

Measuring for safety How to develop a programme

Peter Lachman, MD
Great Ormond Street Hospital for Children NHS Trust






Aims of session

- Provide a step wide approach to setting up a safety programme in your organisation

- Discuss system wide measures

- Show dashboards for measurement of child specific issues

Great Ormond Street Hospital for Children NHS Trust

A brief quiz

Safety

- What the stillbirth rate at your hospital?
- What is the MRSA rate?
- What is the central line infection rate?
- What is the neonatal complication rate?
- How many children were harmed last month?
- Is patient safety the core of what you do?

Cost

- Do you know the capita cost of your service?

Have you had training in:

- Human factors
- Change management
- How to improve flow of patients?
- Business case for quality
- Principles of patient safety
- Variability

.... and do you need this?

Great Ormond Street Hospital for Children NHS Trust

What do we need for safer care?

1. Design **reliable** processes
2. Use **safety** principles
 - Prevent
 - Detect
 - Mitigate
3. **Activated and prepared** care teams communicating with activated and prepared parents and families
4. Focus on child being in **control**

And measure what you are doing

Great Ormond Street Hospital for Children NHS Trust

STEP 1 HAVE AMBITIOUS AIMS

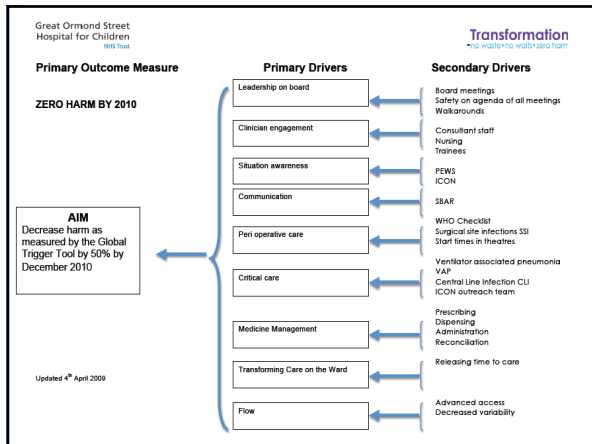
Great Ormond Street Hospital for Children NHS Trust

High level aims

GOSH 2010
– Zero Harm, No Waits, No Waste & Working Together

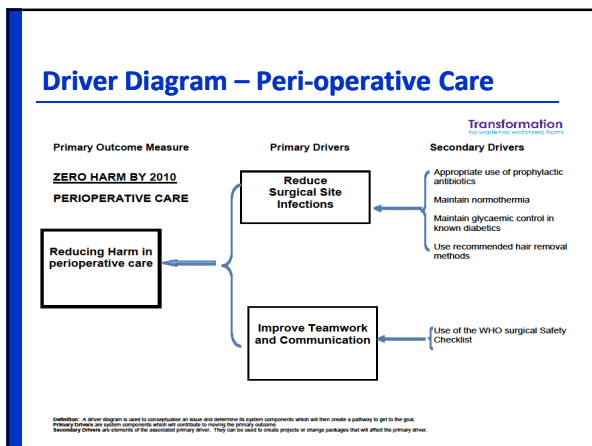
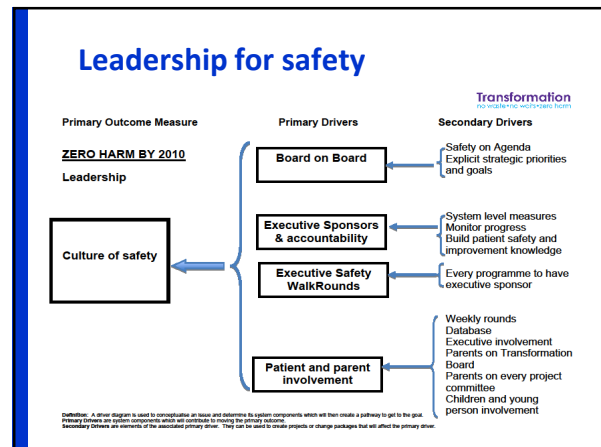
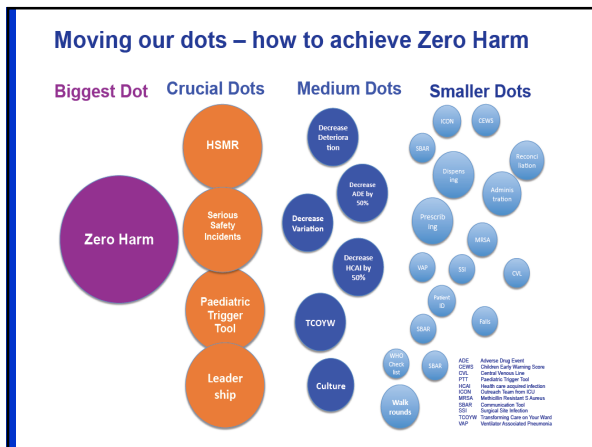
- **Leadership:**
 - Enhance the culture of safety in the organisation
 - Provide leadership at the highest level
- **Measurement**
- **Infections**
 - Eliminate hospital acquired infections with a focus on VAP, SSI, CVL-BSI.
- **Medication**
 - Decrease medication error and improve medication reconciliation
- **Situational awareness**
 - PEWS improve situational awareness for the deteriorating child- PEWS
 - ICON response team
- **Communication**
 - Improving handover and communication at all levels – SBAR
 - WHO Checklist

Great Ormond Street Hospital for Children NHS Trust



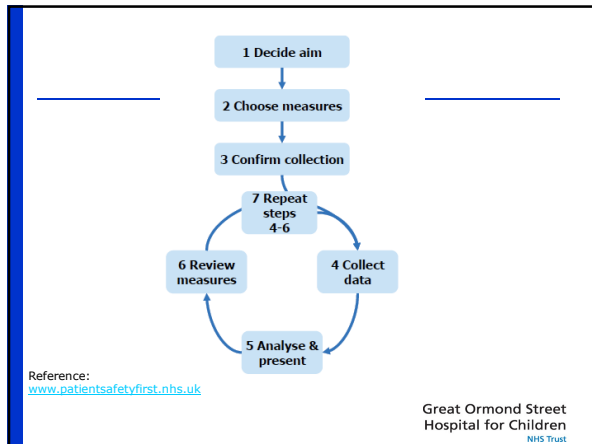
STEP 2
DEVELOP THE PROGRAMME

Great Ormond Street Hospital for Children
NHS Trust



STEP 3
USE MEASUREMENT TO DELIVER

Great Ormond Street Hospital for Children
NHS Trust



Measure your system

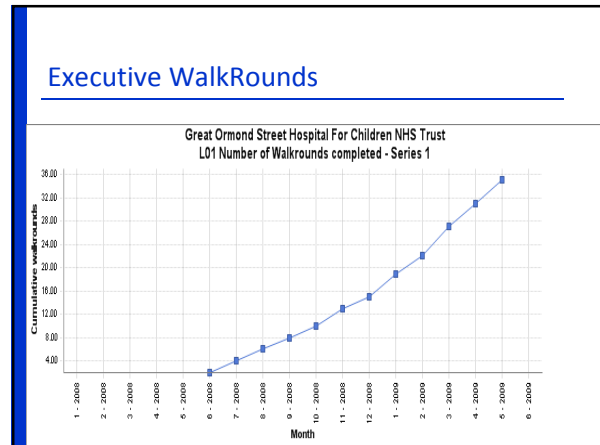
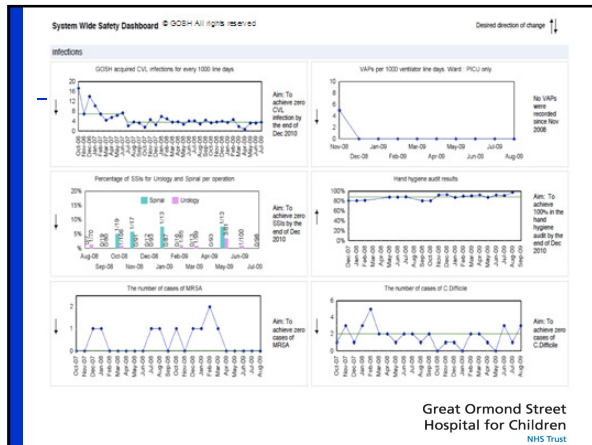
System wide measures

- Mortality
 - Crude mortality
 - Mortality reviews

NB: HSMR is not an appropriate measure in paediatrics

- Serious clinical incidents per 1000 patient days
- Adverse events per 1000 patient days
 - Paediatric Trigger Tool
 - Specific Trigger tools – neonatal; adverse drug events

Great Ormond Street Hospital for Children
NHS Trust



NHS Institute for Innovation and Improvement

Trigger Tool Portal for paediatric safer care

Print | E-mail

Launch of Safer Care's Paediatric Trigger Tool

Monday 1 June saw the launch of the UK Trigger Tool Portal for paediatrics. Specialists from across the country came to Birmingham to hear from the co-producers about the positive results they have had from the Trigger Tool Portal. We also welcomed our paediatrics colleagues from Scotland.

© NHS Institute for Innovation and Improvement: Safer Care

Early Results

Sample characteristics

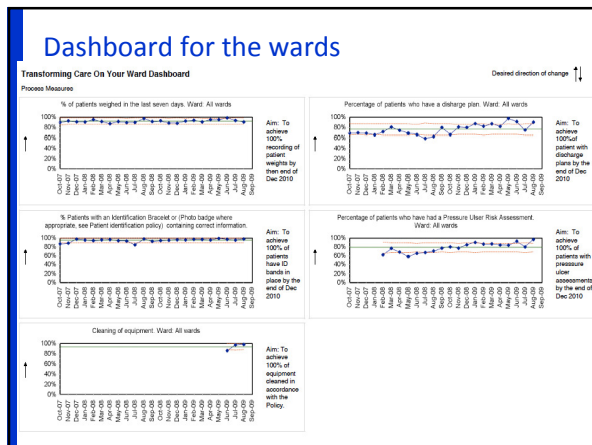
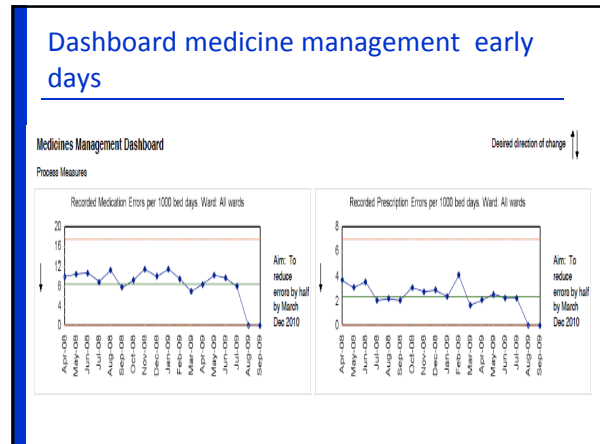
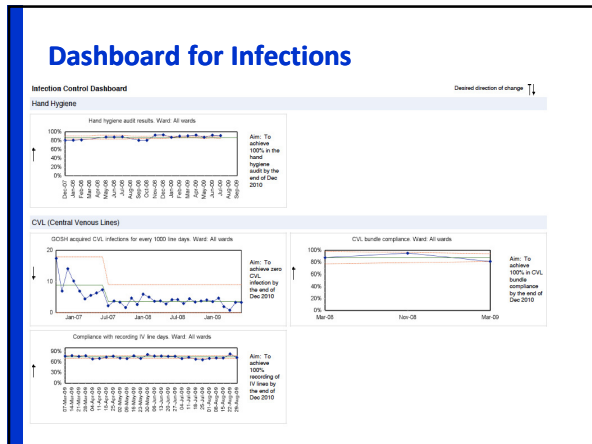
Patients: 997
Triggers: 993 (7.9 per case) (95% CI 6.5-9.4)
Adverse events: 127 (12.7 per case) (95% CI 10.3-15.0)
High harm rate

Performance of the Trigger Tool

Trigger	No.	(% of Triggers total)	Positive Predictive Value	Adverse events
General Care				
P01	65	13%	40%	4
P02	15	3%	53%	8
P03	28	6%	46%	13
P04	70	14%	9%	6
P05	4	1%	15%	1
P06	4	1%	50%	2
P08	26	5%	69%	18
P09	30	6%	20%	6
Intensive Care				
I01	35	6%	33%	14%
I02	19	4%	16%	3
Lab Tests				
L01	9	2%	25%	5
L02	9	2%	0%	0
L03	10	2%	20%	2
L04	4	1%	33%	1
L05	5	1%	20%	1
L06	4	1%	25%	1
L07	5	1%	0%	0
L08	3	1%	33%	1
L09	9	2%	22%	2
Medications				
M01	533	53%	33%	35
M02	2	0%	0%	0
M03	3	0%	33%	1
M04	5	0%	60%	2
M05	6	0%	25%	2
M06	68	7%	22%	15
M07	22	2%	26%	7
M08	27	3%	18%	4
Other				
O01	16	2%	64%	7
O02	16	2%	44%	7
Surgical Care				
S01	12	1%	50%	6
S02	8	1%	0%	0
S03	7	1%	100%	7
S04	8	1%	33%	1
Total	993	100%	32%	127

Pos Pred Value

0% 20% 40% 60% 80% 100%



Summary

- Change can only occur if you know what you want to do
- You can only know that you have achieved change if you measure
- Invest time in developing real time measures
- Only then can success be achieved

Great Ormond Street Hospital for Children
NHS Trust