Reducing Respiratory Representations:

Stopping the Revolving Door

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Background: What we knew…

- **Respiratory Ward (Ward 2G) is a 28 bed ward, with surge capacity to 34.**
- **The winter period sees an increase in Respiratory patient presentations:**
  - **Summer 470 discharges vs Winter 746 discharges (2014)**
  - **Work load per specialist team increases from approximately 25 patients per day to 55 patients per day.**
- **The extra demand historically increases the clinical review time of patients, impeding patient flow and "back of house" capacity.**
- **In 2014 it was proposed that a nurse-led model for expedited discharge with specialised follow-up in the form of the Respiratory Chronic and Complex Care service would be the most appropriate strategy to accommodate this influx over the winter period:**
  - **facilitating early discharge - with follow up, education and support**
  - **prevent readmissions.**

Implementing the Program

- **In late 2014 an application for NaMo funding was sourced, $25,000.**
- **Mid March - June 2015 0.5FTE Chronic Outreach Nurse (CNS 2) appointed, extended to 1.0FTE over the Winter period. Supported by Staff Specialist, Registrar and CNC.**
- **PJB identified as the best multidisciplinary platform to identify high risk patients and refer to the program. Early discharge to be discussed with the MD Team, with follow-up by the Chronic Care Nurse arranged.**
- **Respiratory Clinic and Pulmonary Rehab is also a referral platform, particularly for patients with compliance or health knowledge/education issues.**
- **Commitment from Demand Management Unit to ensure reduced outliers of Respiratory patients (Right Patient in Right Place).**

Program functions

- **Target patients:**
  - **All patients with COPD or Chronic Asthma (+/- COPD)**
  - **All on Home oxygen or COPD patients on NIV/CPAP**
  - **Patients with Brochiectasis, patients with Pneumonia**
- **All patients whom are referred must have a documented Action Plan for their illness.**
- **Use of the PJB to identify patients who could be discharged 1-2 days earlier with follow-up processes in place**

Program functions

- **Prevent relapses and exacerbations of disease through education surrounding symptom and medication management (*e.g. puffer, energy conservation, oxygen caution, NIV)***
- **To prevent potential re-admissions by managing relapses in an out-of-hospital setting.**
- **To improve quality of life to respiratory patients *(COPD, Pulmonary Fibrosis etc)***
- **Link patient to other services (*e.g. GP, other Chronic Disease Programs)***

The Revolving Door…Mrs M

Background:

- 68 year old female
- Hx: COPD, Emphysema, HTN, AF
- Social Hx: Lives with son (recently moved in), helpful and supportive. Uses mobility aids, doesn't leave the house very often.
- Using oxygen concentrator

NOTE: No hospital encounters (inpatient or outpatient) to any facility in SWSLHD or SLHD before June 2014

The Revolving Door…Mrs M

- **From June 2014 – December 2014:**
  - **9 presentations, all via ED, all via Ambulance.**
  - **2 presentations in business hours, 7 out-of-hours.**
  - **All inpatient admissions, 7 to inpatient wards, 2 EMU.**
  - **Total ED LOS = 118hrs 14 mins; average 13hrs 7 mins per visit.**
  - **Total overnight bed days = 88 days; av 9.8 days per admission.**
  - **6 different Admitting Consultants provided care across admissions:**
    - **3 Respiratory**
    - **1 Rehabilitation**
    - **1 Emergency**
    - **1 Cardiology**
  - **1 stay in respite - 24 days (with Ambulance transfer back to ED)**
  - **2 ComPacks packages**

ComPacks

Emergency Physician

EMU

Ward 2G

Respite

Ward 2J

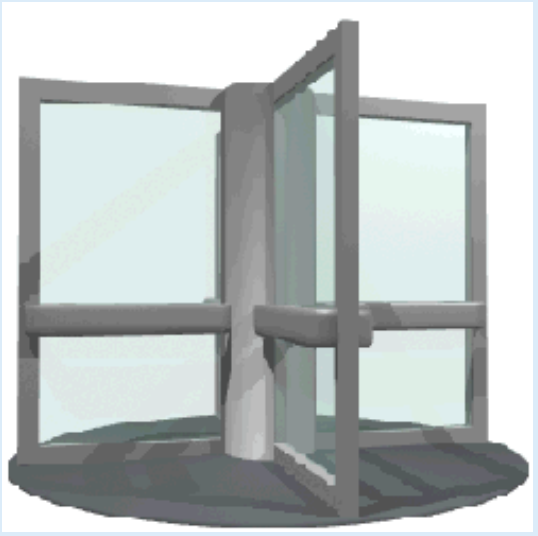
Respiratory Physician

Respiratory Physician

Ward 2A

EMU

Connecting Care



Physiotherapy

Ward 2G

Ward 3H

Ward 2G

Social Work

Ward 2G

Ward 2G

Respiratory Physician

ComPacks

Cardiologist

Emergency Physician

Ambulatory Care

Psychologist

Emergency Physician

Occupational Therapist

Rehabilitation Physician

Stopping the Revolving Door…Mrs M

- **First patient entered into the program due to high risk of readmissions in Winter, already being monitored through the outpatient clinic.**
- **HOME VISITS AND PHONE COACHING:**
  - **12/03/2015: First phone call attended to Mrs M**
  - **27/03/2015: First home visit attended (90 mins).**
  - **Patient educated re:**
    - **pathophysiology**
    - **triggers and management of COPD**
    - **exercises and energy conservation**
    - **use of puffers and specifically using them at home**
    - **Oxygen concentrator safety and maintaining the equipment**
    - **When to call Respiratory CNS, GP or Ambulance**

Stopping the Revolving Door…Mrs M

- **Weekly to fortnightly phone calls and home visits (when needed) to monitor Mrs M's progress, and continue education re: inhalers, breathing exercises and regular appointments with GP.**
- **GP also given copy of the Action Plan**
- **24/07/2015: phone call, patient C/O SOB, cough. Advised to follow COPD action plan (use PRN nebs) and see GP. Saw GP on same day and POABS Given. Patient recovered well and did not attended the hospital.**
- **Next respiratory inpatient admission was on 9/12/2015**
  - **Exactly 12 months since previous respiratory admission**
  - **Infective exacerbation of COPD requiring ICU admission**
  - **LOS 6 days**

Organisational Outcomes

For COPD DRGs (E65A, E65B):

- **There was a reduction in episodes of care across both DRGs**
  - **For Jan-Jun 2015, there was a 2.3% decrease compared to Jan-Jun 2014**
  - **For July-Dec 2015, there was a 5.5% reduction on Jul-Dec 2014.**
- **The average LOS also saw a reduction**
  - **Jan-Jun 2015 (compared to Jan-June 2014):**
    - **E65A (with complications) decreased by 1.61 days**
    - **E65B (without complications) decrease by 0.51 days.**
  - **July-December 2015 (compared to July-Dec 2014):**
    - **E65A decreased by 0.53 days**
    - **E65B decreased by 0.29 days**

Organisational Outcomes

- **Winter 2015 also saw a dramatic decrease of facility surge bed utilisation (adults) down from 1149 overnight bed days in surge beds in Winter 2014 down to 87 in Winter 2015 (=↓92.4%)**
- **Increased Respiratory clinic sessions in 2015 to provide an alternate non-inpatient pathway for exacerbation management and follow-up. An increase of 110 clinic visits in Jun-Aug 2015 than 2014 (↑37.5%).**

Future Scope: Where to from here?

- **To date 155 patients currently in program (a number of these have been identified as excellent candidates for the Telehealth project)**
- **Currently funded 0.5 FTE CNS2, potential for service growth if increased to 1.0 FTE:**
  - **Extend to Include ‘Front of House’ referral model.**
  - **Extend to include Ambulatory Care/MAU/HITH**
  - **Extend to support Connecting Care**