

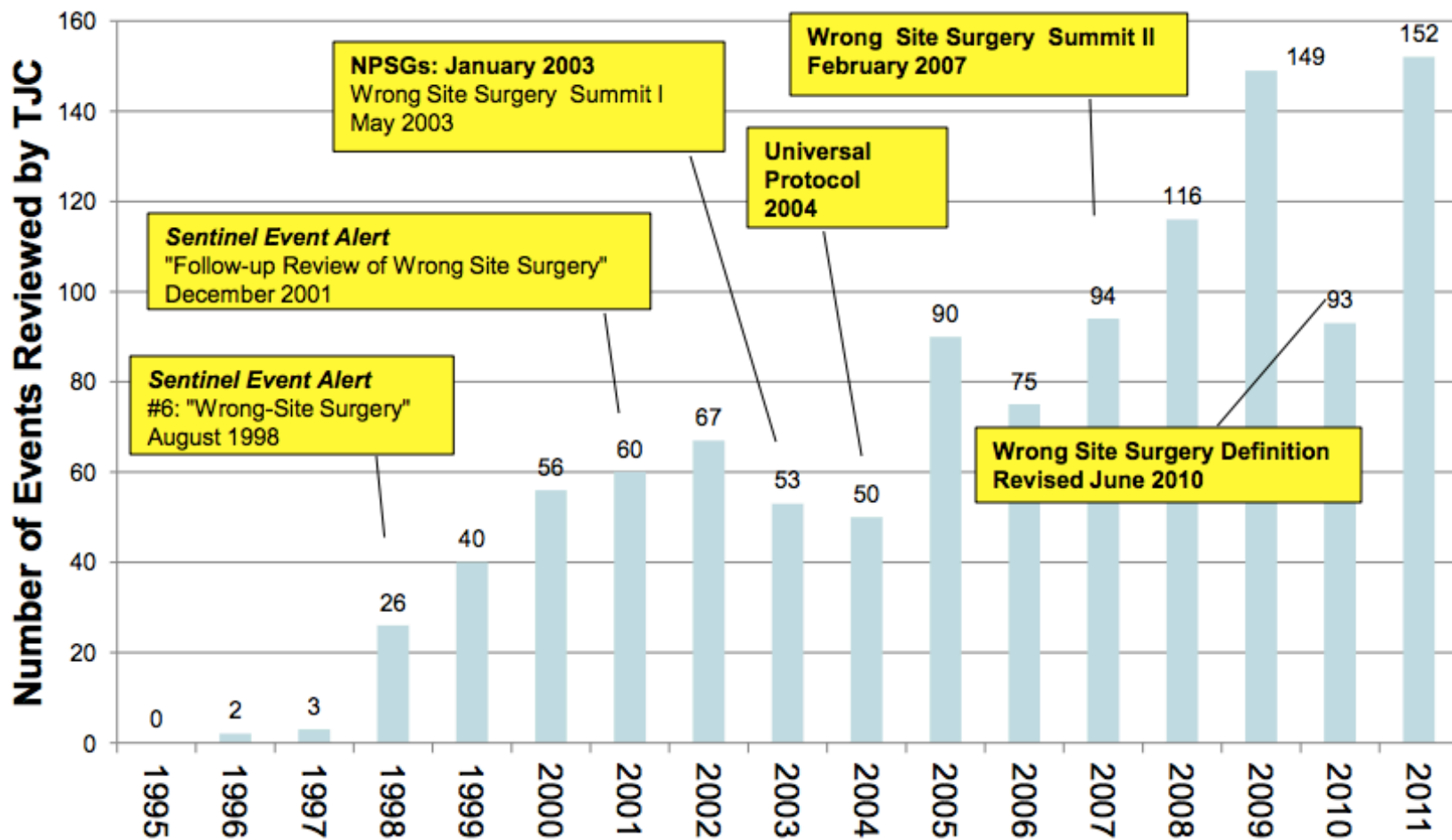


**Partnering with patients, their families and others to eliminate preventable harm, optimize outcomes and experience, and reduce waste**

Peter Pronovost, MD, PhD, FCCM  
Johns Hopkins University

# Wrong-patient, Wrong-site, Wrong-procedure Events Reviewed by The Joint Commission

(Regardless of the magnitude of the procedure)



*The reporting of most sentinel events to The Joint Commission is voluntary and represents only a small proportion of actual events. Therefore, these data are not an epidemiologic data set and no conclusions should be drawn about the actual relative frequency of events or trends in events over time.*



12/28/2012

3

# Rory Staunton

12 years old



*“the most profound 12 year old I had ever met”*

- Kevin Burgoyne, debate coach



# STOP Sepsis Collaborative

A GNYHA / UHF Partnership in Quality

## SEVERE SEPSIS TRIAGE SCREENING TOOL

Does the patient have any three of the following?

- Suspected Infection
- Temp > 100.4 or < 96.5 or rigors
- HR > 90
- RR > 20
- Any alteration of mental status
- O2 Sat < 90%
- SBP < 90
- Suspected/Known Immunocompromise (AIDS/Active Cancer/Organ Transplant Patient)

Yes  No

If Yes clicked:

Go to Nursing Sepsis Panel Orders.

### Triage Sepsis Panel Orders

(all boxes should be checked by default)

- Notify clinician to initiate verbal order for sepsis panel
- CBC
- Metabolic Panel
- Lactate (venous or arterial)
- Draw and Hold PT/PTT
- Draw and Hold Blood Cultures
- Record Vital Signs Q1 hour plus temperature

Is the patient's SBP < 90 or MAP < 65

Yes  No

If Yes clicked:

Present case to physician.

If patient meets criteria, but you feel the patient doesn't need lab testing, please speak to attending.



NYU Hospitals Center  
Patient Record  
NYUMC

Patient: STAUNTON,  
DOB: 05/13/1999  
Attending: [REDACTED]  
Admit Date: 03/29/2012  
Location: EMERG-TH

This report contains documentation entered between 03/29/2012

### Vital Signs & Measurements F/S General

03/29/2012 21:26

Authored By:

#### BLOOD PRESSURE

Blood Pressure Systolic Systolic : 103 mmHg  
Blood Pressure Diastolic Diastolic : 50 mmHg  
Blood Pressure Mean Mean : 67 mmHg

#### TEMPERATURE

Temperature Temperature (F) degree F : 102 degrees F  
Temperature Temperature (C) degree C : 38.8 degrees C

#### PULSE

Pulse Pulse Rate Rate (bpm) : 131 bpm

#### RESPIRATORY

Respirations Respiratory Rate Rate /min : 22 /min

#### PULSE OXIMETRY

Pulse Oximetry Saturation O2 Sat (room air) % (Room Air) : 99  
29-Mar-2012 21:26 Vital Signs & Measurements F/S General  
Norma (Nursing Attendant, Nursing Attendant, BENNEN02)

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NYU Hospitals Center  
Test Result Summary  
NYUMC

Patient: STAUNTON, RORY  
DOB: 05/13/1999 Age: 12y  
Attending: [REDACTED]  
Admit Date: 03/29/2012  
Location: EMERG-TH

MR #: 8979937  
Gender: M  
Visit #: 489040745

This report contains documentation entered between 03/29/2012 and 03/29/2012

03/29/2012 20:00	CBC				
White Blood Cells	14.7	H	[3.7-11.4 K/uL]		Final
Nucleated RBCs	0		[0 /100WBC]		Final
Red Blood Cells	4.94		[4.20-5.60 M/uL]		Final
Hemoglobin	14.3		[12.5-16.1 g/dL]		Final
Hematocrit	42.4		[36.0-47.0 %]		Final
MCV	85.7		[78-95 fL]		Final
MCH	28.9		[26-32 pg]		Final
MCHC	33.7		[32-36 g/dL]		Final
RDW	13.1		[11.5-14.5 %]		Final
Platelet Count	117	L	[150-400 K/uL]		Final
MPV	9.03		[6.0-11.0 fL]		Final

03/29/2012 20:00	Differential Count				
Segs	39		[33-63 %]		Final
Bands	53	H	[5-15 %]		Final
Lymphocytes	3	L	[28-48 %]		Final
Monocytes	5		[3-12 %]		Final
Absolute Neutrophils	13.5	H	[1.5-8.2 K/uL]		Final
Absolute Segs	5.7		[1.3-6.6 K/uL]		Final
Absolute Bands	7.8	H	[0.2-1.7 K/uL]		Final
Absolute Lymphs	0.4	L	[0.8-4.2 K/uL]		Final
Absolute Monocytes	0.7		[0.1-1.1 K/uL]		Final

03/29/2012 20:00	Basic Metabolic				
Sodium	131	L	[134-146 mmol/L]		Final
Potassium	3.9		[3.6-5.2 mmol/L]		Final
Chloride	96	L	[98-108 mmol/L]		Final
CO2	24		[22-31 mmol/L]		Final
Urea Nitrogen	13		[10-26 mg/dL]		Final
Creatinine	0.7		[0.7-1.3 mg/dL]		Final
Glucose, Random	118	H	[70-100 mg/dL]		Final
Calcium	8.6		[8.3-10.3 mg/dL]		Final
GFR Estimate (MDRD)Non-African			[>60 mL/min/1.73m^2]		Final

# AIRPLANES



**Early 1980's**



**Current Version – Better**

# Hospitals in general, and especially ICUs



**Early 1980's**



**Current Version –  
Worse**







# Emergent Transdisciplinary Research Team



<b>Physician/Nurse</b>	<b>Systems engineering</b>	<b>Sociology</b>
<b>Finance</b>	<b>HSR</b>	<b>Biostatistics</b>
<b>Computer science</b>	<b>Human factors engineering</b>	<b>Human Factors Psychology</b>
<b>Informatics</b>	<b>Ethics</b>	<b>Physical therapy</b>
<b>Law</b>	<b>Pastoral care</b>	<b>Palliative care</b>
<b>Organizational Psychology</b>	<b>Anthropology</b>	<b>Management</b>

# Johns Hopkins University Applied Physics Laboratory



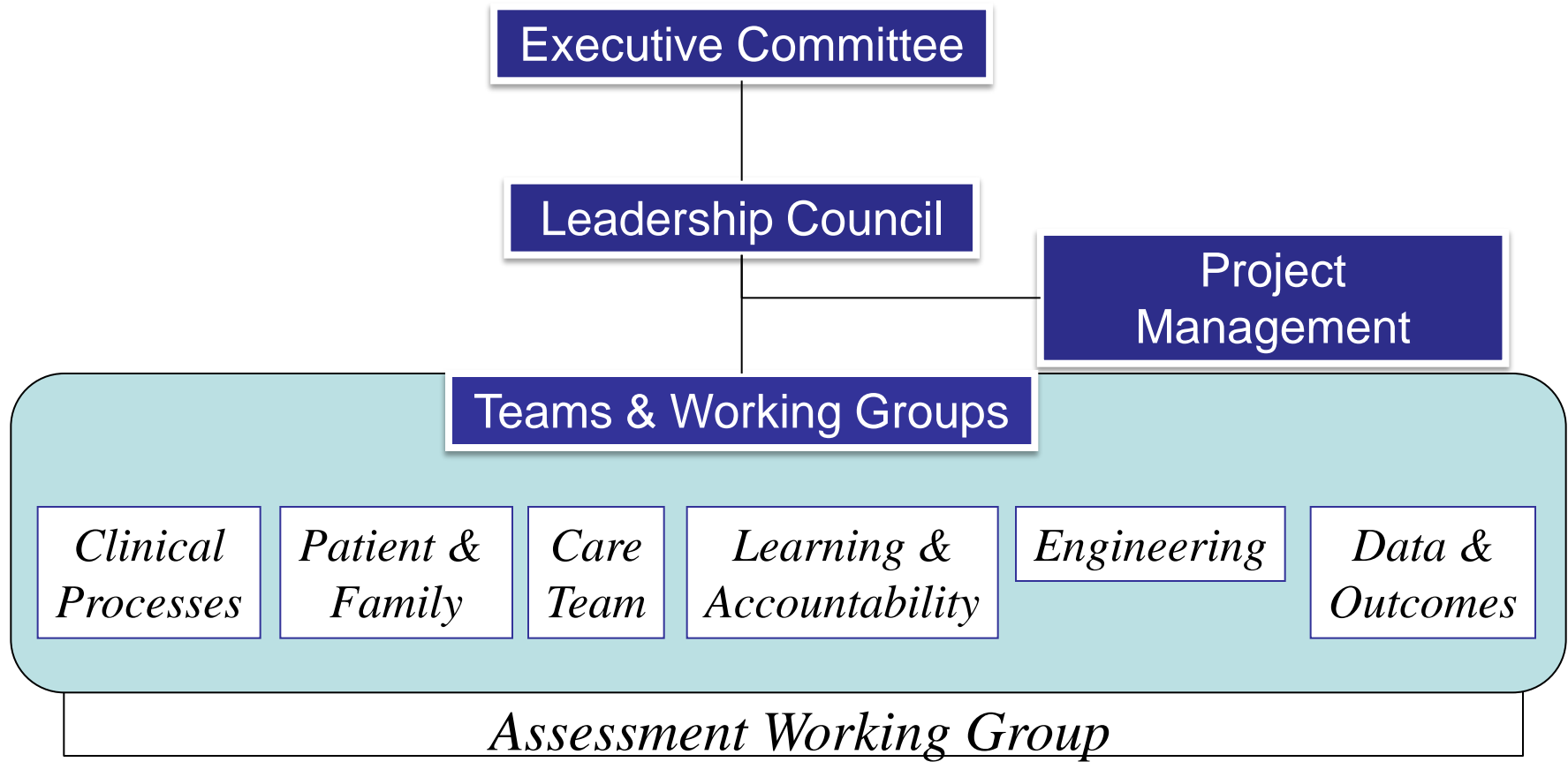
**Division of the Johns Hopkins University founded  
in 1942 to solve a wartime problem**

**Enhance the security of the nation  
through the application  
of science & technology**

**Strategic Systems Test & Evaluation  
Submarine Security & Survivability  
Space Science & Engineering  
Combat & Guided Missile Systems  
Theater Air Defense  
Information Technology (C<sup>4</sup>ISR/IW)  
Simulation, Modeling & Operations  
Mission-Related R&D**



# Emerge Project Governance





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