

# National Comparative Audit of Bedside Transfusion Practice 2005

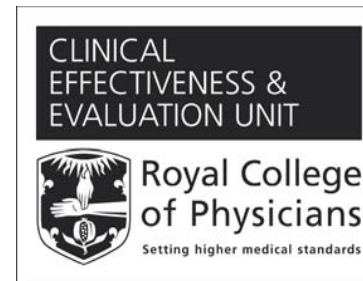
Dr C Taylor November 2006

# Bedside Practice 2005

- Background
- Headline results
- Worst clinical areas
- Variation in practice
- Factors affecting practice

# Background

- Collaborative effort



- Repeat of 2003
- Funding from NBS

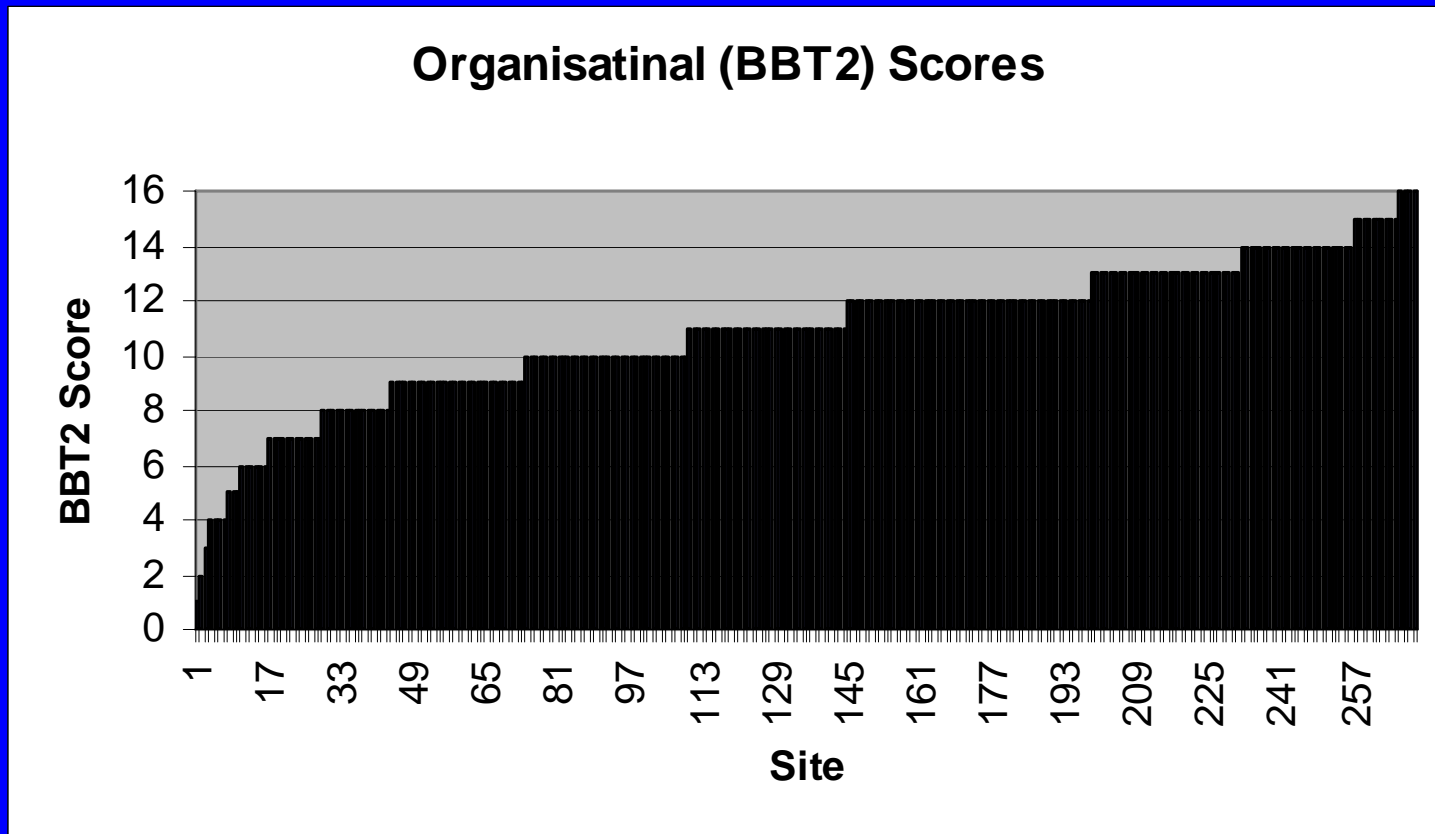
# 2005 Audit

- Largest bedside practice audit yet
  - 274 ‘sites’
  - 8054 episodes
- Standards
  - Better Blood Transfusion 2 (2002)
  - BCSH guidelines (1999)

# Organisation

- 87% of HTCs met at least 3 times in last year
  - Only 39% had general medical representation
  - Only 11% had gastroenterology representation
- 80% have an HTT
- 75% have a transfusion practitioner
- 90% have a lead consultant
  - But 23% have no time allocated!
- Only 39% have trained at least half their nurses

# Variation in organisation



# Bedside Transfusion Safety

- Safe transfusion is dependant upon:
- Correct Patient ID
  - Wristband present and correct
  - ID on other documents correct
- Observation of patient during transfusion
  - Observations documented
  - Timing of observations

# Headline Results

- 8054 transfusion episodes in 269 sites
- 6% had no ID
- only 22% of wristbands fully compliant
- 91% contained name, dob, ID number
- 11% of prescription charts had missing information
- 15% had no monitoring during transfusion
  - Further 12% no observations within 1 hour of start

# Readable wristband information

- Surname 99.5%
- First Name 99.4%
- Gender 24%
- Date of Birth 97%
- ID Number 95%

# Missing ID information

- Where information was present on the wristband

	Surname	First Name	Gender	DoB	Hospital Number	Any missing
Compat. form	0.02	0	13	0.05	0.38	0.39
Blood Label	0.07	0.09	66	2.4	0.39	2.6
Notes	0.05	0.17	6.7	2.4	0.96	2.3
Prescription Sheet	0.2	0.25	19	10	5.6	11

# Mismatched Information

- Mismatches with wristband (where info present)

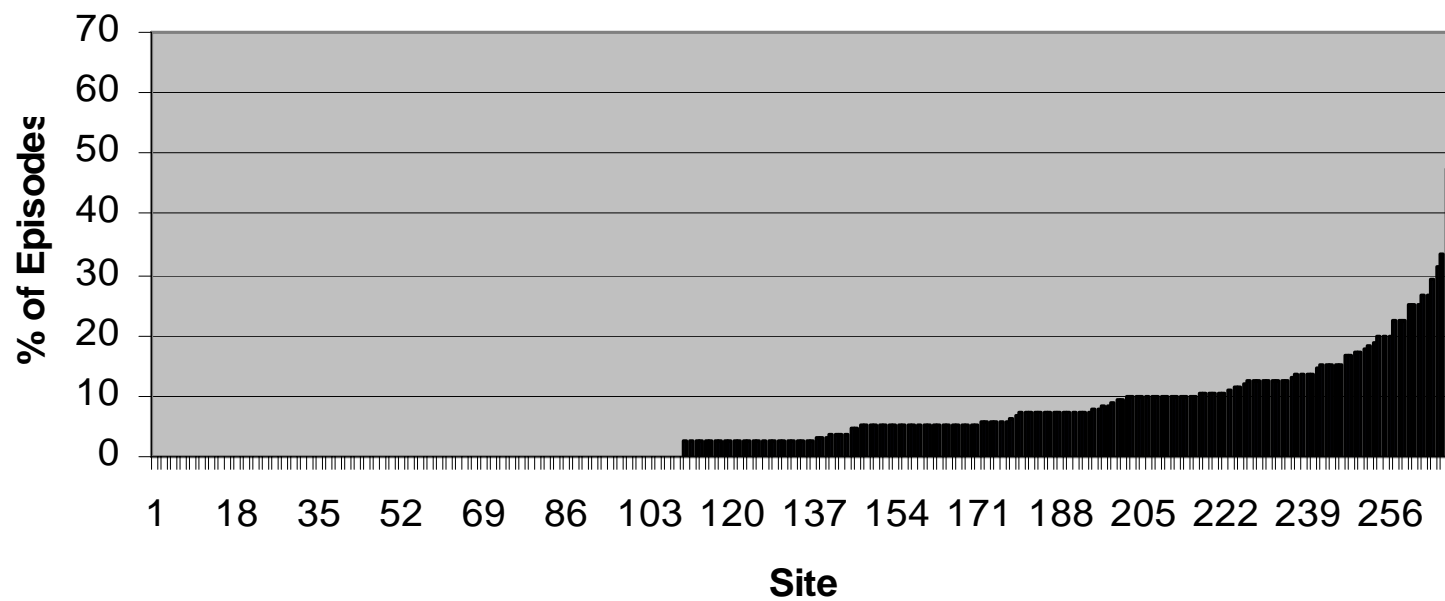
	Surname	First Name	Gender	DoB	Hospital Number	Any Mismatch
Compat form	0.47	0.40	0	0.51	1.24	2.5
Blood Label	<b>0.52</b>	<b>0.45</b>	<b>0</b>	<b>0.52</b>	<b>1.40</b>	<b>2.6</b>
Notes	0.45	0.33	0	0.52	1.01	2.1
Prescription Sheet	0.51	0.56	0	0.75	1.22	2.6

# Where was the worst practice?

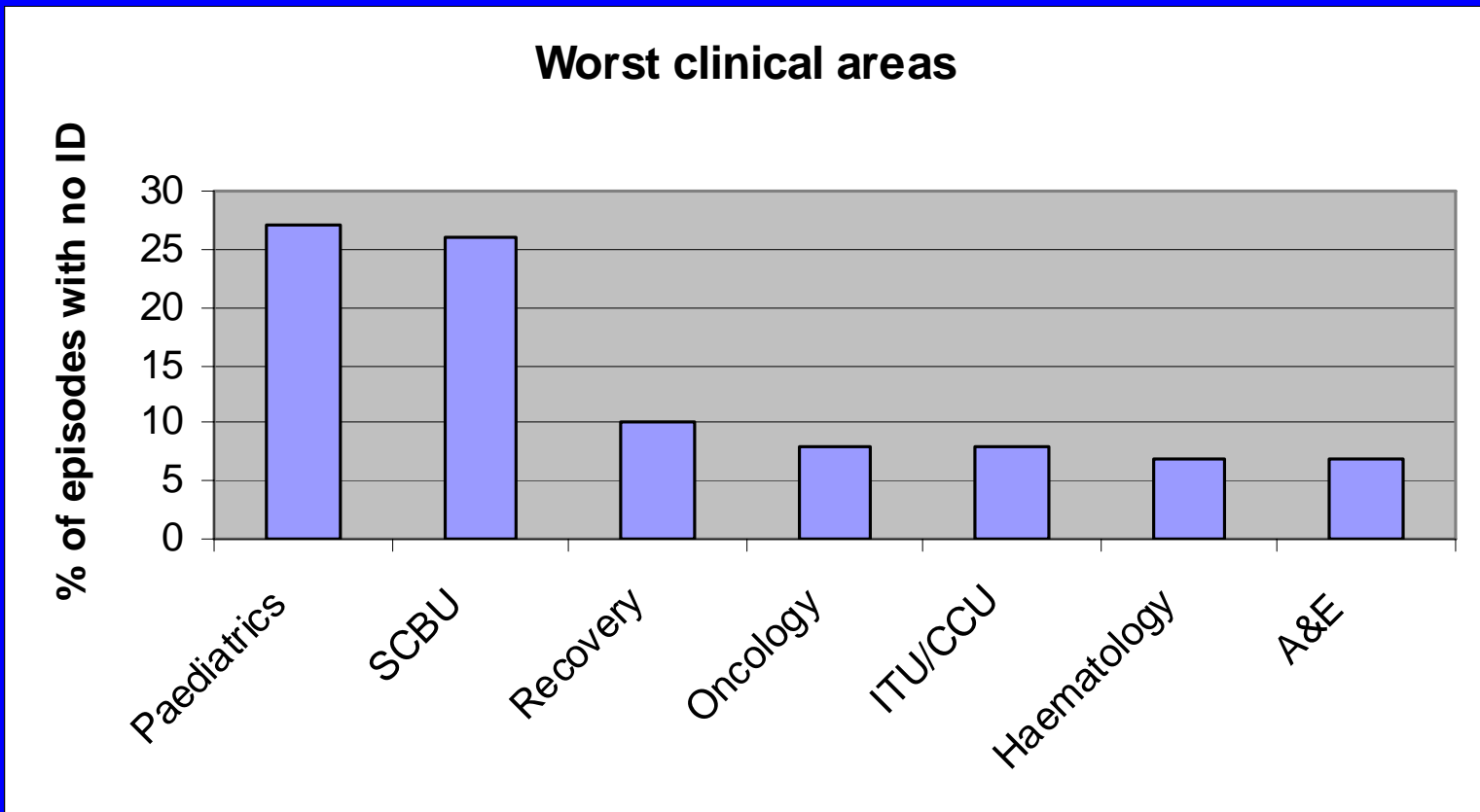
- Lack of Identification
  - 10% of Out patients (5% of in patients)
- Largest numbers on:
  - Medical wards – 27% of total
  - Haematology – 26% of total
  - Oncology – 10% of total
  - Surgical wards – 10% of total
- Most vulnerable groups are at highest risk
  - Those unable to identify themselves

# Patient Identification

Patients with No Identification

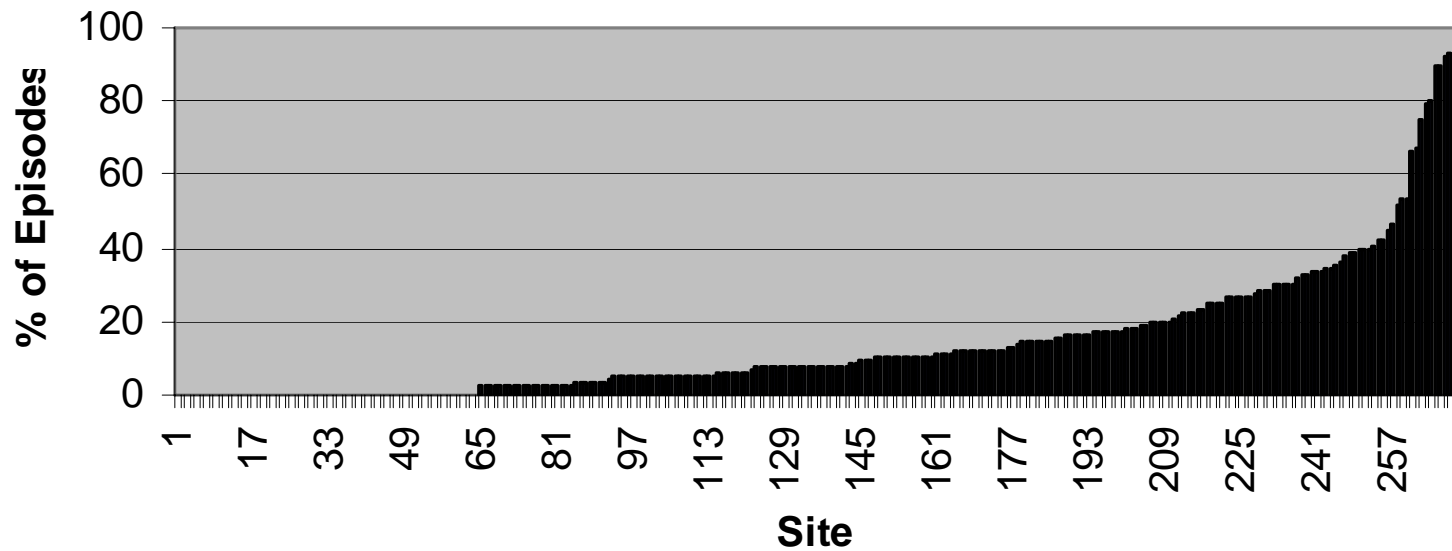


# Patients with No ID



# Patients with no Monitoring

**Transfusion Episodes with no Recorded Observations during the Transfusion**



# Risk Stratification

- Scored each site according to:
  - BBT2 compliance
  - Measures of activity
- Risk assessed each episode
  - ID present and correct
  - ID matched other documents
  - Observations were done
  - Was patient visible and conscious

# Risk Stratification

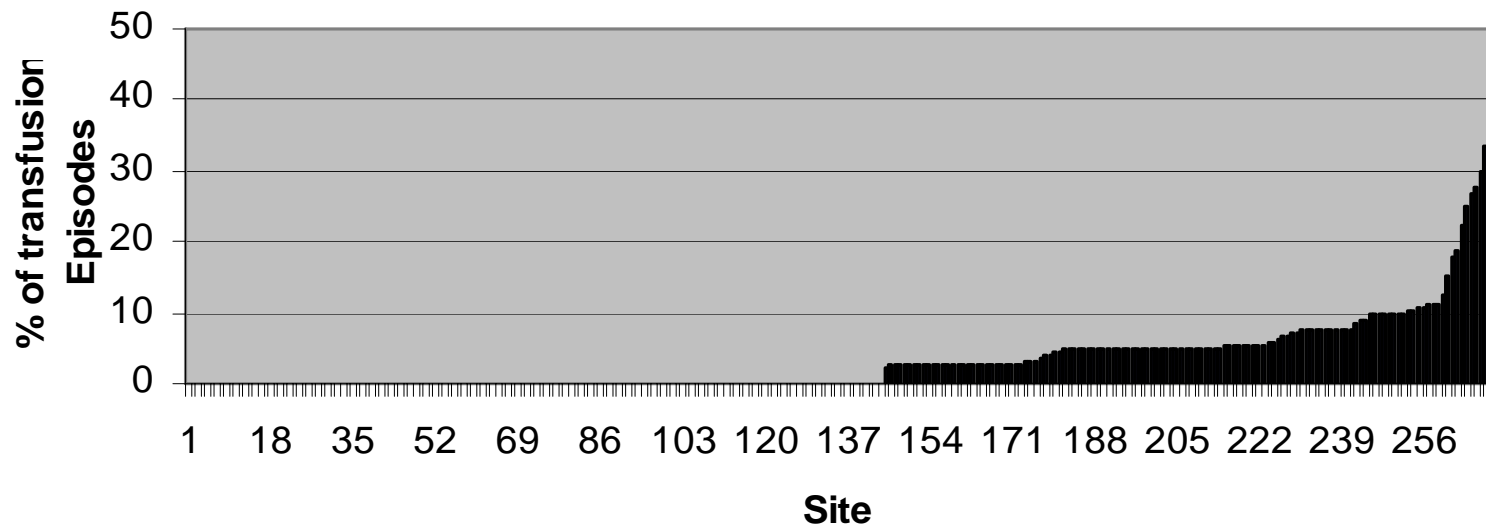
- Moderate Risk
  - No wristband/ID
  - Unit number missing from prescription sheet
  - Observations done at 15 minutes
- Severe Risk
  - Unconscious, in side room
  - No wristband/ID, no observations done
  - Gender and date of birth missing from prescription

# Episode Risks

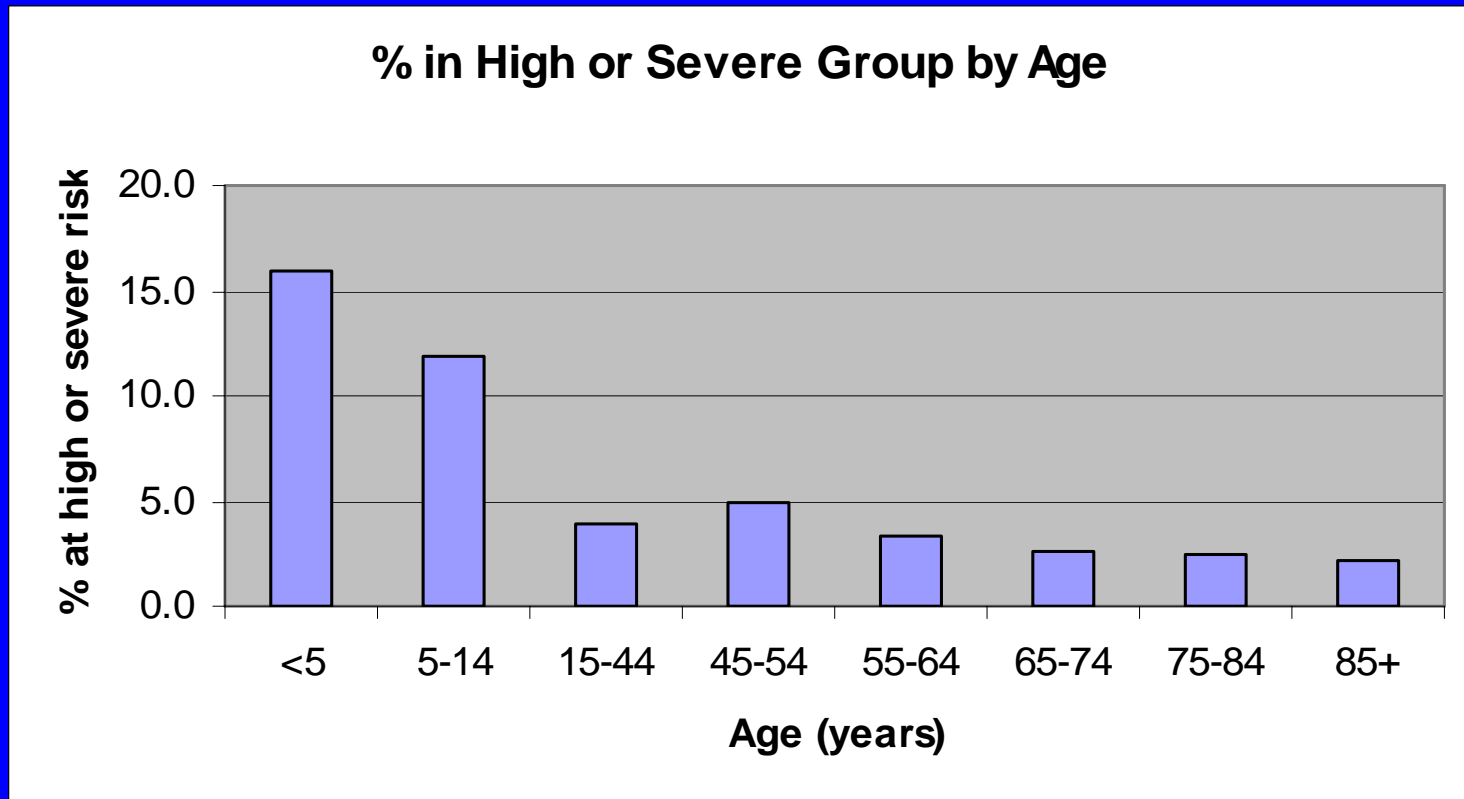
- Low risk 82%
  - Moderate risk 15%
  - High risk 3%
  - Severe Risk 0.3% (23 episodes)
- 
- 82 sites had >25% of episodes at moderate/high/severe risk

# Distribution of risk

**Transfusion Episodes in High or Severe Risk Category**

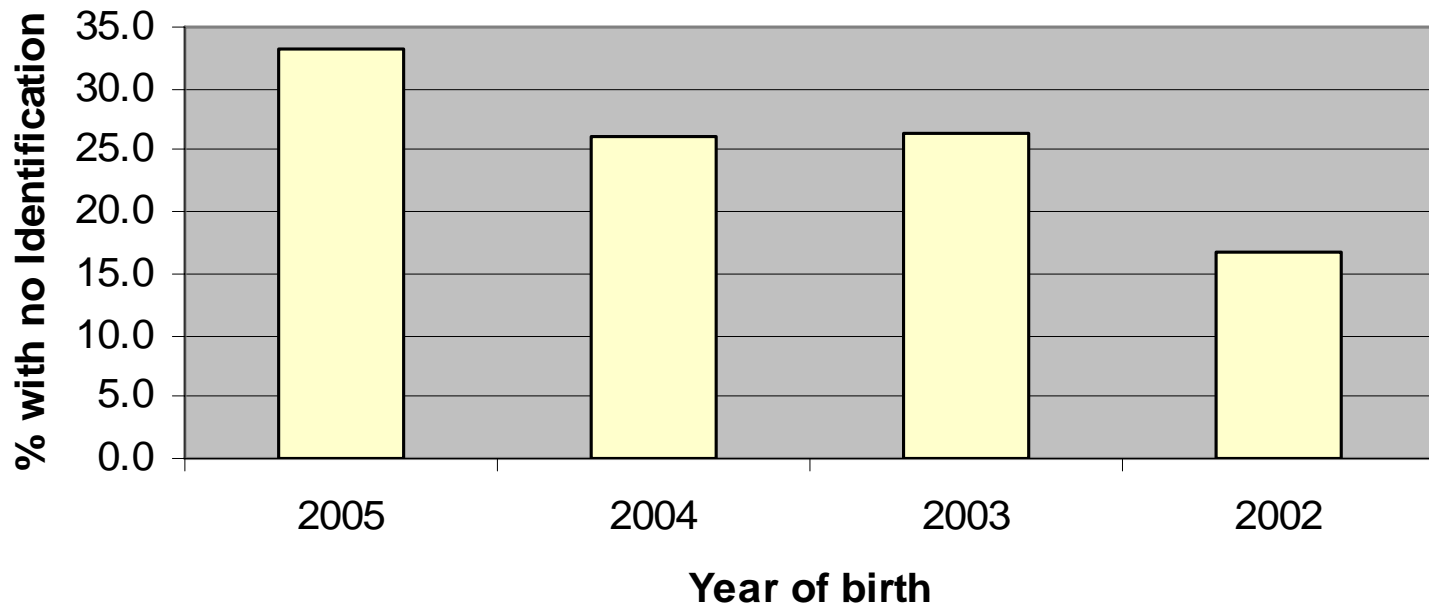


# Risk by Age



# Under 5 years Group

Identification in Under 5 years age group



# Why?

- “Baby too small”
- “removed for iv access”
- “wristband on cot/incubator”
- “wristband inside cot”
  
- “unit policy not to put name bands on babies in incubators”

**It can be done!**



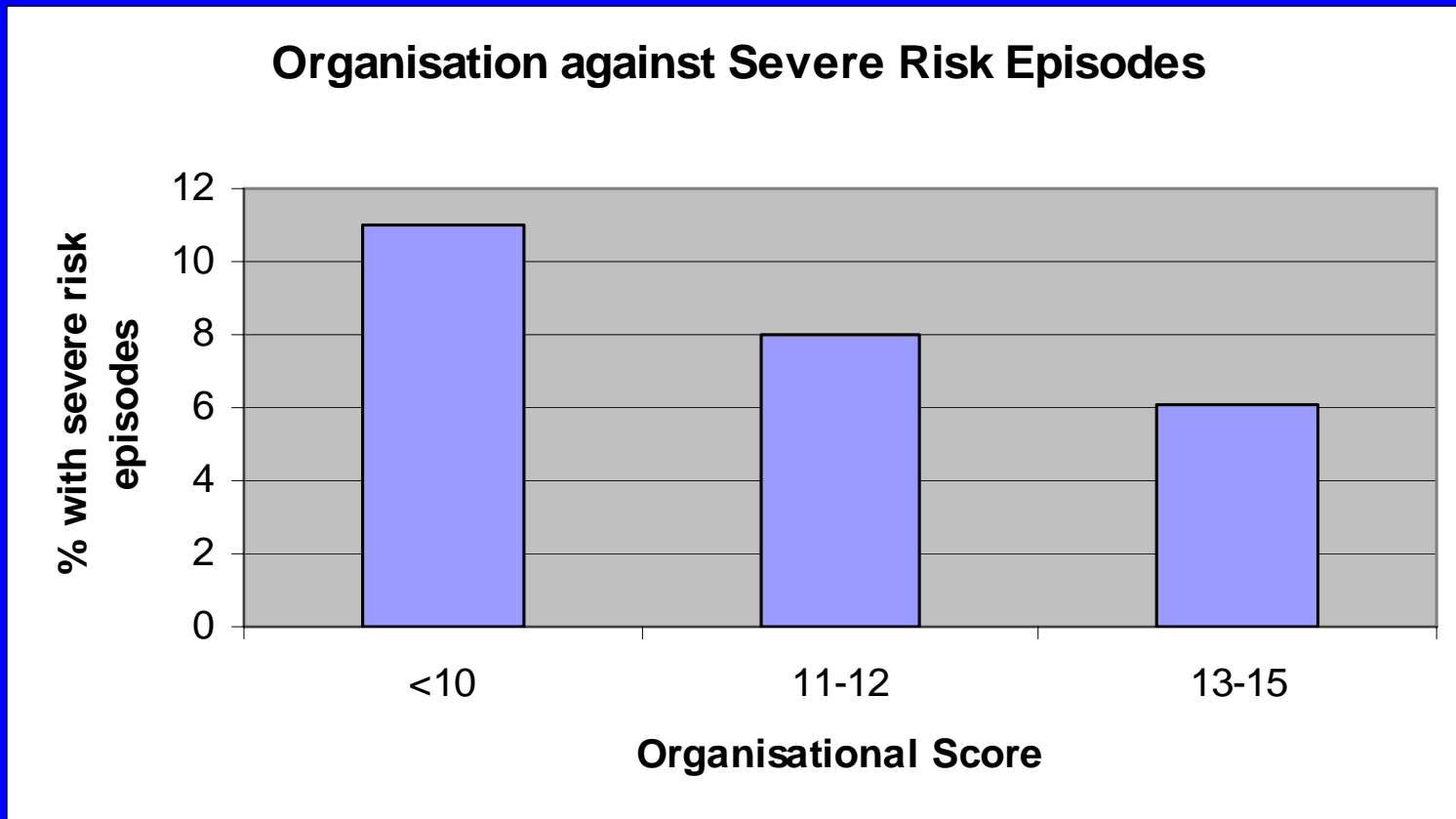
Which one is Henry?



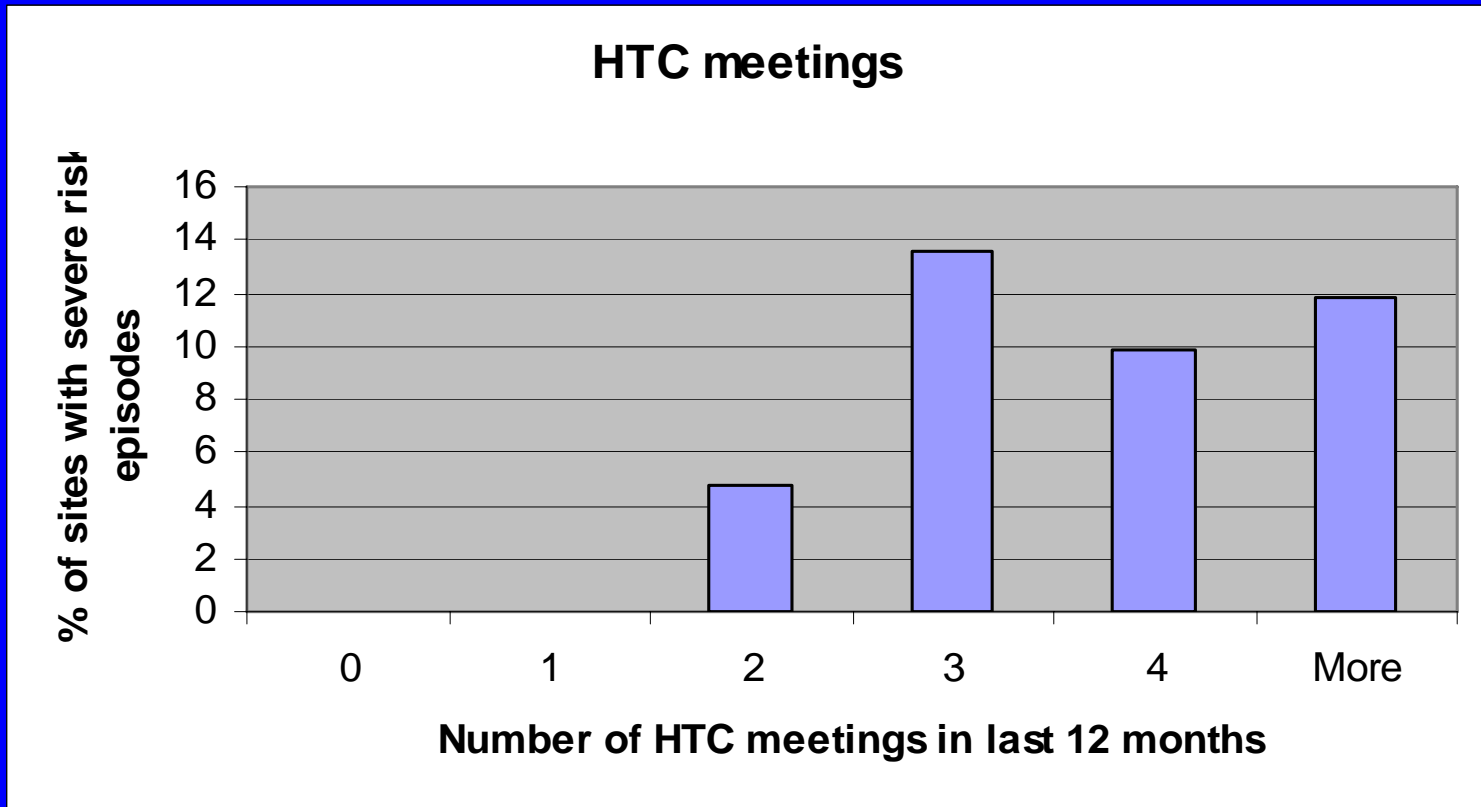
# Did anything influence the risk profile

- Do any organisational factors affect bedside practice?
- Does progress with BBT2 mean better practice?
- Does having a TP in post help?

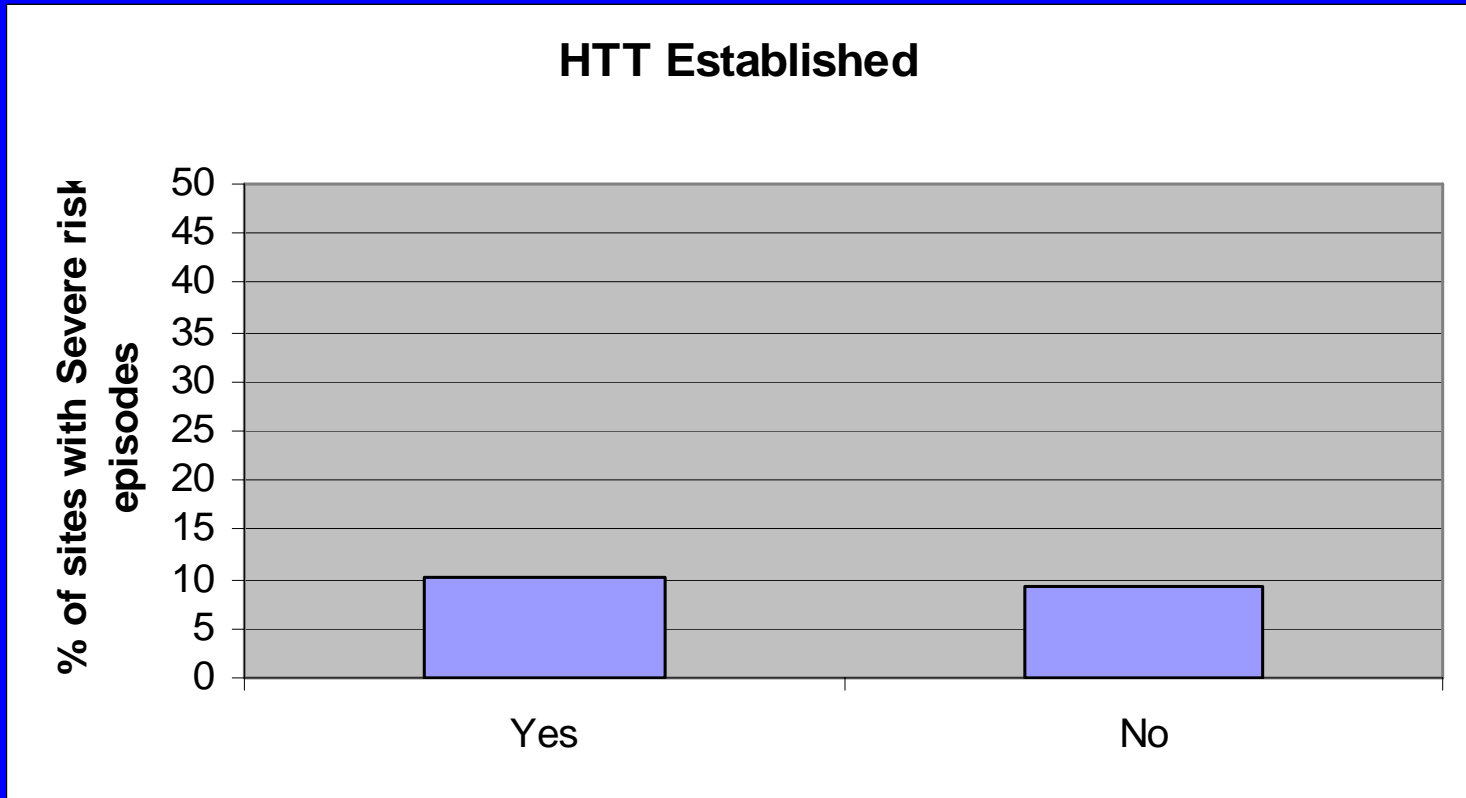
# Organisational Scoring



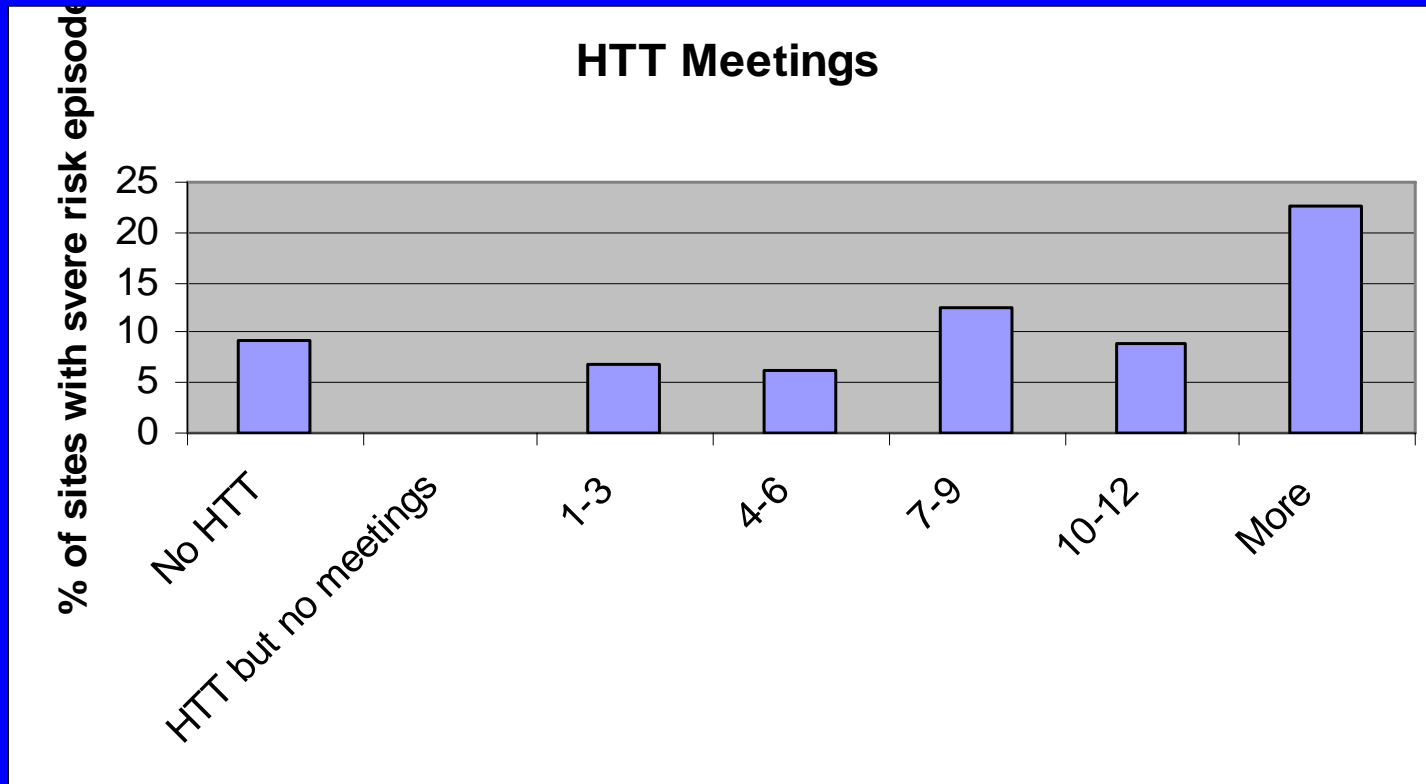
# Does Having Meetings Help?



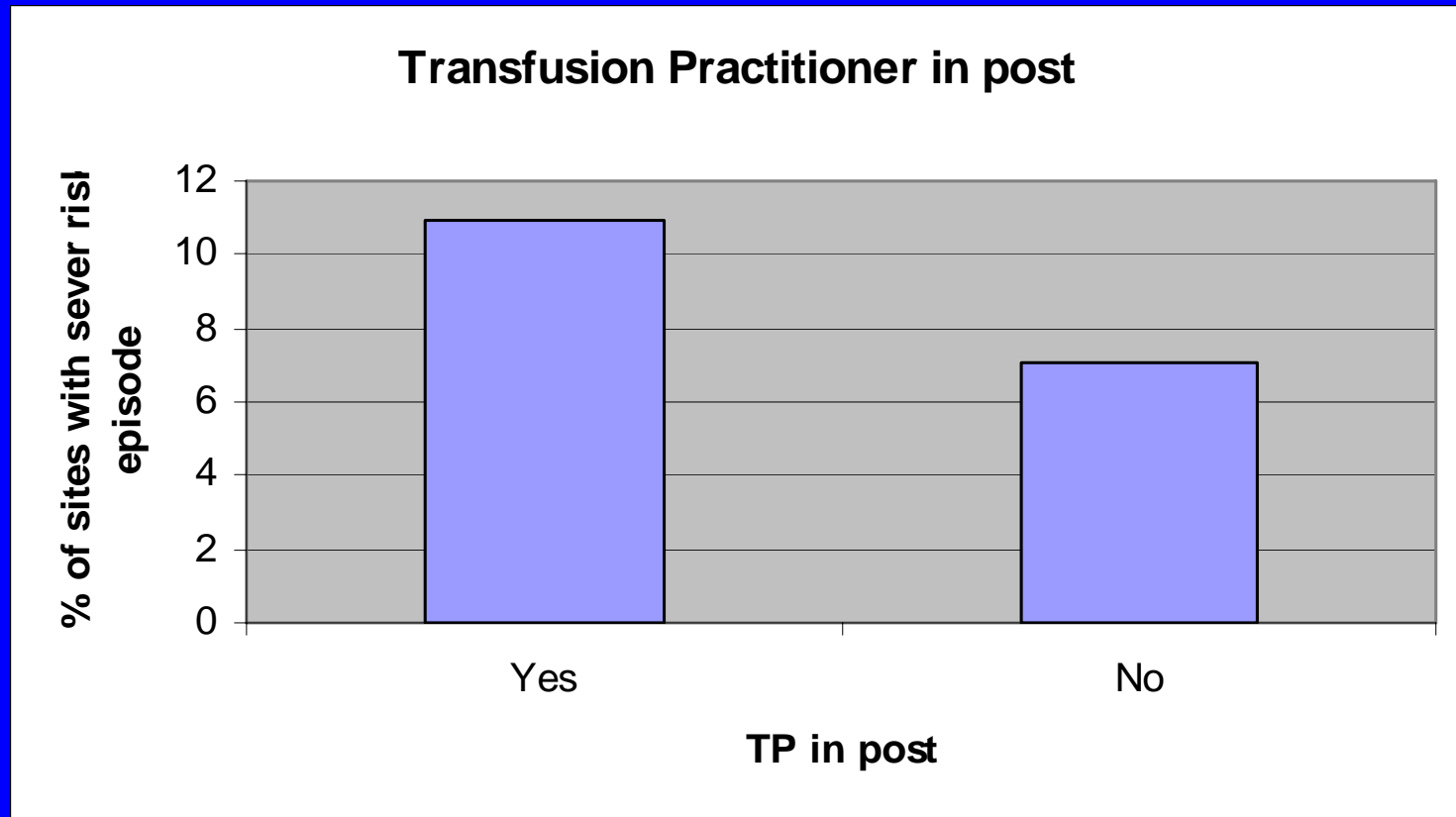
# HTT in place?



# Lots of HTT meetings?



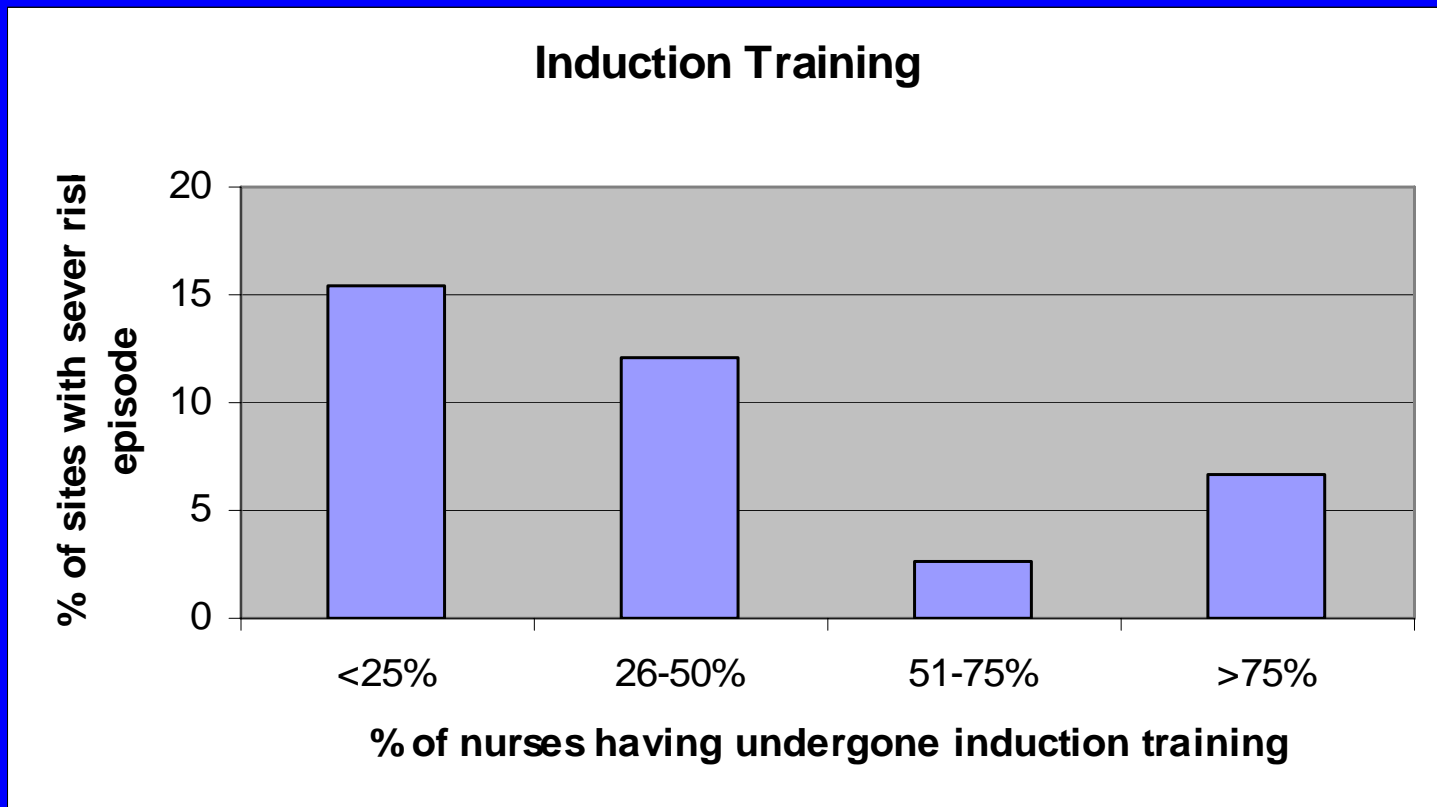
# Having a TP in post?



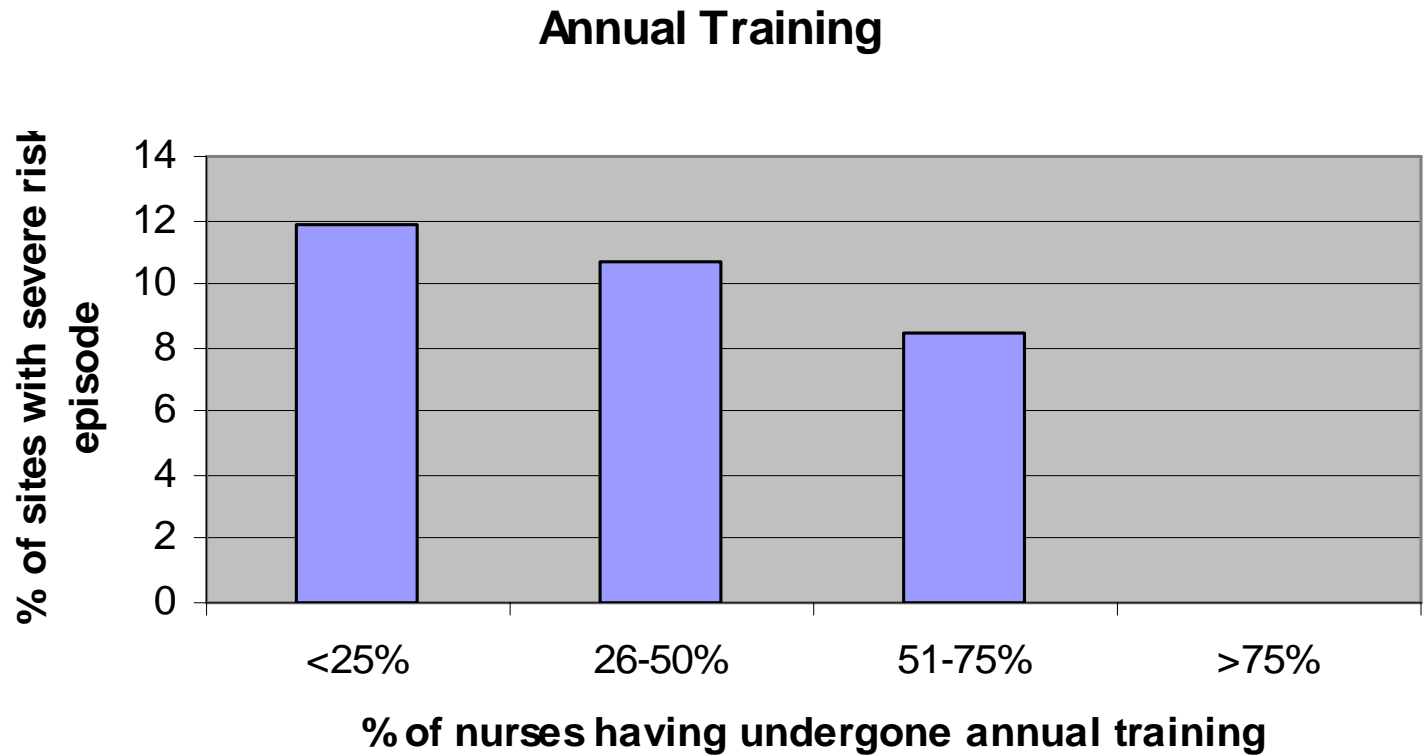
# What about measures of activity?

- HTC attendance
  - Staff training
    - Induction
    - Annual training
    - Barring untrained nurses
  - Incident reporting
    - SHOT reports
- NO
  - YES
  - NO
  - ?YES

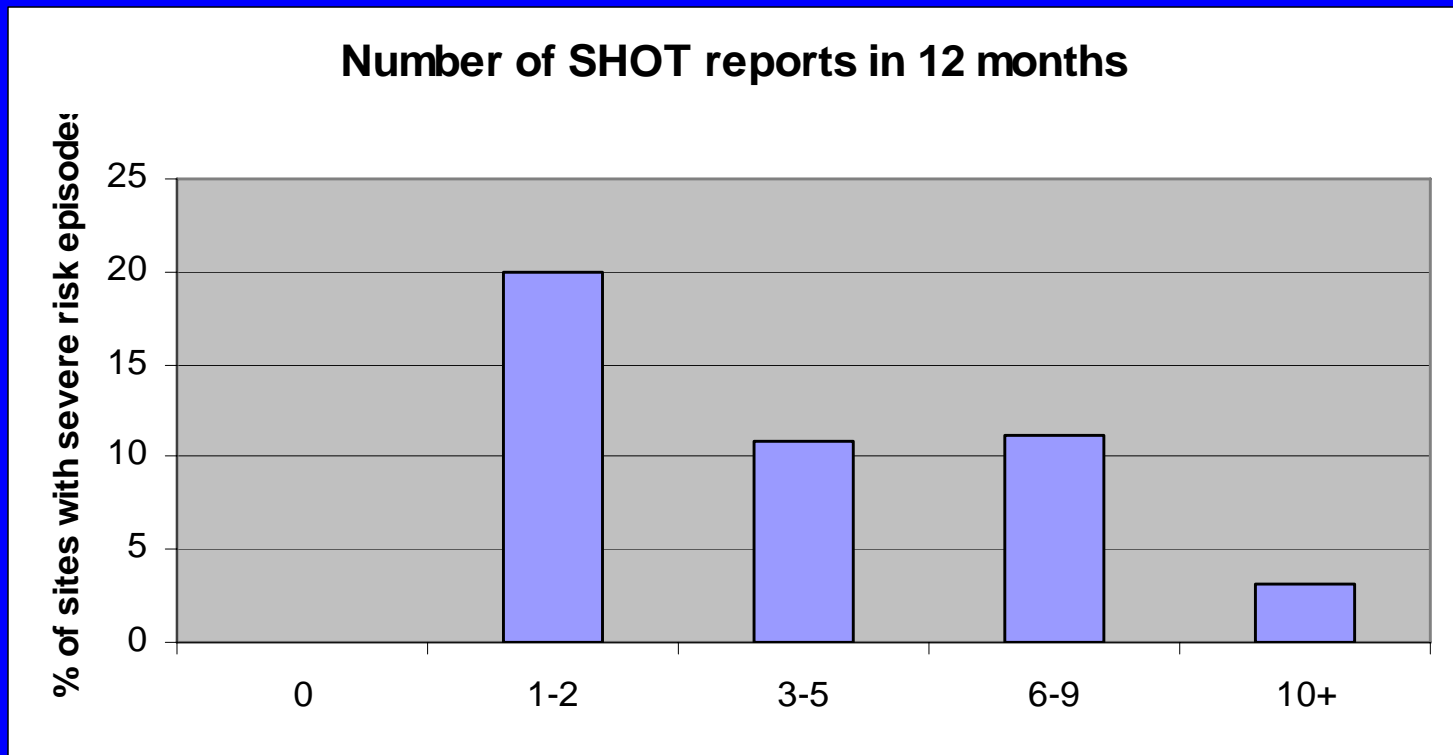
# Induction Training



# Annual Training



# Number of SHOT reports



# Cautions

- Only statistically significant association
  - Nurses annual training
- The presence of the appropriate ID and other documents **does not** mean that the bedside check was actually done.
- This audit only identified those cases in which it was **possible** for the bedside check to take place in accordance with the guidelines

# Summary

- Patient identification remains a major issue
  - Implications beyond blood transfusion
  - The young are at the highest risk
- Transfusions took place when information was missing or wrong
- Data suggests better practice more likely where:
  - BBT2 progress is made
  - Nurses receive annual training
- Actual bedside checking should be audited

# Thanks to

- Hospital data collectors



- Reports available at:
  - [www.blood.co.uk/hospitals/safe\\_use/clinical\\_audit/index.asp](http://www.blood.co.uk/hospitals/safe_use/clinical_audit/index.asp)