Redesign and NEST

Professor Donald MacLellan
Agency for Clinical Innovation
NSW NEST WORKSHOP
February 2013
Surgery Redesign

1. Essence of Redesign
2. Is more Redesign required?
3. Redesign for NEST
EBERS PAPYRUS
(1534 BCE)

Internal Medicine

EDWIN SMITH PAPYRUS
(1600 BCE)

Surgical wounds & Fractures
Royal Palace Medical Specialties:

Gastroenterologist
Proctologist
Ophthalmologist
Inspector of Doctors
Clinical Team Leader

IMHOTEP

A Doctor who became a GOD!
Essence of Redesign
“A hospital is a place where the staff have more complaints than the patients.”

P.K. Shaw
Where are the patients????
Essence of Redesign

HEALTH CARE IN THE 21ST CENTURY:

- EVIDENCE BASED
- PATIENT CENTRED
- SYSTEMS ORIENTED
Essence of Redesign

TEAMWORK
and
PARTNERSHIPS
Old “Dictator” Style:

“Do it my way…”

1980s “Empowerment” Style:

“Do it your way…”

21st Century Style:

“Let’s figure this out together…”
Surgery Redesign

1. Essence of Redesign
2. Is more Redesign required?
3. Redesign for NEST
Category 3 (within 12 months) overdues
Surgery Redesign

• Surgical Services Taskforce
• Surgery Dashboard
• Predictable Surgery Program
• Statewide Program Director of Surgery
• Program Directors of Surgery (AHS)
• Managers of Surgery (AHS)
• Performance Management DoH
Category 3 (within 12 months) overdues
# Performance November 2012

## SURGERY DASHBOARD - November 2012

### METROPOLITAN NSW LOCAL HEALTH DISTRICTS

<table>
<thead>
<tr>
<th>Target</th>
<th>SCH**w</th>
<th>SUNN</th>
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<td>Surgical HRFG patients as % of surgical list</td>
<td>&lt;10%</td>
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### OPERATING THEATRE

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<td>53</td>
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<td>- Patient Related</td>
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<td>- Hospital Related</td>
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### EMERGENCY ACCESSES

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<tr>
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<td>86</td>
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<td>67</td>
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<td>Emergency Access (4)</td>
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<td>Emergency Access (5)</td>
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### Admissions

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<tr>
<td>Target Planned Surgery performed or SGB in 30 (24) to 60 (24)</td>
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<td>71</td>
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Performance November 2012

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<th>Cat 1 - % of patients treated in 18 days (Cat 711D)</th>
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<tbody>
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<td>Cat 2 - % of patients treated in 90 days (Cat 711D)</td>
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<tr>
<td>Cat 3 - % of patients treated in 365 days (Cat 711D)</td>
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<td>100</td>
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**LHDs reaching NEST:**

- 2 LHD = 0 in 3 Cats
- 4 LHD = 1 in 3 Cats
- 5 LHD = 3 in 3 Cats
# Performance November 2012

<table>
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<tr>
<th>Surgical MRFG patients as % of surgical pts</th>
<th>1:6</th>
<th>1:4</th>
<th>1:7</th>
<th>1:6</th>
<th>1:7</th>
<th>1:6</th>
<th>1:6</th>
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<tr>
<td>&lt;10%</td>
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<tr>
<td>&lt;5%</td>
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<td>11.0</td>
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<td>5.7</td>
<td>3.6</td>
<td>4.6</td>
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Surgery Pts Not Ready for Care % Surgery W/L
% Cancellation of the Day of Surgery

1:14
1. Essence of Redesign
2. Is more Redesign required?
3. Redesign for NEST
“Change is the law of life. And those who look only to the past or present are certain to miss the future.”

John F. Kennedy
Impact of NEST & NEAT

- Current Surgical Service configuration inadequate
- Streamline Surgical Services
- Redesign Surgical Service delivery
Surgery Design

- The demand for surgery is increasing
- A growing and ageing population
- Our workforce is changing
- Economic and health technology impacts
- Wide dispersion of surgical services across NSW
- Significant demographic changes
Surgery Design

1. System wide service structural redesign

2. Redesign of Surgical Patient Processes
SUPPLY CHAIN MANAGEMENT

- Demand planning
- Segmentation
- Service configuration
- Patient flow planning
- Capacity planning

- Patient flow management
- Process flows
- Blockage reduction
- Continuity of flow

- Community expectations
- Communication
- HITH/Rehab

Suppliers
Referred
/Patients

Source
Planned
/Unplanned

Process
Mgt Plan

Move
Interventions

Sell
Discharge

Customer
Community
Supermarkets

• Newspaper/bread supply has to be daily:
  - tight planning required; little delay tolerance

• Magazine/beans supplied weekly or monthly
  - planning has more leeway; flexibility

SUPPLY SYSTEM IS SEGMENTED
Supermarkets

• Fast Check Out (8 items of less) – fast throughput

• Normal Check out – slower throughput

CHECKOUT SYSTEM IS SEGMENTED
Streaming Emergency Surgery

Standard-hours scheduling where clinically appropriate;

Load balancing of standard-hours operating theatre sessions with emergency surgery demand;

Streaming of elective and emergency surgery in hospitals;

Reallocation of surgery resources appropriate to roles of the designated hospitals; and

Safe interhospital transfer processes

Specific emergency surgery KPIs

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<th>Same Day</th>
<th>1 Day O/N</th>
<th>2 Day Stays</th>
<th>3 Day Stays</th>
<th>Stays &gt;3 Days</th>
<th>Total All Episodes</th>
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<td>Days of Stay</td>
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High Volume Short Stay (HVSS) Units

Ward Admission

Main Operating Rooms (with assigned High Volume Short Stay Surgical ORs)

Ward Postoperative Area

High Volume Short Stay Surgical Admission

High Volume Short Stay Surgical Postoperative Area (Beds and Chairs)
Specialty Centres

• Clearly delineated referral roles within a geographic region;
• Operates within a network of services;
• Provides access to a high level of expertise; and
• Concentrating high cost resources such as highly complex interventional radiology and other surgical support services
Surgical Process Redesign

- Waiting Time Policy Implementation
- Wait List Management
- Pre-Admission Processes

- Operating Theatre Scheduling
- Operating Theatre Utilisation
- Time Out
- First Case on Time start

- Discharge by Protocol
- Bed Equivalents/HITH
- ICU/HDU & Non-EDO admission

- Models of Care
- EDO / HVSS
- Networking
- Surgery Planning

Support Services & Facilities

- Physical infrastructure
- IT

Network Design, Surgical Streams & Demand & Supply Management
Redesign for NEST

There is no universal solution to surgery redesign. Local circumstances will dictate how to adopt and implement redesign solutions to achieve the best method of service delivery.
Surgical Services Redesign needs YOU!

The Lord gave us two ends –
one to sit on and the other to think with.
Success depends on which one we use the most.

Ann Landers (1961)
Professor Donald MacLellan
Director of Surgery, Anaesthesia & Critical Care
94644604
donald.maclellan@aci.health.nsw.gov.au