Hospital Patient Flow and NEST

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Patient Flow & NEST

Many strategies to assist with the flow of patients through NSW Hospitals

- National Emergency Access Targets (NEAT)
- National Elective Surgery Targets (NEST)
- Patient Flow Systems and Patient Flow Portal
- Hospital in the Home
- Community packages
- ComPacks
Patient Flow & NEST

What affects a Hospital’s Patient Flow?

• Increasing presentations to ED’s across NSW
ED Attendances across all NSW Hospitals

Long period of no real growth followed by a 24% increase from 2005

Source = NSW Health Annual Report:: Total ED Attendances by Year 2002-03 to 2011-12
Patient Flow & NEST

What affects a Hospital’s Patient Flow?

- Increased ED admissions
- Planned & Unplanned surgery
- Winter – sicker patient’s
Patient Flow & NEST

What affects a Hospital’s Patient Flow?

• Ageing population
• Longer length’s of admissions
• Discharge rates
Patient Flow & NEST

Knock on effect

- Admissions & overcrowding in ED
- Ambulance delays
- Delaying Medical and Surgical admissions
- Surging open beds
Patient Flow & NEST

Poor health outcomes for patients who stay longer than required in both

- Inpatient ward beds
- Emergency Department
Patient Flow & NEST

Organisational Strategy

• Utilise Predictive Tool via Patient Flow Flow Portal
Predictive Planning
Patient Flow Portal

- Capacity Demand planning 14 days ahead
- Identifies bed capacity deficits
- Earlier escalation
- Earlier intervention
Predictive Planning

The Data:

- We know there is actually little variation in:
  - ED presentations
  - ED admissions
  - Discharges

- The predictive tool collates:
  - Patients coming into the hospital
  - Patients exiting
  - Capacity to fit demand

- Uses:
  - Historical data
  - Current ED status
  - Expected EDO, DOSA, Surgical and Medical booked
  - Direct admissions
  - Projected discharges / EDT

Data is used to inform short and long term capacity planning:

- Calculate tipping points in the short and long term
- Analyse daily demand for each ward area – deliver a plan for required discharges each day.
- Analyse demand over the long term (e.g. identifying frequent outliers – does this service require extra capacity?)
- Manage predicted events – medical term change / public holidays / events
### Patient Flow Portal

#### Demand and Capacity: Prediction Mode

*Prediction data only applies to ED accessible wards*

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- **Predicted total beds AVAILABLE**
- **Predicted total beds REQUIRED**

### Bed Demand Status

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| Total ED accessible beds
| Notes | 150 | 149 | 147 | 145 | 145 | 147 | 149 | 149 | 149 | 147 | 145 | 145 | 147 | 149 |
| Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes | Notes |

**Notes:**
- Weekdays: Mondays to Fridays
- Predicated data for the week ending 12/02/13

**Last Refreshed:** 30-01-2013 10:26
Predictive Planning

Actions

• Discuss predictive plan with Hospital execs
  Awareness and shape of the organisation over the next 14 days

• **Review surgical bookings in advance**

• Bed containment

• Surge capacity when needed

• Review future staffing requirements
Patient Flow & NEST

How does Planned Surgery Influence patient flow?
Predictability of Emergency Trends

Emergency Surgery is predictable

“Planned” Surgery is not!

efficiency vs. non-emergency Surgical admissions

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000
Total separations for surgical procedures

Predictability of Emergency Trends

- Presentations are predictable
- Admissions are predictable

ED emergency attendances by week of year - NSW

ED emergency admissions by week of year

NSW Government Health
Booked Variation

• Is booked variation tipping the facility over the edge
• Variation in booked activity can be a driver for consistent capacity short falls
• Identification of trends
  – Develop action plans to manage problematic variation
## Patient Flow Portal

### Data Entry: Planned Admissions (Calvary Mater Newcastle)

| Projection Types                  | 21 Day Indicator | Indicators | Wed      | Thu      | Fri      | Sat      | Sun      | Mon      | Tue      | Wed      | Thu      | Fri      | Sat      | Sun      | Mon      | Tue      |
|-----------------------------------|------------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| * Booked Medical Overnight        | 1                | 5yr Indicator | 3        | 2        | 1        | 1        | 1        | 5        | 2        | 1        | 1        | 2        | 3        | 1        | 1        | 1        | 1        |
|                                   |                  | 3mnt Indicator | 2        | 1        | 1        | 2        | 3        | 1        | 2        | 1        | 1        | 1        | 3        | 1        |         |          |          |
|                                   |                  | Booked      | 0        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        |         |          |
| * Booked Surgical Overnight       | 4                | 5yr Indicator | 2        | 5        | 3        | 4        | 4        | 5        | 4        | 4        | 3        | 4        | 3        | 4        | 2        | 3        | 2        |
|                                   |                  | 3mnt Indicator | 3        | 3        | 2        | 4        | 2        | 3        | 3        | 3        | 2        | 4        | 2        |         |          |          |
|                                   |                  | Booked      | 4        | 3        | 3        | 0        | 0        | 9        | 1        | 8        | 5        | 1        | 0        | 0        | 8        | 4        | 1        |
| * EDO / 23hr patients requiring an inpatient bed | | Actual | 0 | | | | | | | | | | | | | | | |
| Booked EDO                        |                  |             | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |

**Notes**: * = must be entered for an accurate prediction.
Predictive Planning
Planned Surgery

• Allocate dates for surgery in PAS at least 2 to 4 weeks in advance.

• Be aware and understand your day to day variations in overnight bookings

• Reduce variation where possible
Variation Management

• Variation in practice affects LOS, errors, complaints, admission rates, readmission rates, off stretcher time, emergency access performance, diagnostic capacity, delays in consults, staff satisfaction.

• Questions to answer:
  – What can we control?
  – How differently do we have to do things?
  – What time frames are we looking at?

• Flattening the variation within a coordinated system leads to better outcomes.
Predictive Planning
Planned Surgery

• Gain access to the Patient Flow Portal
  - review the Predictive Tool – be informed!

• Surgery Models of care:
  - Extended Day Only / 23 Hour
  - High Volume Short Stay Surgery (HVSSS)
  - Emergency Surgery Models
“Patient Flow is everyone’s responsibility”
Patient Flow

Questions?