixings to fail and the cladding panel to fall. To resolve this a remediation method of further securing the cladding panels is being developed. This requires further surveys which are currently underway with intrusive work adjacent to the Neonatal and Trevor Mann Baby units on levels 14 and 15, respectively. A solution



will then be installed over the following months and the intention is for the works to be complete by November 2022.

- Helipad staff recruitment and training
- 3.3 Whilst many crewing options have been reviewed previously the preferred option (which is used in other helideck operations including the Queen Alexandra Hospital, Portsmouth) is to use a single crewing option with staff recruited from within the hospital on a voluntary basis. A pool of 20 volunteer staff will be recruited by the Facilities & Estates Directorate who will be trained in helicopter familiarisation, helideck operations, first response firefighting, basic extrication methods, securing the helicopter to the deck, basic first-aid and trauma care, dynamic risk assessment, incident response and operation of the Helideck firefighting systems.
- 3.4 Greendeck Operations Ltd. has provided quotes on a bespoke helipad training packages with 3 training establishments. An initial 4-day training package will be required followed by "top up" training every 12-18 months.
- 3.5 Whilst it is assumed the staff will be volunteers a sum of £123k pa has been included in the costs to ensure continuity of service i.e. for staff who may be required to be available outside of their normal working hours or in the event of lack of rota cover due to staff absence.
- 3.6 The expected lead-in time for the recruitment of the pool of volunteers is 12-16 weeks and a pool of 10 staff will be required in the first instance to enable the helideck to be operational. The recruitment and training of staff will therefore need to commence as soon as possible to enable test flights to be undertaken in November or December 2022.
- Equipment Procurement
- 3.7 An initial baseline safety inspection has been carried out by Greendeck Operations Ltd and a list of essential safety equipment has been identified including PPE for the helideck team, aircraft tie downs and other items; the costs are detailed in Appendix 2.
- Other items:
- 3.8 In addition to the above items the following relatively minor issues have been identified by the CAA who will issue a letter of completion subject to closure of the following items:-
 - Helipad de-icing
 - Shielding of lights and night light testing
 - Helipad communications
 - Local fire service familiarisation visit
- 3.9 These issues will be addressed in the coming weeks, subject to approval of funding which is detailed in this paper, and during flight testing which is anticipated to take place by the end of this year once the cladding issue has been resolved. A table summarising the outstanding issues, the responsible leads, and expected completion date is included at Appendix 1.
- 3.10 Following completion of the above issues Greendeck will conduct a site visit to undertake a full assessment of operational capability including staff competence and, if satisfactory, issue a certificate of compliance in accordance with CAP1264 (Standards for Helicopter Landing Areas at Hospitals) and ICAO Annex 14 Vol II (Heliports).



4.0 Clinical Readiness & Model of Care

- 4.1 Much of the focus with the development of the helideck has been on the physical infrastructure and safety and operational issues including management, crewing, resourcing, training implications and maintenance and testing.
- 4.2 The Clinical Lead for Major Trauma and the Major Trauma Centre has recently advised that current clinical systems and pathways need to be fully tested to ensure that the MTC is ready to receive major trauma patients via the helideck. New clinical pathways and standard operating procedures will need to be developed, tested and approved by the Major Trauma Committee, for example for the retrieval of major trauma patients from the helideck and their conveyance to either the resuscitation area in the Emergency Department or the polytrauma theatre on Level 5.
- 4.3 The clinical lead has also advised that the clinical pathways needed to support the delivery of high acuity Major Trauma care will require experienced, multi-skilled surgeons, trained across a number of domains, being present at the MTC without delay. The nature of the damage control, resuscitative surgery that these patients need and that these surgeons will perform is unlike anything provided by the Trust and its surgical teams in their current format and changes may be required to existing rotas.
- 4.4 The Major Trauma service sits within the Specialised Division and modelling work will be undertaken to assess the impact on current hospital capacity of an additional 25 major trauma patients a year including inpatient major trauma bed capacity (Level 8AE ward) and ITU capacity. Initial modelling indicates an additional 2 inpatient beds a year would be required for the additional major trauma patients.
- 4.5 It should be noted that of the expected 25 additional major trauma patients per annum a very small number of paediatric major trauma patients will be conveyed to RSCH (although RSCH is not a designated paediatric MTC) and clinical pathways will need to be developed with the Royal Alexandra Childrens Hospital.

5.0 Financial Position

Costs

- 5.1 The costs of operating the helideck are presented at Appendix 2 in the form of initial set up costs and ongoing running costs. Initial set up costs include purchasing equipment, radios and training of staff and ongoing costs include maintaining / replacing equipment capital charges and staffing costs.
- 5.2 Set up costs are estimated to be of £77k of which are £23k are revenue costs and £54k are capital costs.
- 5.3 The annual running costs of the helideck are potentially £453k pa excluding potential additional insurance costs. The current advice is that the helideck it is currently covered as part of the TKT insurance. Key drivers to the annual running costs are capital charges of £199.6k, an additional rates charge of £85k per annum and £123.9k per annum for staffing costs if volunteers are not available (based on four band 6 staff would be needed for four hours a day 7 days a week; this is an asumption to cover absent volunteer posts rather than full staffing costs.
- 5.4 Maintenance costs also reflect the fact that although the helideck was handed over in October 2021 the majority of structural work was completed in 2018.



5.5 Work with the clinical division suggest that there will be increased clinical costs particularly on high value consumables such as blood products and that the tariff income would need to be used to cover these costs. Further work will need to be undertaken by the Specialised Division to confirm any additional costs and this may highlight a cost pressure.

Income

- 5.6 A previous report submitted to the Programme Board in January 2019 provided the figure of a tariff income of £15,351 per incident for a trauma case and £8,135 for a critical care case. This can be uplifted by 3.4% to reflect tariff growth to current levels (£15,872 and £8,412 respectively).
- 5.7 With a projected baseline of 23 anticipated flights this equates to an estimated annual income of circa £279,266. The additional running costs set out above would therefore create a cost pressure for the trust, together with a potential cost pressure as a result of increased clinical costs. Further work is required to understand fully the financial position.

6.0 Conclusion

6.1 This paper has set out the operational issues that need to be resolved during the next 6 months to enable the helideck to be signed-off as fully operational and the clinical input required to ensure that clinical pathways and processes are ready and tested before the arrival of the first trauma patients on the helideck. Subject to resolution of these issues flight testing is expected to be undertaken by the end of this calendar year.

7.0 Recommendations

- 7.1 The 3Ts Steering Group is asked to:
 - 3. Note the contents of this paper.
 - 4. Note the request for start-up funding to purchase essential helideck equipment and to enable recruitment and training of helideck staff to commence as soon as possible.



Appendix 1: Operational Readiness Actions

Action	Lead	Comments	Due
New Cladding on TKT	Capital & Development	Surveys underway	Nov 22
Equipment Procurement	Facilities & Estates	Subject to approved funding	Nov 22
Helipad staffing and training	Facilities & Estates	 Initial pool of 10 volunteers required Subject to approved funding for training 	Nov 22
Helipad de-icing	Facilities & Estates	Subject to approved funding	Dec 22
Shielding of lights and night light testing	Facilities & Estates	Subject to flight testing	Dec 22
Local Fire Service visit	Facilities & Estates		Nov 22



Appendix 2: Start Up and running costs for helideck

Expenditure (inclusive of VAT where applicable)	Start-up costs £	Annual Costs £
Revenue costs		
Consultancy	7,000	3,000
Training	3,000	3,000
Crew accommodation costs and sundries	5,000	2,000
De Icing Kit	1,026	366
Patient trolley servicing	1,872	1,786
Helideck Team uniform	1000	1000
Ground to Air Radio	800	400
Diff system maintenance		11,500
Lift maintenance	3,360	3,360
General maintenance (lighting, power etc.)		15,000
Helideck Team PPE maintenance		3,000
Rescue equipment servicing		450
Staff cost contingency		123,860
Rates		85,000
Capital charges		199,599
Total Revenue cost	23,058	453,321
Helideck Team PPE (3 year life)	29,500	
Rescue equipment	10,584	
Patient Trolley (10 year life)	14,000	
Total Capital cost	54,084	



Total	77,142	453,321