



Cork University Hospital

SCHEDULED CARE PATIENT PATHWAY

THE CHANGE PROGRAMME 2013-2015



Change Management in Cork University Hospital

Cork University Hospital is the busiest in the country with 30,000 emergency admissions and 17,000 planned admissions per year (including maternity services). In addition we treat 85,000 day cases and have 300,000 outpatient attendances each year. As a result of multiple change programmes over the past number of years the Hospital now has the lowest average length of stay for any of the large teaching hospitals at five days. This is in no small way a result of the implementation of HSE national care programmes but more importantly a result of the commitment of staff who have demonstrated a capacity to implement large scale change despite reductions in pay over the past few years.

In response to these challenges Cork University Hospital has implemented over 160 different change initiatives designed to incrementally improve patient care, safety and flow while reducing the time patients spend on trolleys in the Emergency Department. These changes develop further the excellent work led by the national care programmes that have been a catalyst for change in relation to key areas such as acute medicine, surgery, emergency medicine and the management of stroke.

In parallel the Hospital has also had to ensure that processes are in place such that targets in relation to waiting times for planned admissions are met. This has required significant change in the alignment of planned admissions with waiting lists and in the management of theatre to improve efficiency and patient throughput. In addition the transfer of planned activity to both Mallow and Bantry General Hospitals has

been extremely helpful and underscores the importance of these Hospitals in the region freeing up resources in Cork University Hospital for emergency services, cancer care and activities that are appropriate to it. As a result of these changes, by the end of June 2015 all waiting list targets relating to inpatient care were met by the Hospital.

It is to the credit of staff that the collective response was to implement change in work practices and service delivery that enabled the Hospital not only meet these challenges but to improve performance in respect of patient flow, waiting lists and departmental efficiency. The Executive Management Board seek to continue to innovate and change in the interest of our patients and staff who are proud of and committed to the service they deliver.

Overview of Cork University Hospital

Cork University Hospital (CUH) with over 40 different medical and surgical specialties on site is the largest university teaching hospital in Ireland and the only Level 1 Trauma centre in the country.

It is the tertiary referral centre for the HSE Southern area, and the supra regional area of Limerick, Clare, Tipperary, Waterford and Kilkenny. CUH functions as a regional centre for secondary and tertiary care for the catchment population of 550,000 served by the HSE Southern area and a supra-regional centre for a total a population of 1.1 million.

In 2014 CUH had 65,000 ED presentations 33,000 inpatient discharges, 82,000 day case discharges and 200,000 outpatient attendances. In 2014 CUH Maternity service (CUMH) had 14,800 inpatient discharges, 4,000 day case discharges and 88,850 OPD attendances and 8,000 births annually, making it one of the busiest maternity hospitals in the country.



CUH has 850 beds and the maternity service has 198 beds and has undergone significant change in respect of the service configuration as a result of the implementation of strategies such as the reconfiguration programme, the cancer strategy and the implementation of the small hospitals framework. As a direct consequence of these changes both scheduled and unscheduled activity has increased in the Hospital and managing these, at times conflicting demands, is a constant challenge.

The hospital currently employs 4,000 staff (3,555 WTE) of multiple professions and is the primary teaching hospital for the Faculty of Health and Science in University College Cork.

CUH Scheduled Care Governance Programme

The Minister for Health has prioritised an improvement in performance relating to the delivery of scheduled care in Ireland which requires that hospitals have demand and capacity for scheduled care in balance and that there is demonstrable equity in the management of waiting lists.

Achieving health services access targets for improving scheduled care are dependent on improving patient flow and waiting times. All hospitals are obliged to improve the management processes for scheduled care to meet waiting time targets. As outlined in the 2015 HSE Service Plan, there is a requirement to reduce waiting times for scheduled and unscheduled care with priority for those waiting the longest in the context of adherence to National Treatment Purchase Fund (NTPF) guidelines in relation to scheduling of patients for surgery.

In 2013 a Scheduled Care Governance Group was established chaired by the CEO to oversee the implementation of the HSE policy on the management of inpatient and day-case waiting lists. The Group leads the implementation of processes such that all staff follow an agreed national minimum standard for the management of waiting lists for scheduled care, regardless of whether patients are active, suspended, scheduled, public or private.

The Scheduled Care Governance Groups' critical function is to ensure appropriate governance is exercised in the management of the inpatient and day case waiting lists and to ensure that there is complete, accurate, validated patient information for inpatient (IPDC) and outpatient (OP) waiting lists and that CUH has implemented key internal management practices to manage demand, capacity and productivity efficiently.



Scheduled Care Work Programme

There are a significant number of change initiatives that were implemented which resulted in an improvement in the delivery of Scheduled Care including:

- (1) Compliance with national policy on the management of waiting lists;
- (2) Implementation of measures to achieve waiting list targets in a sustainable way;
- (3) Implementation of recommendations contained in the Surgical Care Programme to improve patient experience;
- (4) Supporting the Surgical Directorate and the Theatre Users Group to improve efficiency in the management of patients through theatre, recovery and the ward;
- (5) Implementation of a Surgical Assessment Unit to support the Emergency Department;
- (6) Implementation of Day of Surgery Assessment Unit and Pre-Admission Assessment Unit;
- (7) Implementation of a theatre management IT system to improve efficiency in theatre and to support Activity Based Funding;
- (8) Reorganisation of the Bed Management Department to ensure that all admissions are managed through a centralised booking system;
- (9) Implementation of an Electronic Booking System.

Compliance with National Policy on the Management of Waiting Lists

In order to ensure alignment between the management of waiting lists, theatre lists and hospital admissions a centralised Bed Management Office was established in 2013. The EMB implemented a set of policies that reflect national policy in relation to chronological booking and centralised bed booking, to ensure there is transparency and a singular pathway for elective cases

There is regular management oversight of the implementation of national policy through a structured monthly meeting of the multi-disciplinary Scheduled Care Group.

Management of Inpatient and Day Case Waiting Lists

In addition to the initiatives relating to the implementation of a national policy for the management of waiting lists, the CUH Group has put in place processes to maximise the support that level 2 hospitals (Mallow General Hospital and Bantry General Hospital) can provide. At a corporate level the EMB has restructured elective operating sessions such that any spare capacity in either of the band 2 hospitals is maximised and that elective surgical cases appropriate to those hospitals are accommodated therein.

At this time there are 11 CUH Consultants with visiting sessions in both band 2 Hospitals and the utilisation of this capacity has freed up internal capacity for cancer and trauma care in Cork University Hospital. This is in line with the report on the reconfiguration of services and the Small Hospitals Framework.

The EMB has consistently sought to put in place sustainable solutions for the management of elective surgical activity with a view to optimal use of resources internally in the CUH Group and in the wider South/South West Hospital Group.

In relation to the June 2015 targets for the Inpatient and Day cases, CUH was fully compliant and is working with the relevant stakeholders to achieve the December target of no patient waiting great than 15 months. Table I provides the status of the December 2015 potential breaches as of 2nd October 2015.

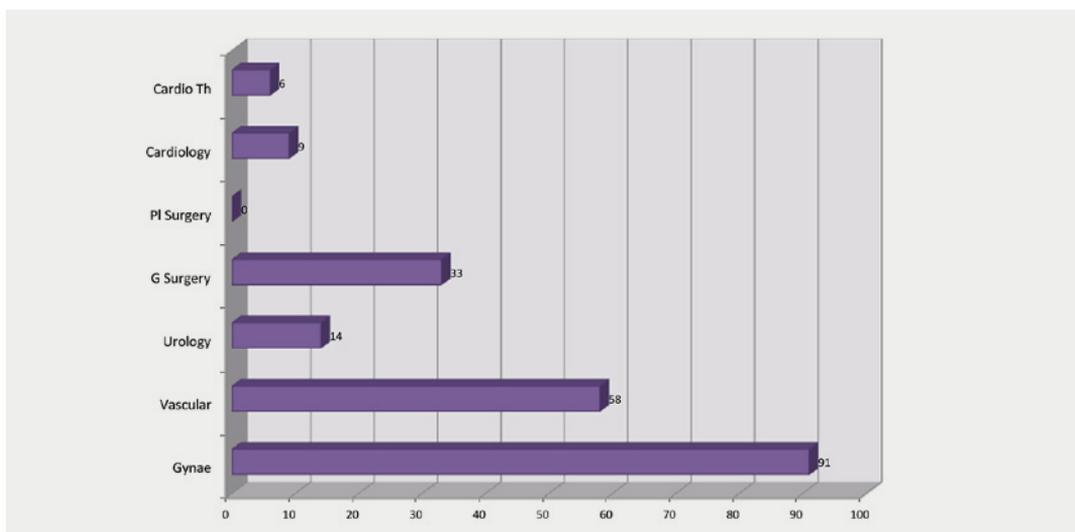


Table 1: Status of the potential breaches as of 2nd October 2015

National Clinical Programme in Surgery

The National Clinical Programmes commenced in 2012 and represent a strategic initiative between the Health Service Executive’s Quality and Clinical Care Directorate and the various post-graduate training bodies. The aim is to design and implement change initiatives to improve and standardise the quality of care and access for all patients.

The EMB is committed to the full implementation of the Clinical Care Programme in Surgery and it is clear that such implementation will bring significant benefits to the overall performance of the hospital and to patient’s experience.

To oversee the implementation of the Programme, the EMB established a governance structure overseen by the Surgical Directorate and developed a comprehensive work programme that is outlined in a Quality Improvement Plan.

The Hospital was identified as an exemplar site for the implementation of the Programme and this has been supported through the multidisciplinary approach adopted by the staff involved and their willingness to embrace change. In addition the Hospital prioritised capital investment in key infrastructural projects including;

- (i) Provision of a dedicated acute surgical ward incorporating a 6 bed surgical assessment unit, 6 surgical day beds and 10 inpatient beds;
- (ii) Construction of a pre – admission assessment unit;
- (iii) Construction of a day of surgery admission unit (DOSA);
- (iv) Allocation and staffing of a dedicated emergency theatre
- (v) Provision of a second Orthopaedic trauma theatre.

These investments in infrastructure have provided an environment in which significant changes have been made in patient flow improving efficiency and the patient experience.

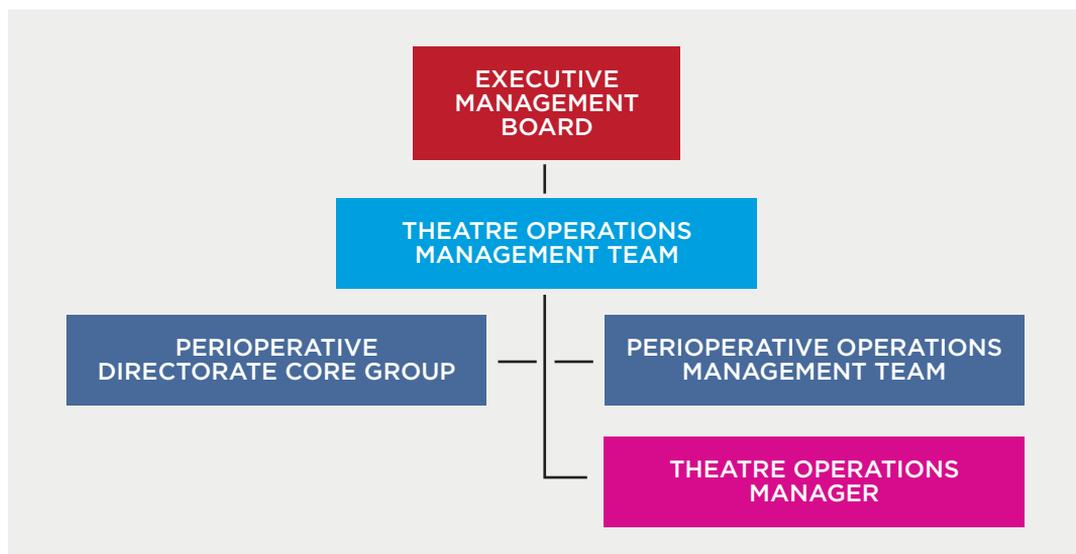


Table 2: Governance Structure

Theatre Management - Electronic Theatre Scheduling System

The optimal management of highly specialised resources in the theatre complex requires that managers have available to them timely, accurate and comprehensive management information to support decision making and to provide direction for theatre services. The EMB recognising the requirement to have such a system in place established a working group to oversee the development of an Electronic Theatre Scheduling System.

The Hospital is committed to implementing Lean and Six Sigma principles to improve the efficiency of services and to minimise redundancies therein. To maximise the deliverables from the implementation of the Electronic Theatre Scheduling system it was necessary to undertake Lean & Six Sigma Processes to identify other steps in the pathway that required to be streamlined.

Based on the outcomes from the Lean & Six Sigma Processes a theatre management information system was implemented in 2014. This represented a large change in work practices and processes but now provides a suite of management reports that allow the governance group to manage resources optimally. The following are a number of the improvement realised following the implementation of the system:

- Structured approach is now in place for the notification of Consultant leave so that scheduling of cases and theatre capacity can be managed to its maximum.
- The utilisation of sessions and a theatre calendar with the objective of enabling anticipated structural improvements
- The creation of a centralised Bed Booking function
- The implementation of an electronic theatre list that improves communication between wards and theatre.
- Completion of an electronic bed booking pilot project.
- The alignment of theatre access as per activity
- The management of rolling theatre closures
- The implementation of the National Inpatient and Day Case Management Policy.

The Productive Operating Theatre (TPOT)

The Productive Operating Theatre is a comprehensive improvement initiative designed to enable hospitals to improve patient experiences and outcomes by pursuing three main objectives:

- increase safety and reliability of care
- effective teamwork and improved staff morale
- value and efficiency.

Implementing the TPOT programme will provide the hospital with an opportunity to improve the quality and safety of surgical services through Quality Improvement (QI) methodologies and effective team-working.



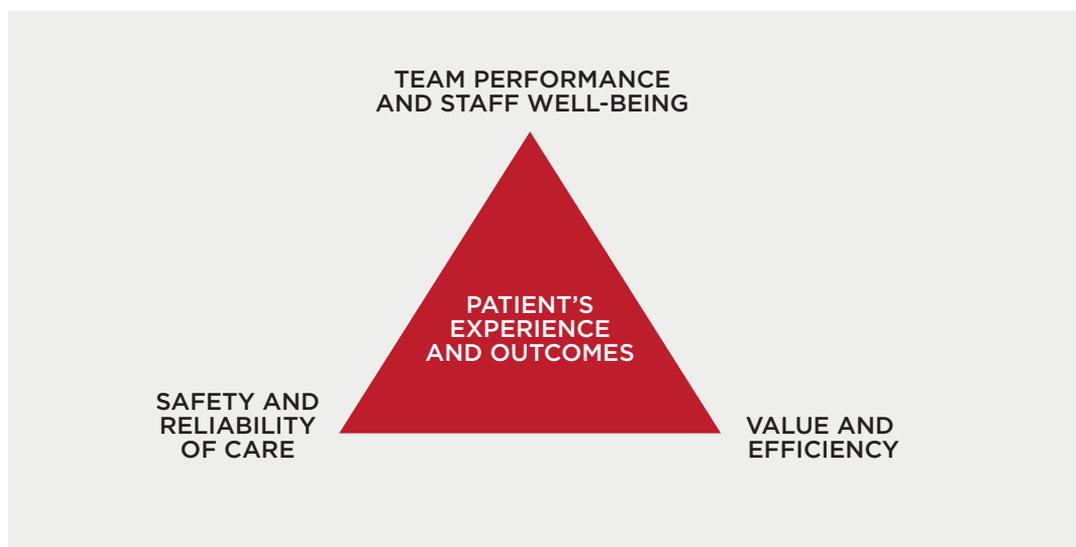


Table 3: The Productive Operating Theatre Model

Cost containment measures and greater safety coupled with an increased demand for healthcare services are well-established drivers for change and improvement. External factors such as new treatment modalities and revised international norms and standards must also be observed. These factors all impact on work processes and systems within the operating theatre environment.

CUH has commenced the process of implementing TPOT and is presently signing off the criteria for Participating Acute Hospitals undertaking the TPOT Quality Improvement (QI) initiative.

Listed hereunder are the benefits realised to date from the implementation of the programme:

- Reduction in number of theatre nurses on call from 11 WTE per night to 8WTE per night;
- Opening of in hours emergency theatre in November 2011-initial call savings approximately €85,000 - €90,000;
- Installation of computers in in each theatre;
- iPMS installed l in theatres and data inputted by staff. Data being captured on excel spread sheet in Theatre 9, Emergency Theatre and orthopaedic theatre;
- Installation of interactive white board in theatre recovery facilitation real time information for staff;
- Twice daily meetings in theatre with CNM3 and CNM or deputy of each theatre to ensure communication of any issues related to theatre flow;
- €305,000 saved with introduction of customized procedure packs;
- €15,000 saved on sutures and other inventory savings were made and this is an on-going project in theatre with streaming of inventory;
- On-going work in each theatre aiming to standardise areas;
- 5S project in theatre 9 facilitated the organisation of a minor ops room for local anaesthetics;

- Improved patient pathways with DOSA and Pre-admission opening, staggered admissions for patients-Increase in WTE to support this, plus full time administration support;
- Further improvement between DOSA and Theatre with the amalgamation of theatre reception and DOSA;
- Standardisation of patient documentation- inpatient and day case patients;
- Change in opening times of admissions from 7.30am to 7am as a result of project work and involving all relevant departments;
- Reorganisation of theatre stores and creating better standard and flow of sterile instrumentation packs;
- Lean education – Staff education in green belt, black belt and yellow belts – improvement projects undertaken by staff while undertaking these courses;
- Walking patient to theatre and now where feasible walking patients directly into theatre- more efficient;
- Improved theatre start times due to improved pathways;
- Reduction in Intra Operative Interval (IOI) by 10 min;
- Electronic schedule (always available);
- Kanban introduced-cost of stock to be removed from pilot Savings in stock issues in pilot theatre Theatre (based on average cost price);
- Cabinet and 5S inventory savings;
- Standard work practice for all medical secretaries;
- Greater visibility across the different functions.

The EMB is mindful of the resources expended in theatre and information from the theatre management system will be critical in supporting the implementation of Activity Based Funding.





Surgical Assessment Unit

The EMB continues to implement change initiatives that support overall the performance of the hospital. In this regard the opening of the Surgical Assessment Unit which streams patients that present at the Emergency Department who need surgical assessment has the potential to significantly improve the performance of the Emergency Department in respect of PET times and patient flow.

This 5 bed unit is now in the process of being commissioned and when fully operational will as outlined above have a positive effect on patient flow.

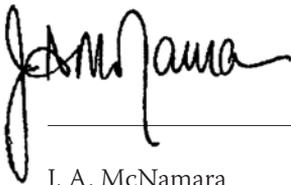
Outpatient Services

The HSE has determined that optimisation in the delivery of outpatient services is a key priority for the organisation and in 2010 the Executive Management Board at Cork University Hospital established a steering group, chaired by the CEO to provide leadership in this area. The steering group meets on a monthly basis and is representative of various stakeholders involved in the delivery of outpatient services. The hospital sees approximately 250,000 outpatients each year and works within the framework of the national guidelines for the management of outpatient services. The key priorities for the group are:

- Identification of capacity and opportunities for optimisation in the functioning of the Outpatients Department;
- Implementation of systems improvement in the delivery of Outpatient services;
- Achievement of improvements in planning processes and productivity;
- Reduction in the non-attendance rate to 10% as determined by the HSE;
- Development of a model for managing the financial and other resources used by the Department;
- Management of systemic problems that may arise in the Department and resolution of contentious issues;
- Re-design processes to simplify the system using available management techniques;
- Development of a quality programme for outpatient services.

The following are examples of specific change initiatives that have been implemented in respect of the Outpatient service:

- Restructuring of clinic appointments to allow for timed appointments;
- Reorganisation of schedules to provide a consultant led speciality service at the outpatient clinic;
- Reorganisation of clinical profiles by new and return ratio to meet the targets set out in the national waiting list targets;
- Continuous monitoring of the start and finishing times of clinics to maximise capacity;
- Monthly review of clinic Did Not Attend (DNA) rates each month;
- Introduction of Physiotherapy led clinics in the Orthopaedics and Neurosurgery specialties resulting in earlier access for patients;
- Introduction of GP sessions in the outpatient clinics to maximise the number of patients reviewed at each clinic and to develop closer links with GP's and community services.



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Chief Executive Officer
Cork University Hospital Group

October 2015

CORK UNIVERSITY HOSPITAL
SCHEDULED CARE GOVERNANCE PROGRAMME

KEY ENABLERS – INPATIENT AND DAY CASE SERVICE

GOVERNANCE

- Scheduled Care Governance Group chaired by CEO (established 2013)
- Theatre Governance Group
- Perioperative Directorate Core Group
- Perioperative Operations Management Team
- Theatre Operations Manager
- National Surgery Clinical Care Programmes
- Quality Improvement Plan
- Implementation of single governance structure for theatres
- LOS monitoring by condition, by team by consultant.

SUPPORTS IN PLACE

- Day of Surgery Admission (DOSA)
- Dedicate Surgical Ward
- The Productive Operating Theatre
- Pre – admission assessment
- Dedicated Emergency Theatre
- Dedicated Trauma theatre
- Surgical Assessment Unit
- Appointment of Consultant Ortho geriatrician to facilitate patient flow for post trauma patients between CUH and the SIVUH
- Established Centralised Bed Booking Office – Bed Manager controls access to beds
- Electronic Bed Booking System
- Electronic Theatre Scheduling System
- Implementation of Electronic Theatre Lists
- Theatre scheduling/management of overruns - daily monitorin
- Rotation of nursing staff on campus to create greater economies of scale and efficiencies
- Opening of Hybrid Laboratory
- Implementation of Safe Site Surgery Protocol

- Implementation of EWTD Maximisation Day beds – turnaround of two patients per day
- Appointment of Clinical Facilitator for Theatres
- Increased uptake of Theatre sessions at MGH
- Additional Outpatient & Theatre capacity at BGH
- Participation in weekly cost containment meetings
- Participation in weekly hospital cost containment meetings.

MANAGEMENT INFORMATION FLOWS

Use of NOCA data to inform performance and audit

Collation of data in relation to
Turnaround Times – Start – Finish time of list
Time to Anaesthesia

Theatre Management Reports

Implementation of cost accounting process in theatres

TRAINING AND DEVELOPMENT

Lean Management Training for staff

Introduction of Anaesthetic Nurse training course

Finalising the commencement of a Foundation Course for theatre nurses within the South-South West Hospital Group.

KEY ENABLERS – OUTPATIENT SERVICE

GOVERNANCE

Outpatient Service Management Group chaired by CEO
(established 2013)

Monthly meeting to review performance

Liaison meetings with the South-South West Hospital Group Lead
for Scheduled Care in relation to waiting list management and
national KPI's

Direct Liaison with Clinical Directorates and Clinical Leads.

SUPPORTS IN PLACE

National Outpatient Improvement Programme

Centralised Referral and Appointment Management Office

Restructure of consultant OPD clinics by speciality to provide
dedicated consulting rooms for the Neurology service

Introduction of generic waiting lists – commenced in Neurology,
Rheumatology, Paediatric Neurology and Cardiology

Maximisation of capacity across the hospital group – access to OPD
capacity in Mallow General Hospital and Bantry General Hospital

Management Reporting System – detailed management reports on
identified KPI's

Aligning Consultant theatre lists with OPD lists to maximise capacity

Rolling validation of waiting lists to ensure accuracy

Introduction of 'out of hours' clinics as part of the waiting list
management in line with national targets

Introduction of Physiotherapy led clinics – Rheumatology and
Neurosurgery

'See and Treat' clinics for Plastic Surgery patients - 'out of hours' clinics

Commenced the introduction of GP sessions in the OPD clinics to
maximise patient throughput.

