Whole of Hospital Program Master Class

Shifting the balance of care

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Overview of SESLHD

- SESLHD covers nine Local Government Areas from Sydney's CBD to the Royal National Park

- Population of over 830,000 people, which includes highly urbanised areas of eastern Sydney and southern Sydney

Overview of SESLHD

- Eight public hospitals including:

  – Two principal referral hospitals; Prince of Wales Hospital and St George Hospital

  – Two specialist referral hospitals; The Royal Hospital for Women and Sydney/Sydney Eye Hospital

  – One major metropolitan hospital; The Sutherland Hospital

  – Four emergency departments (EDs)

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Our Emergency Departments

- 174,299 presentations in 2014 across four EDs

- Located at Prince of Wales Hospital, St George Hospital, Sutherland Hospital, Sydney Hospital

- New St George Hospital Emergency Department opened in October, 2014

Current State

POWH Projected ED Presentations

**Prince of Wales Hospital
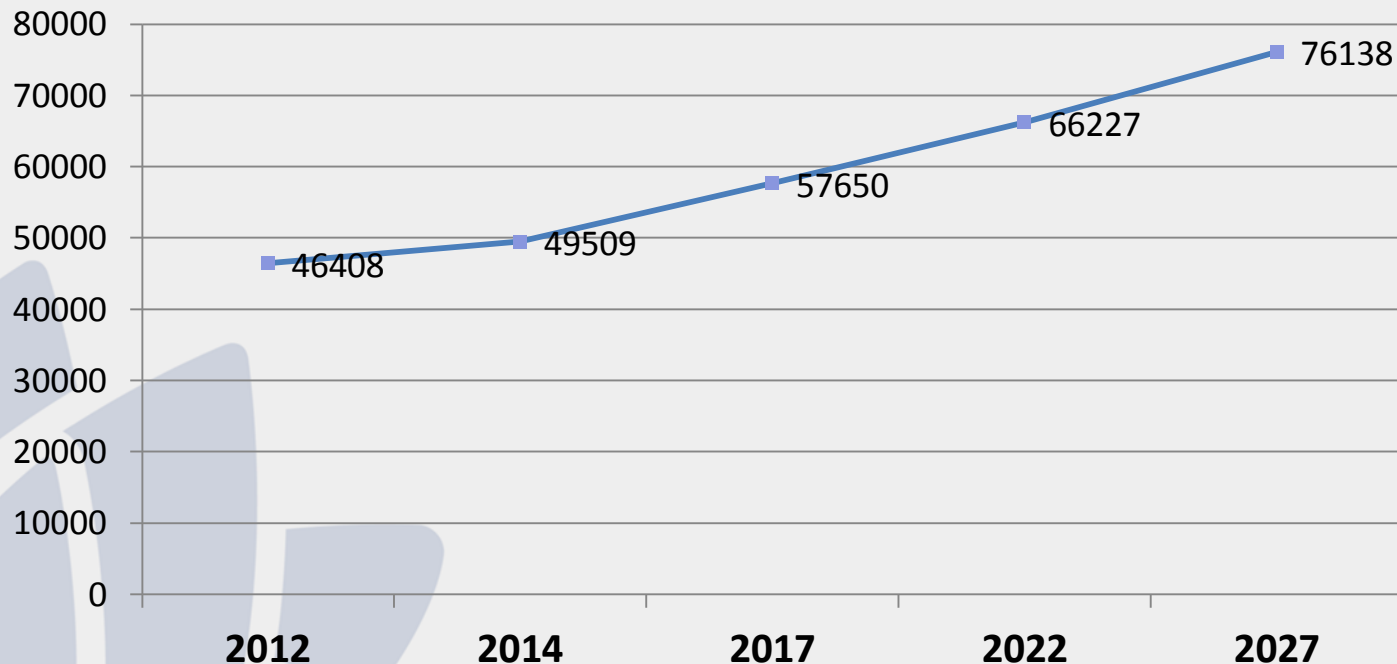Projected ED Presentations**
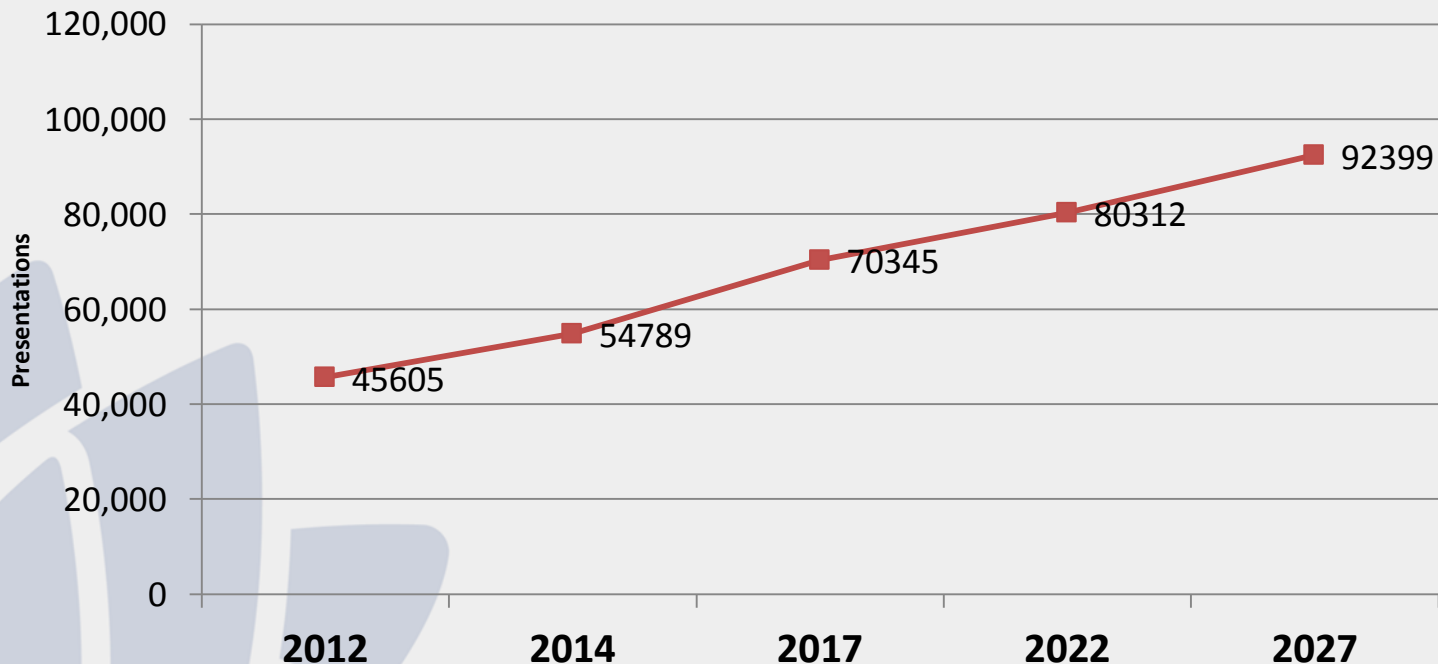
- 200% increase in 15 years

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TSH Projected ED Presentations
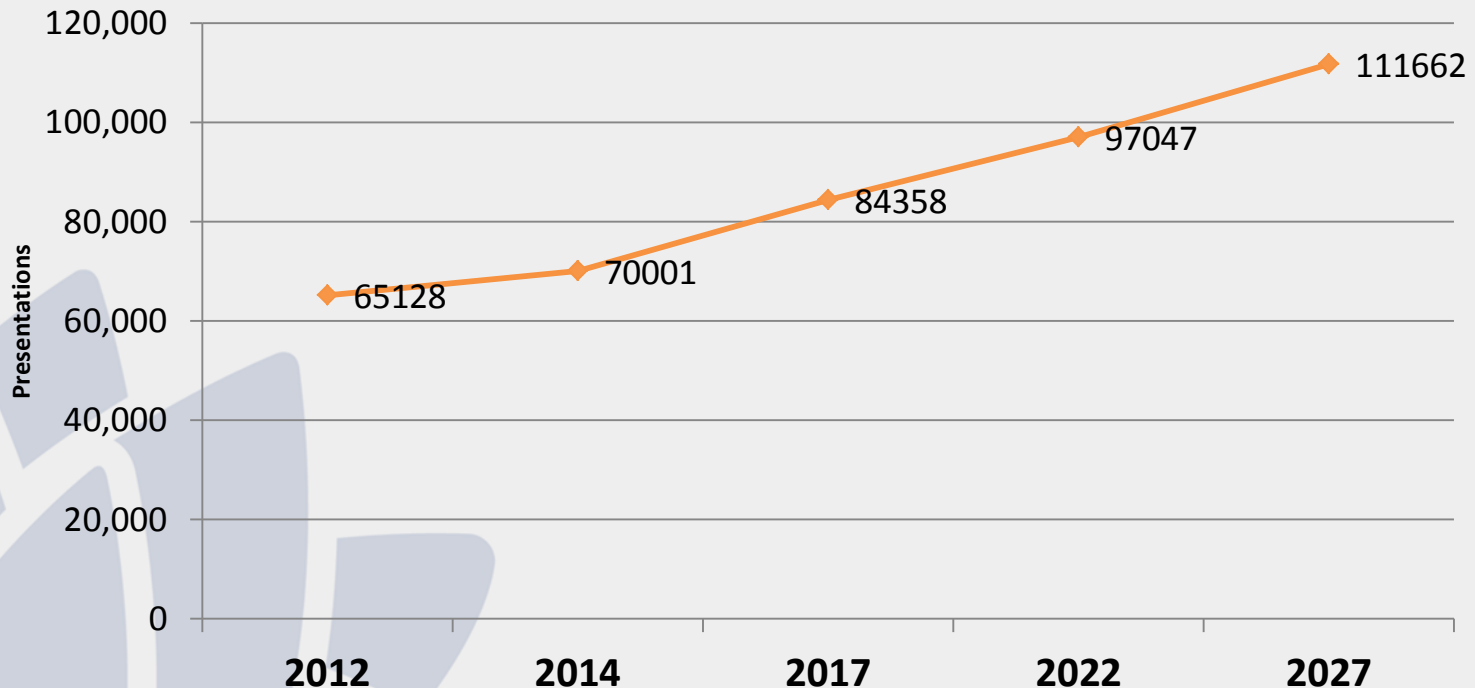
Sutherland Hospital
Projected ED Presentations

- 164% increase in 15 years

SGH Projected ED Presentations

**St George Hospital
Projected ED Presentations**

- 170% increase in 15 years

SGH Projected ED Presentations

Scenario builder

Site: St George Hospital
Role delineation level: 6

	Base case	Scenario 1	Scenario 2
Change in the annual volume - admitted patients (%)		20%	-10%
Change in the annual volume - non admitted patients (%)		20%	-10%
Length of stay (hrs) - admitted	5.70	6.18	5.00
Length of stay (hrs) - non-admitted	2.82	3.17	2.50
Grand Total (hrs)	3.80		

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Base case

	2012	2017	2022	2027	CAGR
Presentations - admitted (0-15 years)	1,750	2,955	3,604	4,295	6.2%
Presentations - admitted (16+ years)	20,896	26,782	32,626	39,984	4.4%
Presentations - admitted (total)	22,646	29,738	36,230	44,278	4.6%
Presentations - non admitted (0-15 years)	11,792	10,824	12,282	13,604	1.0%
Presentations - non admitted (16+ years)	30,690	43,796	48,535	53,780	3.8%
Presentations - non admitted (total)	42,482	54,620	60,817	67,384	3.1%
Presentations (Total)	65,128	84,358	97,047	111,662	3.7%
% admitted	35%	35%	37%	40%	
NWAU13 estimate	8,060	10,474	12,221	14,282	

Facility requirements (i.e. beds required)

	2012	2017	2022	2027
Resuscitation	4	6	6	7
Adult	30	41	48	56
Paediatric	6	7	8	9
Isolation room	2	2	2	2

Scenario 1

	2012	2017	2022	2027	CAGR
Presentations - admitted (0-15 years)	1,750	3,547	4,325	5,154	7.5%
Presentations - admitted (16+ years)	20,896	32,139	39,151	47,980	5.7%
Presentations - admitted (total)	22,646	35,685	43,476	53,134	5.9%
Presentations - non admitted (0-15 years)	11,792	12,989	14,738	16,325	2.2%
Presentations - non admitted (16+ years)	30,690	52,555	58,242	64,536	5.1%
Presentations - non admitted (total)	42,482	65,545	72,980	80,861	4.4%
Presentations (Total)	65,128	101,230	116,456	133,995	4.9%
% admitted	35%	35%	37%	40%	
NWAU13 estimate	8,060	12,569	14,666	17,139	
Resuscitation	4	7	8	9	
Adult	33	54	63	74	
Paediatric	7	9	11	12	
Isolation room	2	2	2	2	

Scenario 2

	2012	2017	2022	2027	CAGR
Presentations - admitted (0-15 years)	1,750	2,660	3,244	3,865	5.4%
Presentations - admitted (16+ years)	20,896	24,104	29,363	35,985	3.7%
Presentations - admitted (total)	22,646	26,764	32,607	39,851	3.8%
Presentations - non admitted (0-15 years)	11,792	9,742	11,053	12,244	0.3%
Presentations - non admitted (16+ years)	30,690	39,416	43,681	48,402	3.1%
Presentations - non admitted (total)	42,482	49,158	54,735	60,646	2.4%
Presentations (Total)	65,128	75,922	87,342	100,496	2.9%
% admitted	35%	35%	37%	40%	
NWAU13 estimate	8,060	9,427	10,999	12,854	
Resuscitation	4	5	6	7	
Adult	27	32	38	44	
Paediatric	6	6	6	7	
Isolation room	2	2	2	2	

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Projections for NSW in 2022

- ED presentations to increase from 2.3 million to 3.2 million
  - Increase of 38%

- NWAUs are to increase by 111,622
  - additional annual operational cost of $521 million using NWAU13 and the State Efficient Price

- With no change to current practise an additional 594 treatment spaces will be required by 2022.
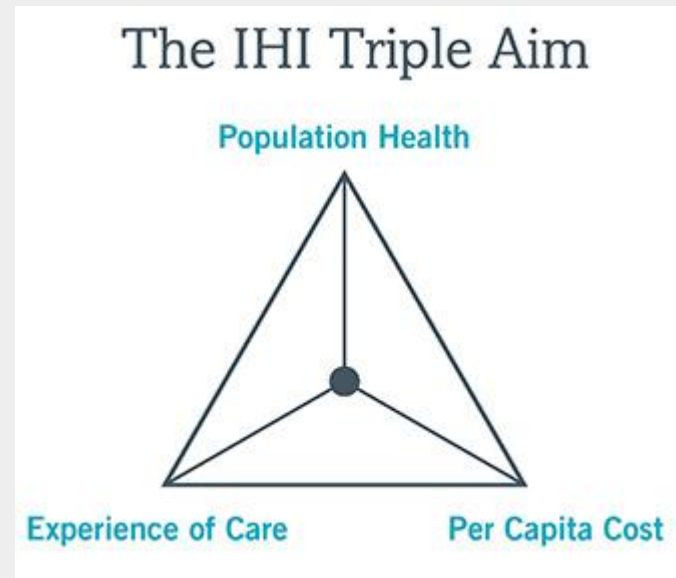
Preparing the Case for Change

SESLHD's Roadmap

- Triple aim:
  1. Quality of care
  2. Health of the population
  3. Value and financial sustainability

The IHI Triple Aim

Population Health

Experience of Care   Per Capita Cost

Based on the IHI Triple Aim

http://www.ihi.org/Engage/Initiatives/TripleAim/pages/default.aspx

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SESLHD's Roadmap

- Triple aim:

1. Quality of care

   – Improved by patients remaining out of hospital

   – Reducing risk and unnecessary hospitalisations

2. Health of the population

   – Improved through new self-management models

   – Improved case management

3. Value and financial sustainability

   – Through the efficiency delivered through rebalancing care

Quality of Care

- **Improving the way we deliver emergency services**

  – We now recognise that current ABF model rewards growth and believe the model should recognise and reward shifting the balance of care to the primary sector with more hospital substitution.

  – SESLHD will internally introduce a KPI for our facilities and reward this in 2015/16.

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Do we understand why patients come to our Emergency Departments?

Understanding Our Business

- Information gaps:

  – How many patients attempted to see a GP before presenting to ED?

  – How many patients were waiting to see a specialist when they presented to ED?

  – For how many days were patients sick before they presented to ED?

  – How many of our ED presentations could have been better managed with a scheduled appointment?

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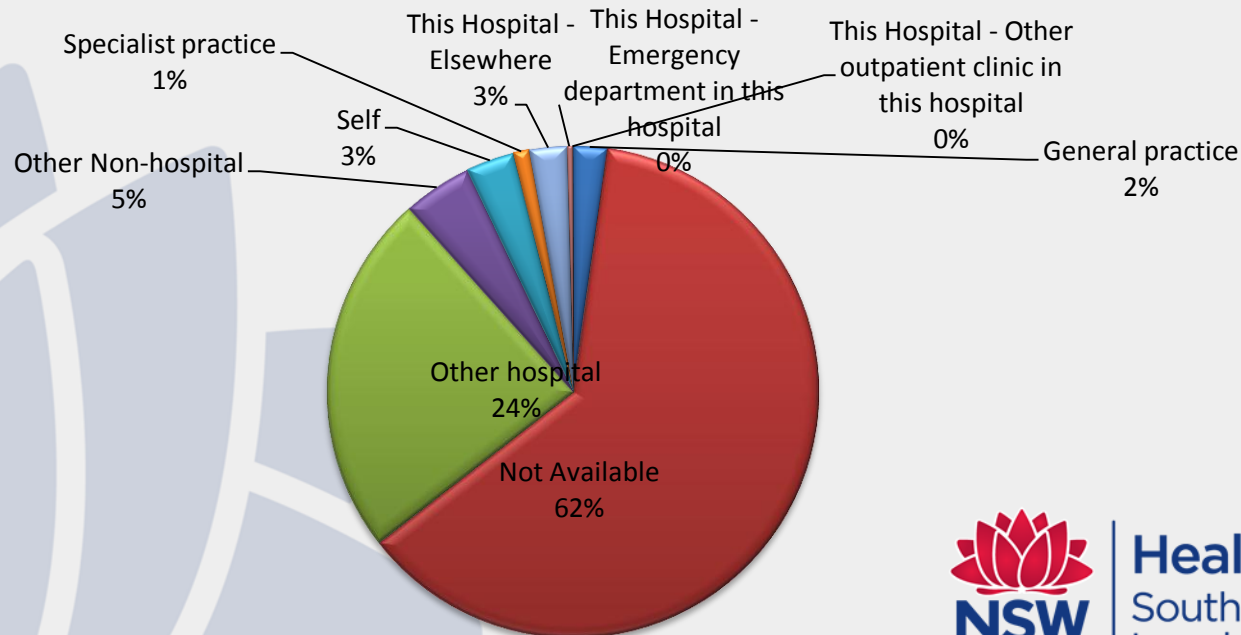# Do we understand why patients come to our hospitals?

Outpatient Clinics

- Information gaps:

  – We currently only collect referrals for billing purposes, not to improve our understanding of the use of Outpatient Departments

  – Do we know how many GPs have access to our clinics?

  – Do we understand the clinical urgency of patients coming to our outpatient clinics?

  – Do we have consistent criteria for access to our outpatient clinics?

  – Do we have a strategic intent for the management of our outpatient clinics?

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Outpatient Clinics

● Prince of Wales Hospital Outpatient Department

  – Referral data is currently only available for 38% of outpatient occasions of service

    – Approximately 230,000 occasions of service in one year

Specialist practice 1%
This Hospital - Elsewhere 3%
This Hospital - Emergency department in this hospital 0%
This Hospital - Other outpatient clinic in this hospital 0%
General practice 2%
Self 3%
Other Non-hospital 5%
Other hospital 24%
Not Available 62%

OPD Source of Referral

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Future State

What are we currently doing to address Emergency Department demand?

New St George Emergency Department

- A range of strategies to communicate with and educate the general public

  – Community Open day before the official opening

  – Marketing campaign: **Save our Emergency Department for real emergencies**

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New St George Emergency Department

- Marketing campaign: **Save our Emergency Department for real emergencies**

  – Through a social media campaign e.g. Twitter, internet pages, news articles, advertising on local buses
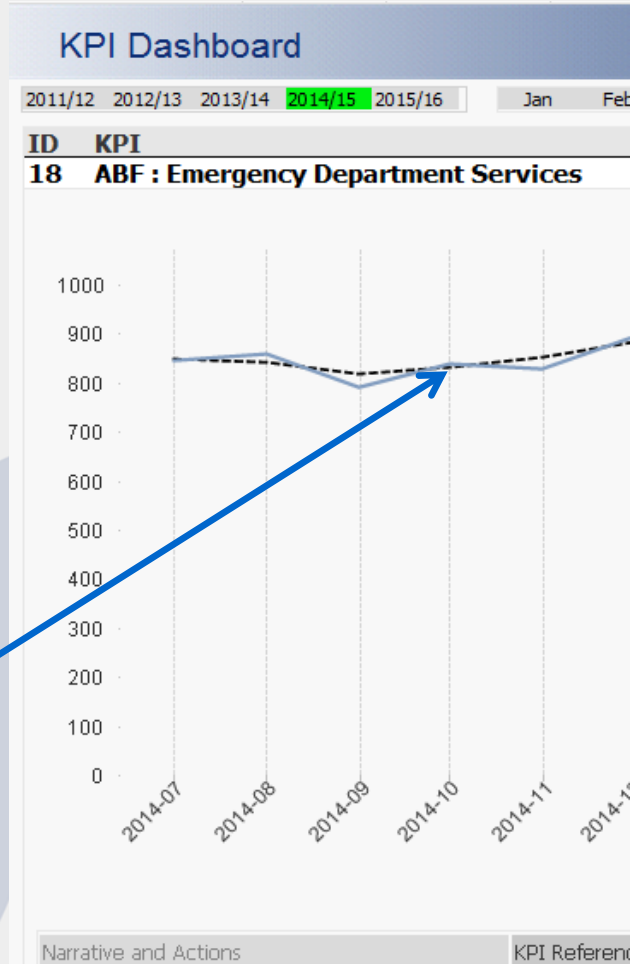
New St George Emergency Department

KPI Dashboard

2011/12 2012/13 2013/14 **2014/15** 2015/16   Jan   Feb

ID   KPI
18   ABF : Emergency Department Services

New ED Opened

- ABF Activity

Lightfoot

- Lightfoot is an international company that designs solutions to help organisations maximise their performance and efficiency

- Lightfoot will be used by SESLHD as a pilot sponsored through the Ministry of Health

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Lightfoot Data

- Lightfoot will be used to:
  - Create a live data feed of patient data from pre-presentation to discharge
  - Assist the integration of the patient journey through identifying the avoidable delays, such as those created through
    - Additional medical consults
    - Multiple patient relocations around the hospital
    - Waiting for diagnostics
  - Promote improvement through analytical changes made in the system, giving control charts and run rates to measure improvement

- The data can be seen by clinician or sub-speciality

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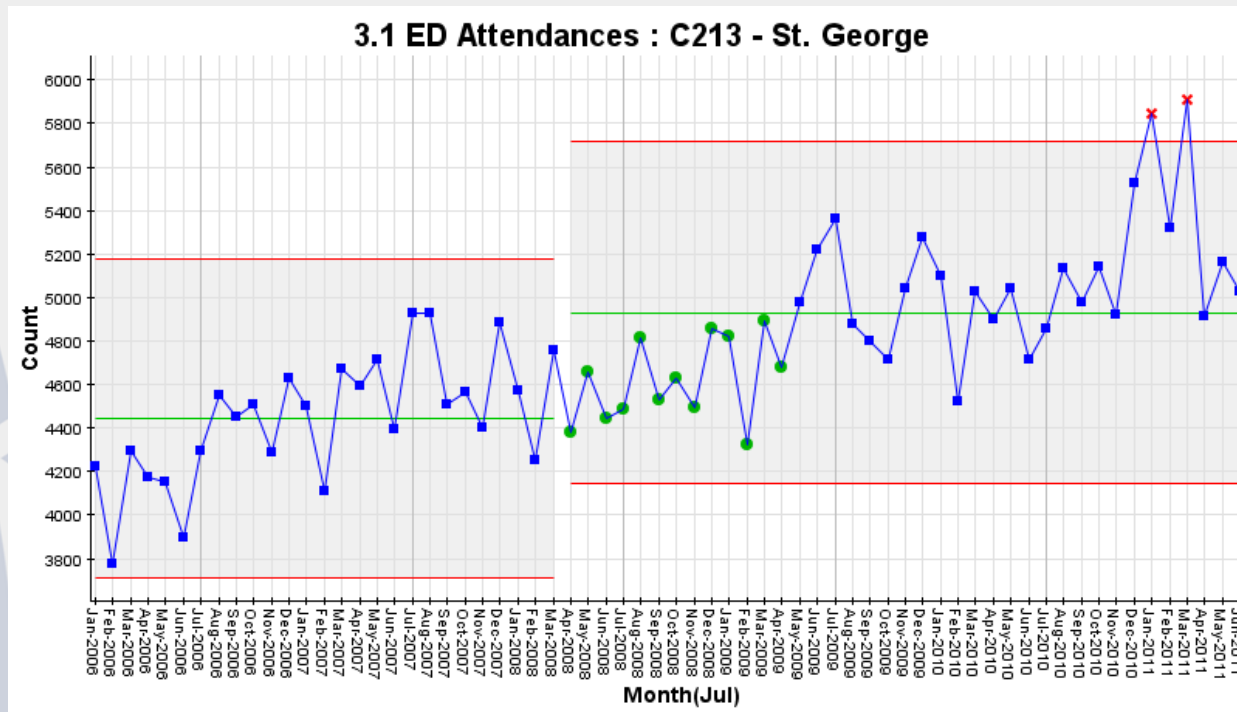Local Health District

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Lightfoot Data

- Expand the range of data incorporated by Lightfoot, such as:

  – GPs

  – Ambulance NSW

Lightfoot Data

- ## ED Attendances, St George Hospital

3.1 ED Attendances : C213 - St. George

Lightfoot Data

- ## Movement from MAU to inpatient wards

First Ward Movement			Second Ward Movement			Third Ward Movement			Fourth Ward Movement		

Total MAU Patients 10,310

Direct to MAU 981 → Discharged from MAU 411

MAU to other wards 570

ED Level 3 9,168

Other Wards 161

MAU Patients Remaining 9,899

To MAU 8,484 → Discharged from MAU 3,980

MAU to other wards 4,504

Onto other wards 1,080

Discharged other ward 335

MAU Patients Remaining 5,584

To MAU 814 → Discharged from MAU 390

MAU to other wards 424

Onto other wards 1,901

Discharged other ward 2,869

MAU Patients Remaining 2,325

To MAU 126 → Discharged from MAU 53

MAU to other wards 73

Onto other wards 888

Discharged other ward 1,311

Lightfoot Data

- Lightfoot data allows us to see the direct outcomes of changes made, through SPC and run charts
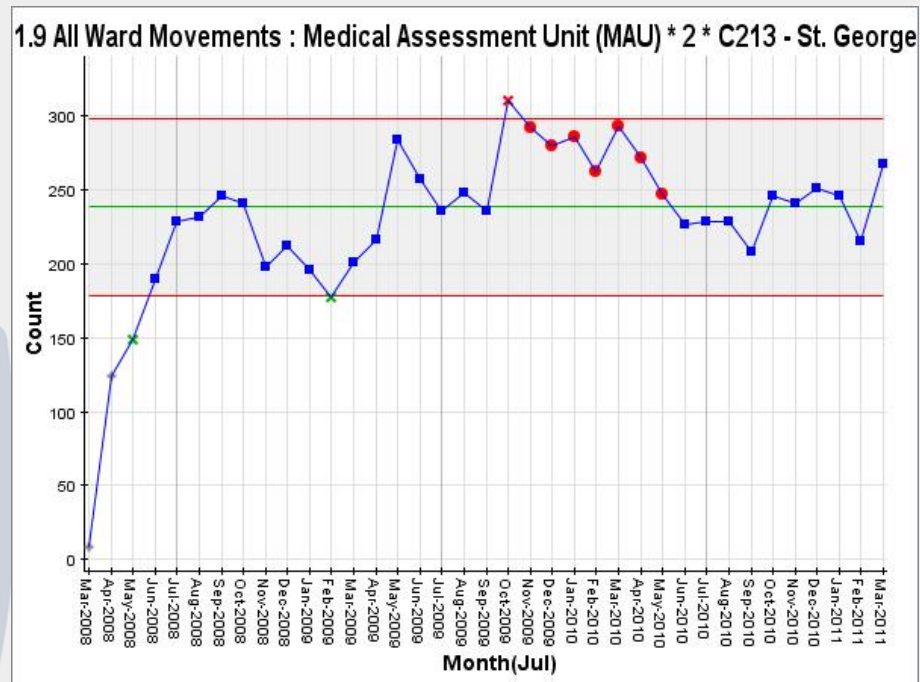
Chronic Care Management Models

Current state

- Disease specific models

- Hospital-centric

- Reactive

- Segmented

Future state

- Towards a more generic case management model for chronic disease

- Patient-centred approach leading to self-management

- Enabled by GPs and supported by the MDT in the hospital

- Risk profiling

A Change in the Model of Care

- **Anticipatory care:** risk-stratefied algorithm-based case management of patients through self-management

  - Supported by urgent access to specialty services should a patient's condition change

  - Emphasis on:

    - Anticipating deterioration of the patient

    - Criteria-based interventions

  - Strong partnerships with:

    - GPs

    - Social welfare agencies

Other initiatives

- Improving the physical assessment of Mental Health patients, both inpatient and community

  – Assists in viewing the patient more holistically

  – Helps in managing co-morbidities before deterioration

  – Links patients in with a GP

  – Number of patients who have received a physical examination within the past 12 months increased from 18.1% to 25% in the three months to October 2014

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Integrated care initiatives

- **Geriatric Flying Squad**

  – Introduced to improve the care experience of older adults living in residential aged care facilities and to reduce avoidable hospital presentations and admissions from these facilities

  – Rapid response, 7 day extended hours service providing assessment and management using point of care

  – Outcomes:

    – 90% managed in facility; 5% direct admissions

    – Only 5% required admission via ED

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Integrated care initiatives

- **Southcare Outreach Service (SOS)**
  - Community-based rapid response multidisciplinary team for the ageing population
  - Provides acute and sub-acute interventions for up to six weeks by nursing, physiotherapy and occupational therapy.
  - Aims to:
    - Prevent aged care clients from presenting or re-presenting to ED and to
    - Integrate and coordinate client's care through comprehensive care planning and appropriate clinical interventions in the community.
  - Over 250 clients since February 2015

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Quality of Care

- Key Deliverables

  – As part of our work on integration, we need to establish collaborative partnerships to build on existing and produce well defined out-of-hospital programs across the District.

  – Produce clear flow management programs in our emergency departments that take the opportunity for redesign in our refurbished facilities, producing consistent target achievement.

  – Need to significantly better understand who our patients are.

Next steps

- Understanding our business (refining data)

- Anticipatory care management / preventative care

- Unscheduled care (ED) → Scheduled care (GP/MAU/OPD)
  - Strategic use of resources around entry points e.g. outpatient clinics, medical assessment units

- Chronic care management models that are enabled by GPs and supported by multidisciplinary teams

- Collaboration with social welfare agencies

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Thank you