Hospitals are changed:

• Just a few years ago they were budgeting and administrations, and fire fighting between them and the Clinical Directors.

• Now we need another dimension, we need to manage the horizontal pathway of patients to support services and supplies. Why?

• Because the budget cut will be more severe.

Dan Jones 2009
Leaders need to shift the current thinking

CURRENT

- Waiting is acceptable
- Errors are to be expected
- Add resources
- Reduce cost
- Problems not visible
- Maximise use of capacity
- Functional management

FUTURE
Leaders need to shift the current thinking

**CURRENT**
- Waiting is acceptable
- Errors are to be expected
- Add resources
- Reduce cost
- Problems not visible
- Maximise use of capacity
- Functional management

**FUTURE**
- Waiting is unacceptable
- Defect free processes
- No new resources
- Reduce waste
- Problems visible
- Minimise cost of capacity
- End to end processes
London July 10th, 2009

Lean Healthcare Transformation Summit 2009
The Bolton Lean Healthcare Journey
E.O. Ospedali Galliera - Genova

• 480 beds (148 for surgery)
• 1764 Employees
• 10 Op. Theatres
• 8 Surg. Specialities
• 12,000 interventions/y
• 15% emergency
Historical vision

PS

Urgenze

Ambulatori

UTI, UTIC,

Intensive 2-3% PL

98%
Patients flow

1° liv 10% PL
2° liv 50% PL
3° liv 40% PL
Il Nuovo Galliera
The Impact of TPS: Half is Waste

- ½ the human effort
- ½ the space
- ½ the equipment
- ½ the inventory
- ½ the investment
- ½ the engineering hours
- ½ the new product development time
The Impact of TPS: Half is Waste

- \( \frac{1}{2} \) the human effort
- \( \frac{1}{2} \) the space
- \( \frac{1}{2} \) the equipment
- \( \frac{1}{2} \) the inventory
- \( \frac{1}{2} \) the investment
- \( \frac{1}{2} \) the engineering hours
- \( \frac{1}{2} \) the new product development time

LEAN
Le tecniche più utili

• Takt Time
• Buffers (tamponi)
• Value Stream Mapping
• Cellular work
• Levelling Scheduled Discharge Box
Le tecniche più utili

- Takt Time
- Buffers (tamponi)
- Value Stream Mapping
- Cellular work
- Levelling Scheduled Discharge Box
NHS Improvement
Diagnostics Improvement

Pathology  Imaging  Therapies  Pharmacy

NHS

Clinical Support services

Our Big problems

Pathology  Imaging  Therapies  Pharmacy

Human Resources  Health Records  Laundry  Estates

Facilities
The Productive Operating Theatre

Building Teams for Safer Care

Lean in the Operating Theatre

Dr Alastair Williamson
Ann Abbassi

Heart of England FT
Proposte di miglioramento della catena di fornitura nel BOC: bottom up (2007)
Priorità:
1. Pazienti in OTU
2. Sanificare
3. Ferri chimici
4. Forniture materiale termale

Prossima: 3°
U shape  CELL DESIGN
U shape  CELL DESIGN
The Exeter experience - 4

- Utilisation of time during lists
Sforamenti sala C mar giu 2008

T6 = Uscita dalla S.O.

21 sforamenti in 4 mesi
Verticalizzazione attività chirurgica

*Modifying clients flow in OR*
(activity shift from 8x6 h to 4x12 h / day)

February 2009
Le ultime 5 ore di sala operatoria

Sforamenti Sala C mar – giu 2009

21 overwork vs 3 overwork
Sala C T6 uscito S.O. Sedute finite fra le 16:30 e le 17:30 o molto dopo.

Ore 19:00 prevista fine interventi


Sedute finite fra le 16:30 e le 17:30 o molto dopo.

Marzo, Aprile, Maggio 2009
Sala C  T6 uscito S.O.

Sedute finite fra le 16:30 e le 17:30 o molto dopo

Ore 19:00 prevista fine interventi


Marzo  Aprile  Maggio 2009
Patients put off
2008-2009 in %
2006

<table>
<thead>
<tr>
<th>Trim</th>
<th>ore agg</th>
<th>tot interv</th>
<th>interv agg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1°</td>
<td>565</td>
<td>420</td>
<td>83</td>
</tr>
<tr>
<td>2°</td>
<td>420</td>
<td>1639</td>
<td>1572</td>
</tr>
<tr>
<td>3°</td>
<td>83</td>
<td>1295</td>
<td>1295</td>
</tr>
<tr>
<td>4°</td>
<td>173</td>
<td>1479</td>
<td>1479</td>
</tr>
</tbody>
</table>

ore agg: 565 420 83 173
tot interv: 1639 1572 1295 1479
interv agg: 330 280 15 106

2006
8222+ 4317+ DS
12539
<table>
<thead>
<tr>
<th>Patient status</th>
<th>At a glance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Plan for</td>
<td>Every patient</td>
</tr>
</tbody>
</table>
Promising Results: 2007-2009
Just by improving patients flow

- Ridotti del 45% i pazienti rinviati (45% reduction in putting patients off in Op. Theatre)
- Ridotte del 90% le sedute extraorario (90% reduction extra work in O.T.)
- Aumentata l’attività di Day Surgery (+47%) (Increased Day Surgery activity by 47%, 2007)
  - Increased emergency activity from 12 to 15%, 2009)
  - Elective surgery maintained
- With less Human Resources (- 10%)
- As a consequence, over 1.5 milion euro cost reduction, within the first year of lean journey (2008)
Promising Results 2007-2009 at The Galliera Hospital - GENOVA

- 40% floor space reduction in Op. Theatre by working through 12 hours (7-19 h) (2009) (and less extra work)

- 55% preoperative time reduction (4.4 to 2.6 days) for surgery after hip fracture (2009)

- 46% of thyroidectomies performed in ODS (2007-08-09)

- 200 Operators (all levels of responsibility) trained on Lean along the year 2009
Lean Hospitals - Converting the Sceptics

The lean hospital looks like, as a collection of processes:

- 30-40% of savings if we manage all those processes correctly.
- Huge potentials by redesigning the process management.
**EMICOLEKTOMIA by o Sin**

- **Colon**
  - Visita auscultet.
  - Alter:
  - PRC
  - Ricovero programmato 10%
  - Preparazione per intervento 10%
  - Trasferimento in locale per posizionamento epidurale

**Punti deboli:**

- Eliminando i punti deboli
delire una migliore...
INDIVIDUALE PUNTI DEBOLI: 5/6/11
(Cambiare o eliminare)

STATO FUTURO
Redesigning care: Improving the patient journey