

Trust Board

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From: Ms Amanda Middleton, Acting Director of Operations, Division C

Date: March 2008

Subject: **Children's Hospital: First Anniversary Report**

For: **Information**

Synopsis

The Children's Hospital opened on 15 January 2007 and this paper provides an update at the end of its first full year.

The paper reports on the changes to capacity, activity, occupancy and other key metrics for both in and out-patient services since the relocation. Changes in key support departments, including operating theatres and the children's radiology department are also described.

The inpatient work from the Nuffield Orthopaedic Centre transferred on 1 April 2008. Spare capacity remains for future funded additional activity.

Financial, legal and risk impact

Not applicable.

Children's Hospital: First Anniversary Report to the Trust Board

1. Introduction

The Children's Hospital's opened on 15 January 2007 and a formal and very successful anniversary celebration was held on 25 January 2008. Acute paediatric services are provided at both the John Radcliffe Hospital and the Horton General Hospital. The vision for the Children's Hospital was to provide an integrated, child orientated service for Oxfordshire children, and specialist services for children from the extended region and beyond, in a high quality environment. We are pleased to report that this integration of services within Oxford has been achieved; the quality of clinical care for families has improved as a result of clinicians from different specialities working closely together and the child friendly environment has greatly enhanced the experience of health care for children, young people and their families.

2. Purpose of this Report

This paper provides an update on the Children's Hospital at the end of its first full year.

3. Relocation Plan

Initial assumptions were for a level transfer of services of Community Paediatrics from the Churchill site, Coombe and Leopold wards from the Radcliffe Infirmary, adolescent and children's wards on JR Level 4 and out-patients' clinics from the Red area.

4. The Children's Hospital

The Children's Hospital offers cutting edge clinical facilities and a very pleasant and children focussed environment for patients, carers and staff. It caters for a diverse range of community, secondary, tertiary and national services as shown in table 1.

5. Capacity

5.1 Day-Care

As patient pathways and surgical and medical interventions have evolved, the demand for day-care work is increasing and the Day-Care Ward activity, across all specialties, is reflecting this trend. The new ward has increased physical capacity and enhanced facilities to accommodate this demand. Although the average increase in bed numbers is very modest (one), the new ward allows for a greater degree of flexibility of use. Nursed bed numbers are up to 16 beds and there is also the ability to support patients who require day-case care but not a bed, for example, for a 4-hour intravenous drug infusion.

5.2 In-patient Care

Co-location of all Oxford inpatient services has permitted a slight increase in the number of nursed beds (without any additional staff resources) as shown in Table 2. Children also continue to be treated as in-patients at the Horton General Hospital

Table 1: Range of Clinical Services Offered by the Children’s Hospital

Secondary Care Services	Tertiary Care Services	National Services
General Paediatrics		Craniofacial
Community Paediatrics		Cleft, lip and palate
Diabetes & Endocrinology		Mitochondrial
Gastroenterology, hepatology and nutrition		Myasthenia
Haematology and oncology		
Neurology		
	Neurosurgery	
Cardiology		
	Cardiac Surgery	
Infectious diseases		
Respiratory medicine		
Urology		
General paediatric surgery		
ENT		
Plastic surgery		
Ophthalmology		
Oral, maxillofacial surgery		
Trauma		

Note: Paediatric intensive care and neonatal services and clinical genetics are a part of the Children’s Directorate, but these services are not within the Children’s Hospital building.

Table 2: Bed Configuration and Numbers: Plan (2006) versus Actual (2008)

Ward	New Ward Name	Pre-Relocation	Plan	Current	Net Change (pre-relocation to current)
Adolescent	Melanie	8	12	12	+4
4C	Drayson	14	10	10	-4
4C in winter	Drayson	+4	+4	+4	0
4D	Tom	14	16	16	+2
Leopold	Robin	13	12	12	-1
Coombe & DFDW ¹	DayCare	11(ave)	12(ave)	12(ave)	+1
4B CR	Bellhouse	6	7	6	0
4BHaem/Onc ²	Kamran	7	8	8	+1
Total		73/77	77/81	76/80	+3³

1. Bed numbers vary from 8 to 16 depending on the day of the week

2. Refers to in-patient beds only

3. Additional beds opened from existing resources as a result of co-location related economies of scale

6. Activity

The timing of the move into the Children’s hospital has been fortuitous in managing the 18-week referral to treatment target. As expected, all activity has increased significantly (including tertiary activity in every sub-speciality) – the old facilities simply did not have the physical space to cope with this increase. Non-recurrent funding in (and for) 2008-09

has allowed a modest increase in staffing levels to deal with the one-off increase in workload due to the 18-week pressures.

6.1 Out-patients

In relocating services, JR children’s outpatients, Community Paediatrics, neurosurgery and the cleft services’ activity transferred to the Children’s Hospital. Other specialist surgery, trauma and dermatology outpatients take place in the West Wing, trauma centre and the Churchill respectively. Children also continue to be seen as out-patients at the Horton General Hospital.

Table 3: Paediatric Out-patient Activity in the Children’s Hospital

	New	Follow-up	Total
Pre-Relocation	3,481	9,364	12,438
Post-Relocation	4,386	10,280	14,759
Change	905	916	2,321
Percentage Change	26.0%	9.8%	18.7%

Data period: Feb-Sept, 2006 and 2007

It is interesting to note that during this time period in 2007 another 19,248 paediatric out-patients were seen on the JR site but outside the Children’s Hospital. These relate mainly to attendances at Specialist Surgery clinics in the West Wing. This presents challenges to the Trust and those Directorates in order to comply with the NSF requirements. These include child focused facilities, child registered nurses (or staff with the competence and confidence to deliver appropriate care to children), play specialists and appropriate current and on-going training, for example, resuscitation skills, communication with children and safe-guarding. With these issues in mind, dermatology transferred one clinic per week to the Children’s Hospital from February 2008.

6.2 In-patients

Unlike out-patients, all paediatric in-patients other than those cared for at the Horton General Hospital are cared for in the Children’s Hospital (or paediatric ITU or the neonatal unit) on the JR site. 54 in-patients have been transferred from the Horton to the Children’s Hospital since it opened. As alluded to earlier, activity was expected to be higher this year as shown in table 4.

Table 4: Activity and Length of Stay Pre and Post Relocation to the Children’s Hospital

	Elective	LoS	Non-Elective	LoS
Pre-Relocation	5527	2.73	3655	3.3
Post-Relocation	6027	2.4	3728	2.5
Percentage Change	9.0%	-12.1%	2.0%	-24.2%

Note: Approximately 60% of all elective surgical activity relates to specialist surgery and as such income is apportioned to that Directorate. The ward activity and costs accrue in the Children’s Directorate.

7. Cancelled Operations

Against a background of increasing activity, last minute cancellations would be expected to increase too – especially cancellations due to a lack of ward beds. As table 5 shows last minute cancellations due to ward beds has actually fallen significantly.

Table 5: Last Minute Cancellation in the Children’s Hospital

	No. of Cancellations	Key Services Affected
Pre-Relocation	32	ENT (9), Plastics (8), Gen Surgery (6), Urology (4)
Post-Relocation	13	Gen Surgery (6), ENT (4)

Data period February to December 2006 and 2007

The substantial decrease in last minute cancellations is as a result of a number of different initiatives which have had a synergistic and additive effect, including:

- An increase in the number of in-patient beds
- Greater flexibility of the Day-care ward matching demand with capacity
- An overall reduction in length of stay (see table 4)
- Increased same day admissions (92% of all patients are admitted on the day of operation)
- Increased flexibility between wards
- Enhanced operational arrangements to allocate patients to anticipated beds 10-14 days prior to, and on the day of, their admission.

8. Occupancy

Table 6 shows the utilisation of in-patient bed capacity. In line with established NHS practice, occupancy is calculated at midnight. Due to the Children’s Hospital patient group, midnight occupancy is significantly lower than during the day. Elective surgical wards experience very high activity and occupancy early in the morning (as that day’s patients present for surgery prior to that day’s patients have been discharged) and this gradually decreases over the day.

The dataset demonstrates that Children’s Hospital capacity and occupancy can deliver the required level of activity. From April 2008 the paediatric inpatients from the Nuffield Orthopaedic Centre (NOC) with staffing resources will transfer to the Children’s Hospital permitting the opening of a further 8 of the 19 additional available beds.

9. Operating Theatres

Paediatric urology and general surgery operating transferred to the West Wing theatre suite on 29 October 2007. In order to facilitate this transfer and accommodate emergency operating in the West Wing theatres, each previous full day elective list has had to be converted to a mixed emergency and elective list. This is extremely difficult operationally. To ensure elective targets are met, additional lists during the week and on Saturdays were introduced until the second theatre (for emergency operating) could be staffed and opened in the West Wing. Sessions in the second theatre started in March 2008 and will further increase in June 2008 to permit separate and sufficient operating capacity for both elective and emergency cases.

An Integrated Theatres’ system is installed in both paediatric theatres and is proving to be a great success.

Table 6: Bed Capacity and Occupancy

Ward	Specialty	Physical Capacity	Beds available for additional funded activity	Nursed Beds	Occupancy	Range (%)
Drayson ¹	General & paediatric medical specialties	16	2	10/14	87%	80-96
Bellhouse	Cardio-respiratory	9	3	6	83%	64-94
Melanie	All specialties for adolescents	12	0	12	69%	58-77
Kamran	Haem-oncology	9	1	8	84%	72-93
Tom	General, urology and plastic Surgery, Neurosciences and	20	4	16	68%	64-78
Robin	other specialist surgery	21	9	12	75%	61-85
Total ²		87	19	64/68	77%	61-96

1. 10 beds funded between April and September (inclusive) and 14 the rest of the year
2. Excludes 19 funded Day care beds (3 on Kamran ward and up to 16 on Day-care ward)
3. Data relates to February - November 2007

10. Parent Accommodation

In addition to the provision of a parent bed next to almost all patient beds in the Children's Hospital, the Ronald McDonald House provides 18 en-suite rooms for parent accommodation. Access to these rooms is based on jointly agreed criteria and is free of charge (although a donation is tactfully requested by the charity). Demand generally outstrips capacity, but the standard and facility is very well received.

As the paediatric orthopaedic in-patients transfer to the Children's Hospital, colleagues from the NOC are exploring possibilities of creating additional parent accommodation on that site. If this was feasible, access would be criteria based.

11. Children's Radiology

The radiology department opened in the Children's Hospital on 1st October 2007. This department now provides a machine dedicated and set-up for children resulting in the ability to provide improved quality of plain films. Video fluoroscopy has moved from the Churchill site and delivers significant gains in efficiency as all the key staff are on site. Increasingly other radiology work is moving into this department, for example, one list per fortnight for interventional radiology work has transferred to free up a theatre. This transfer also paves the way to increase the frequency of this list (central line insertion - mainly for oncology patients) to once per week to meet current activity levels.

12. Staffing

In line with many other specialised professions, maintaining adequate staffing levels - especially at the higher grades, can be challenging. Generally, the summer months see a substantial decline in activity. Due to the 18-week target, activity dipped only marginally last summer, and for a very short period of time. The combination of these factors led to the Children's Hospital using excess capacity on the Horton Children's Ward on several

occasions. For general paediatrics, the Horton Children's Ward has a year round capacity of 14 beds and 41% occupancy, compared to 87% occupancy in the Children's Hospital (after allowing for sub-specialty work on Drayson Ward).

On the occasions that the Children's Hospital approaches full capacity, planned diversion of appropriate patients is implemented. Table 7 shows the numbers of admissions to Horton Children's ward from the JR ED. Planned diversion was in place on many more occasions but did not lead to any patients being transferred.

Table 7: Numbers of Admissions To Horton Children's Ward From The JR ED

Month	Number of patients
April	3
May	5
June	3
July	6
August	3
September	4
October	6
November	7

From late October staffing numbers have improved significantly. In order to maintain this position (in light of the locum agencies' ability to fill less than 5% of shifts requested), the Directorate has authorised a level of over-recruitment to minimise potential gaps in nursing as staff turnover.

Dr Janet Craze has also led a number of initiatives, working with colleagues from the Emergency Department, Operational Management Team and the Children's Hospital, to ensure appropriate escalation procedures are in place to minimise the requirement and/or the frequency of diverting patients to other hospitals and when it is necessary, it is authorised by the paediatrician on-call.

The Children's Hospital also witnessed a significant re-structuring of senior nurse leadership and the appointment of two key posts: Dr Nettie Dearmun, Associate Chief Nurse and Alison Chapman, Lead Nurse for Safeguarding Children. These posts, along with other senior nurse colleagues will promote and enhance children's nursing in Oxford.

13. Summary

The Children's Hospital has been a great success and provides outstanding facilities for patients, their carers and our staff. As expected, the first year has been very challenging, and staff of all levels in the Directorate have had additional pressures of working in a new environment with record high activity levels. It is a great credit to every staff member that they have responded to this challenge and their enthusiasm and dedication has made the last year successful. We look forward to developments in 2008-9 and maintaining and enhancing our reputation as a top quality provider of Children's Services.

Raj Gokani
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1st May 2008

Anne Thomson
Directorate Chair