



## 3<sup>rd</sup> Annual Quality & Patient Safety Conference

### Improving the Healthcare Journey for Patients & Staff



#### TITLE

## Impact of a novel "Outreach Pre-operative Assessment" service for Neurosurgery patients at Beaumont Hospital

#### SUBMITTED BY

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#### ABSTRACT

##### INTRODUCTION

Neurosurgery patient referrals occur through different clinical pathways. A large cohort of patients with newly diagnosed brain tumours are admitted as urgent transfers to Beaumont after emergency admission to referring hospitals nationwide. Due to constraints on bed access in this busy national service patients were being transferred to Beaumont late on the evening before surgery and first coming to the attention of Anaesthesia on day of surgery. Frequently no specific pre-operative medical work-up had been completed. Delays and deferrals of surgery were occurring frequently due to lack of availability of essential pre-operative patient information, investigation results and / or inadequate medical optimisation.

##### METHODOLOGY

Model for Improvement (MFI) methodology was utilised as per Institute for Healthcare Improvement.

##### AIM

Primary Aim: To increase the percentage of inter-hospital-transfer Neurosurgical patients who have completed Anaesthesia pre-operative assessment prior to day of surgery from 5% (October 2019) to 100%. Secondary aims additionally identified.

##### CHANGE IMPLEMENTED

- New "Neurosurgery Outreach Pre-operative Assessment Service"- NeurO-PAS - conceived / established.
- New homepage link established to guide referring hospital staff through the process.
- Patient medical details, investigation results, blood results from referring hospital accessed and reviewed in Beaumont prior to patient transfer.

##### MEASUREMENT

- Number / Percentage of all urgent Neurosurgery transfers that NeurO-PAS service assessed
- Impact on cancellations
- Number / percentage of NeurO-PAS-assessed patients cancelled on day-of-surgery
- Cost savings achieved
- Bed days saved

##### RESULTS

- Period of service 6.5 months
- Number patients NeurO-PAS assessed 194
- % Total urgent brain-tumour-transfers assessed 92%
- Number NeurO-PAS patients cancelled day-of-surgery for medical reason 2 %
- NeurO-PAS patients cancelled day of surgery 1%
- Cost savings: Total cost of pre-operative tests arranged by, or results sourced by NeurO-PAS in referring hospitals (and therefore not necessary to duplicate on admission to Beaumont): €58,655
- Cost savings arising from MRI protocol dissemination: €9,250
- Bed days saved over 6.5 month period of service: 72

##### VALUE

###### Patient journey:

Most significant impact (as shown in results and cited by staff) - Day-of-surgery cancellations minimised

###### Financial:

Institutional cost savings significant - estimated €68,000 over 6.5 month period

###### Laboratory services:

Duplication of testing minimised - reduced demand on service / increased access for other patients

###### Potential:

Further reduction in Neurosurgery pre-operative length-of-stay achievable

##### SUSTAINMENT

- Data on cost savings and efficiencies achieved has formed the basis for a business case for recruitment of permanent staff to service.
- NeurO-PAS service now employs 1 full time permanent staff nurse + 1 part-time physician associate thus ensuring improvements and efficiencies are sustained.

##### ADDITIONAL INFORMATION

Our outreach model facilitates "just-in-time" inter-hospital patient transfer, reduced tertiary centre length-of-stay, minimal duplication of testing and could be disseminated.