

## 2007 NSW Health Awards Entry

*Complete under the following headings and use the italics as a guide.  
Remove the italics when completed.*

<b>Entry Title (50 characters or less)</b>
Fast Track Colorectal Surgery – A Regional Base Hospital Experience
<b>Abstract (120 Words)</b>
<p>Fast track colorectal surgery programs are multi-modal rehabilitation approach to patients undergoing colorectal surgery. The aim of fast track colorectal surgery programs is to reduce the patients surgical stress response, optimise pain relief and support early mobilisation and oral nutrition through the introduction of a range of evidence based interventions (Jackobsen et al 2006).</p> <p>Since the implementation of the fast-track colorectal resection protocol there have been 24 patients who have undergone the fast track colorectal surgery approach. The outcomes achieved include a reduction in median length of stay from 10 days to 6 days with nil adverse events related to the fast track protocol. A patient satisfaction survey undertaken 28 days post surgery has revealed that there was a high level of satisfaction with the 'fast track approach' to colorectal surgery including education received pre-operatively, pain management post operatively and level of fatigue.</p>
<b>Aim (30 Words)</b>
To implement evidence based clinical practices to enhance post-operative recovery for patients undergoing colorectal resections in a regional base hospital will result in a 50% reduction in LOS and provide a better patient experience within 12 months.
<b><i>Nature of the Problem (100 words)</i></b>
One of the surgeons attended a conference in April 2005 in the United Kingdom where he heard a presentation on the experiences of a hospital implementing 'Fast Track Surgery'. This presentation prompted the surgeon to review his current practices with colorectal surgery where patients are in hospital for 8 to 10 days, have a large incision, NBM for several days with slow reintroduction of diet and fluids, bowel preparation pre-operatively which causes dehydration and stress and a reliance on opioid analgesia.
<b>Extent of the problem (150 words)</b>
<p>A review of the literature was undertaken to determine the quality of the evidence for the interventions and the experiences and outcomes of other hospitals who had implemented the fast track approach.</p> <p>A comparison of current practice with the evidence based fast track approach revealed that current practice was not based on the best available evidence. A pathway for</p>

colorectal surgery did not exist and there was a lack of a standardised evidence based approach to the management of the patient undergoing colorectal surgery. A review of the 85 patients who underwent colorectal surgery in the financial year 2004/2005 the average length of stay was 12.1 days (Median 10 days). The implementation of the fast track approach could potentially result in a saving of 688-773 bed days per annum if LOS was reduced to 3-4 days.

### **Strategic importance (100 words)**

In recent years there has been much attention to health care costs, length of stays, timely access to elective surgical services and better patient experiences. The Fast Track colorectal protocol implements the best available evidence for the management of colorectal surgery which has demonstrated a reduced length of stay (LOS) for patients and a better experience for patients. The project supports the Area Health Services Surgical Services Plan due to the substantial reduction in length of stay and the NSW Health Surgical Waiting List Targets.

### **Planning and implementing solutions (300 words)**

The successful implementation of fast track colorectal surgery was attributed to the multidisciplinary team's willingness to embrace the fast track colorectal surgery approach. The team consisted of surgeons, anaesthetists, physiotherapists, dieticians and nursing staff from pre-admissions, operating theatres, recovery, surgical unit and discharge planners and was well supported by hospital executive.

The interventions that were implemented include the following:

- Extensive pre-operative education
- Carbohydrate loading 2 hours pre-operatively
- Fasting 2 hours pre-operatively
- Transverse incision
- Nil naso-gastric tube or abdominal drains
- Maintain intra-operative normothermia
- Patient controlled epidural analgesia (PCEA) for pain management
- Early mobilisation - 6 hours post surgery
- Early resumption of diet
- Post-operative protein drinks

The fast track approach was supported by the development of a patient education brochure and clinical pathway. Extensive preoperative education in advance of the procedure was identified in the literature as crucial for enhancing postoperative rehabilitation by ensuring patients are aware of the fast track protocol which assists in reducing patients' level of anxiety, need for pain relief and provides a basis for working in collaboration with health care personnel.

The implementation process was facilitated by a project officer who undertook:

- Development of the patient education brochure
- Progressed the development of the clinical pathway
- Provided education to staff either as a group or one-on-one
- Followed patients through their inpatient journey and fine-tuned the fast track approach during the first three months of implementing the protocol
- Developed the patient satisfaction tool and process for conducting the surveys 28

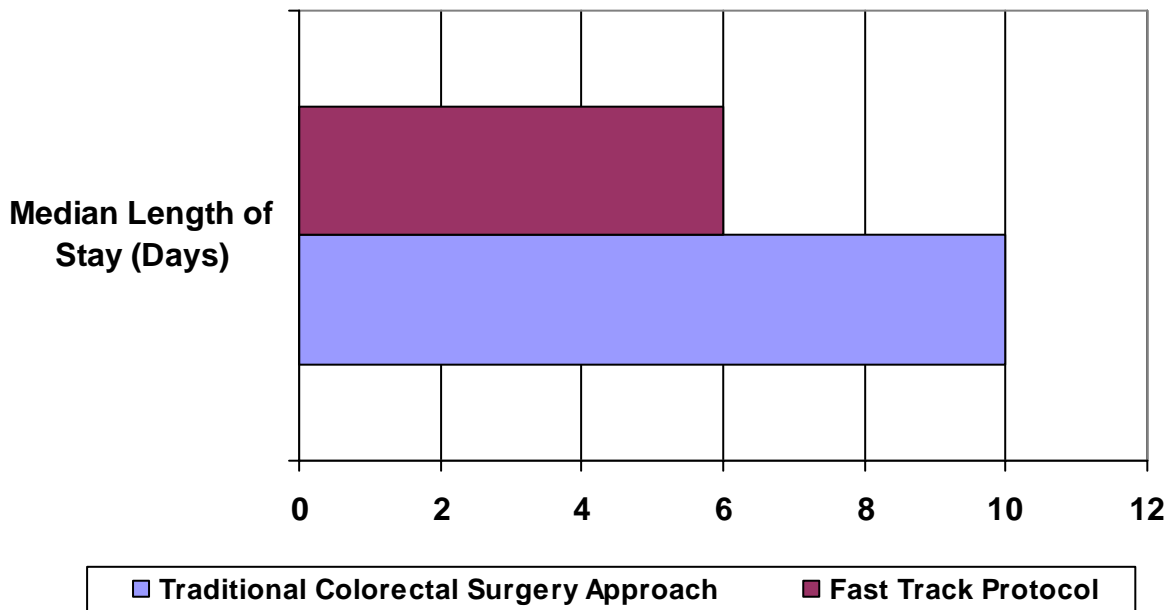
days post discharge

This pilot has been endorsed by the North Coast Area Health Service Ethics Committee.

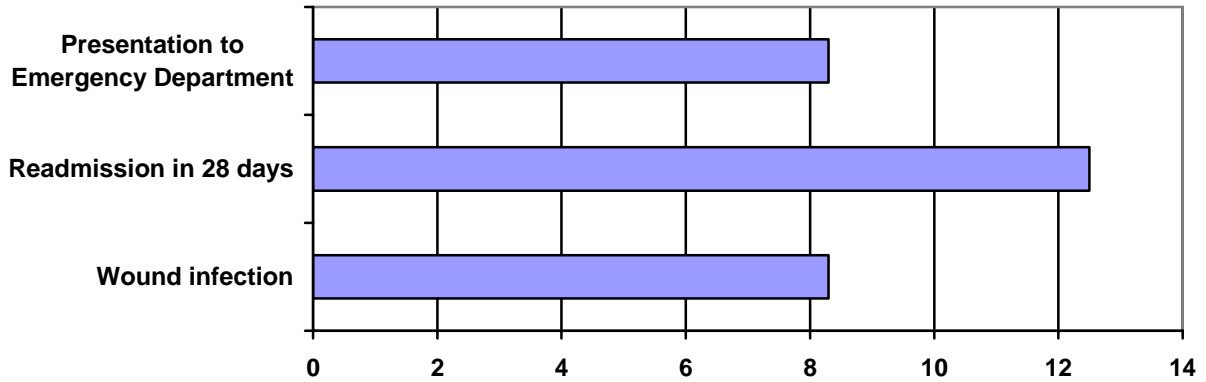
**Outcomes and Evaluation (200 words)**

The patients who underwent colorectal surgery using the Fast Track protocol demonstrated a significant reduction in length of stay, earlier resumption of normal activities without any increased need for support after discharged compared with patients who underwent colorectal surgery using the 'traditional' approach. The median length of stay was reduced from 10 to 6 days as demonstrated in Graph 1. This equates to a notional saving of 96 bed days for the 24 patients in the pilot. Graph 2 demonstrates the post-operative outcomes for patients undergoing the Fast Track Protocol such as presentation to the Emergency Department, readmission in 28 days and post-operative wound infection.

Graph 1: Comparison of Median Length of Stay for Fast Track Colorectal Surgery and Traditional Approach to Colorectal Surgery

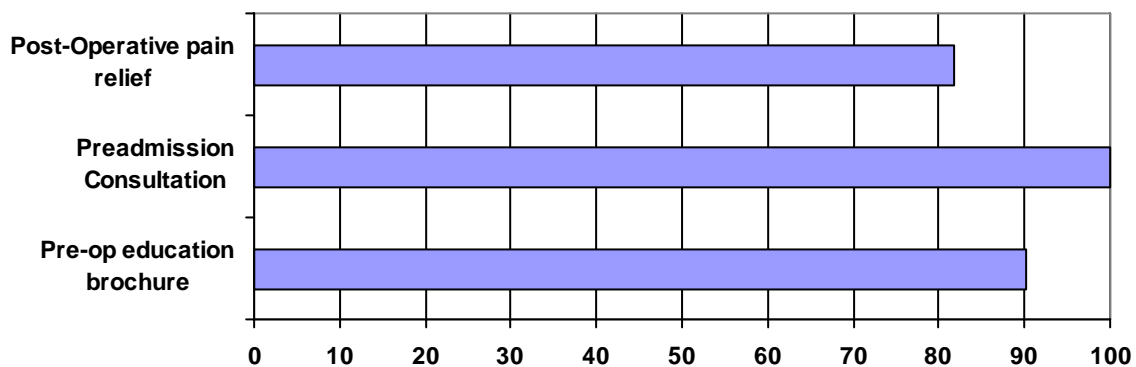


Graph 2: Post Operative Outcomes - 28 days post surgery (%)



Patients were followed up 28 days post discharge to determine their level of satisfaction with all aspects of their surgical journey including pain management, fatigue levels, mobility levels, readmission to hospital and any aspects of care which could have been improved. On the whole patients had a high level of satisfaction whilst in hospital and with their post operative recovery. Graph 3 demonstrates the patient's level of satisfaction with the information provided in the education brochure, opportunity to ask questions and seek clarification at Preadmissions and post-operative pain management.

Graph 3: Patient Satisfaction Survey Levels (%)



The implementation of the Fast Track colorectal protocol has reduced variation in clinical practice, enhanced patient recovery and reduced length of stay without an increased need for community based services to support these patients post discharge in the community. The reduction in length of stay results in the hospital being more efficient in the use of surgical beds ensuring that consumers have timely access to surgical services.

**Sustaining change (100 words)**

The Fast Track colorectal surgery protocol has been in place for 11 months and is moving from a pilot phase to being part of the way we do things at Coffs Harbour Health Campus. The general surgeons who perform colorectal surgery who were not involved in the pilot are now eagerly taking up the opportunity to use the Fast Track protocol which will ensure ongoing sustainability.

The development of the Fast Track Colorectal Surgery Pathway on Teleforms © has supported the ongoing collection of data to enable monitoring of variances from the

pathway and feedback to clinicians to support ongoing improvement.

### Future Scope (100 words)

The implementation of the Fast Track colorectal surgery protocol at Coffs Harbour Health Campus has significantly reduced the length of stay for this group of patients whilst having nil increase in readmission rates or adverse events. The initial pilot had been confined to two general surgeons this is now being expanded to the remaining general surgeons who perform colorectal surgery. These surgeons have maintained a keen interest in the Fast Track colorectal surgery protocol throughout the pilot and are keen to commence with the protocol.

The Fast Track colorectal surgery protocol has attracted interest from other facilities within the North Coast Area Health Service and is equally transferable to any facility that performs colorectal surgery across Australia.

### REFERENCES

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**Total: 1200 words** (including references but excluding reference list and entry title)