



Academic Health  
Science Network  
North East and North Cumbria

# Emergency Laparotomy Collaborative Meeting 27<sup>th</sup> March 2019

[www.ahsn-nenc.org.uk](http://www.ahsn-nenc.org.uk)

 @AHSN\_NENC



**Academic Health  
Science Network**  
North East and North Cumbria

# Emergency Laparotomy

**09:30am – 3:00pm, Wednesday 27<sup>th</sup> March 2019**  
Durham County Cricket Club, Chester le Street

## #NENCEMLap

[www.ahsn-nenc.org.uk](http://www.ahsn-nenc.org.uk)  
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**Academic Health  
Science Network**  
North East and North Cumbria

# **Welcome**

## **Dr David Saunders and Mr Ben Griffiths**

The Newcastle upon Tyne Hospitals  
NHS Foundation Trust

**#NENCEMLap**

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## HOUSE KEEPING

- No fire drill scheduled
- Please turn mobile phone onto silent
- Toilets are located outside main room, along the corridor
- Speaker presentations will be circulated following the event
- Join the conversation on Twitter #NENCEMLap
- Take a look at our website: [www.ahsn-nenc.org.uk](http://www.ahsn-nenc.org.uk)



**Academic Health  
Science Network**  
North East and North Cumbria

**Dr Dave Murray**

Consultant Anaesthetist  
South Tees Hospitals NHS Foundation Trust  
and Chair of NELA

**#NENCEMLap**

[www.ahsn-nenc.org.uk](http://www.ahsn-nenc.org.uk)

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# NELA & AHSN collaboration

Dr Dave Murray

Chair, National Emergency Laparotomy Audit

Consultant Anaesthetist, James Cook University Hospital

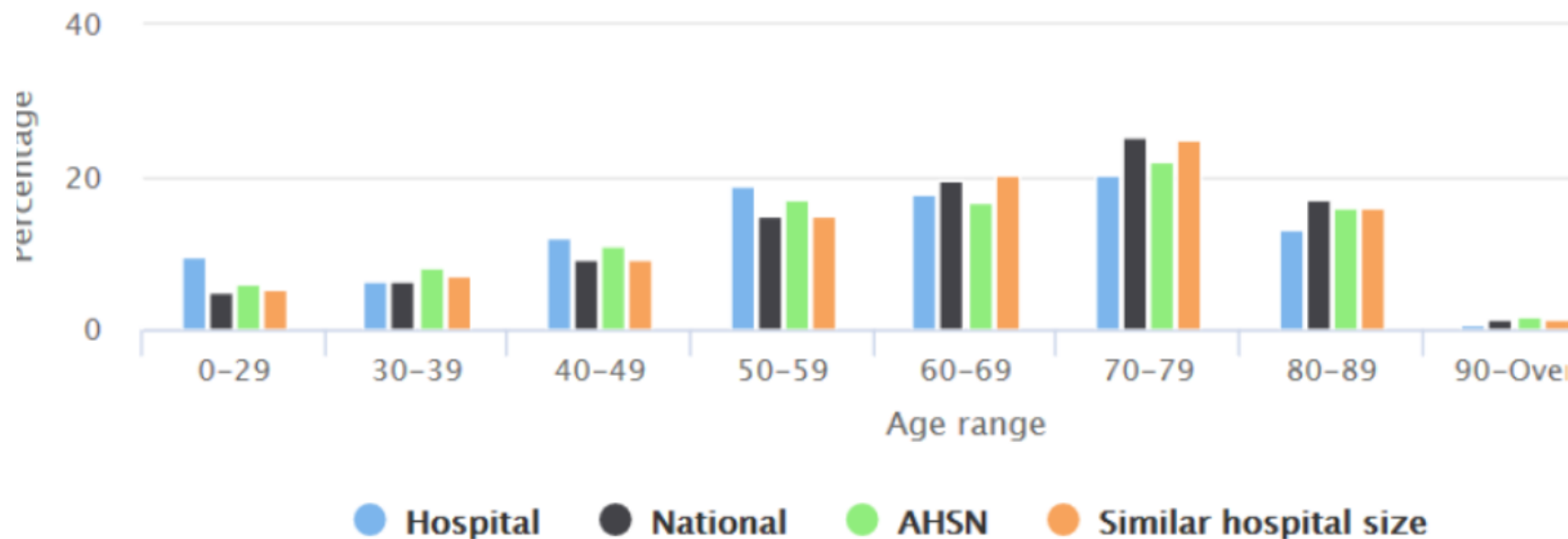
[www.nela.org.uk](http://www.nela.org.uk)  
[info@nela.org.uk](mailto:info@nela.org.uk)

# Dashboard and Reporting

- Analysing Yr5 data – publication “autumn”
- Dashboard in next week or so

## Age (%)

Click and drag in the plot area to zoom in  
Click on legend items to hide/show data

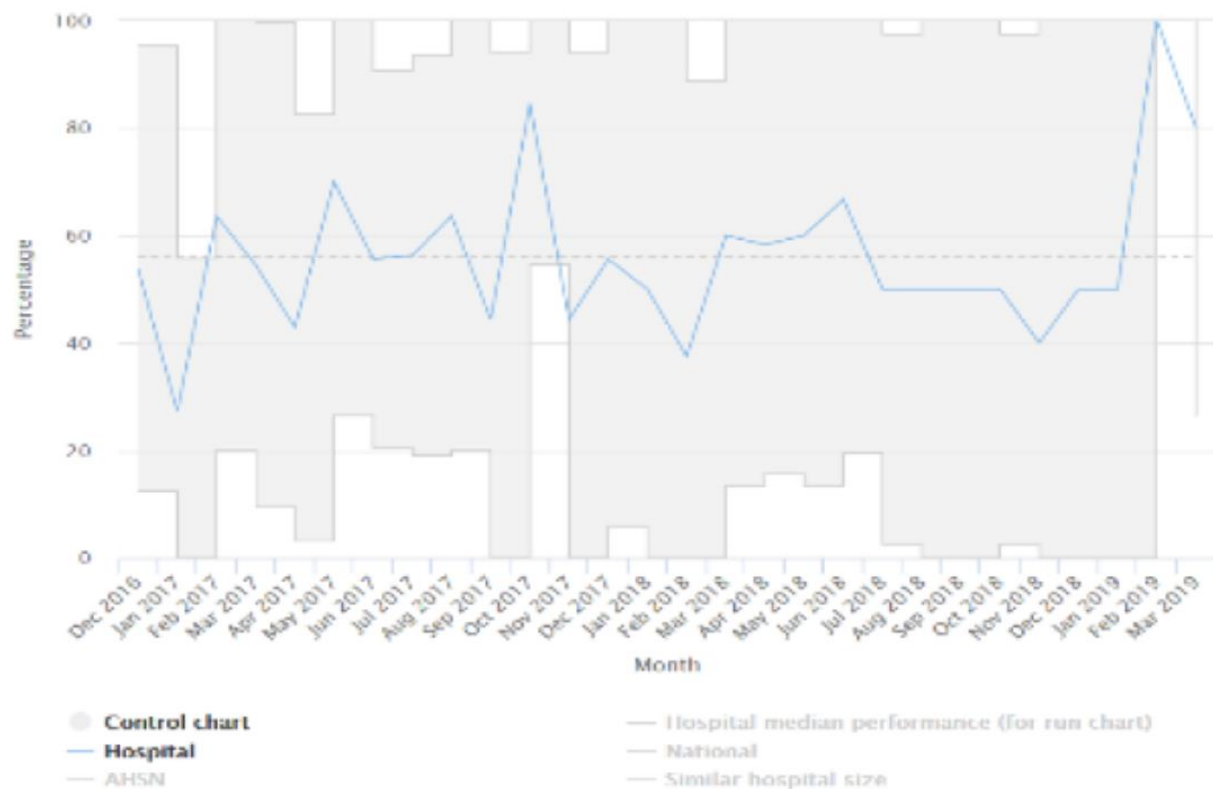




## Documentation of risk



Click and drag in the plot area to zoom in  
Click on legend items to hide/show data

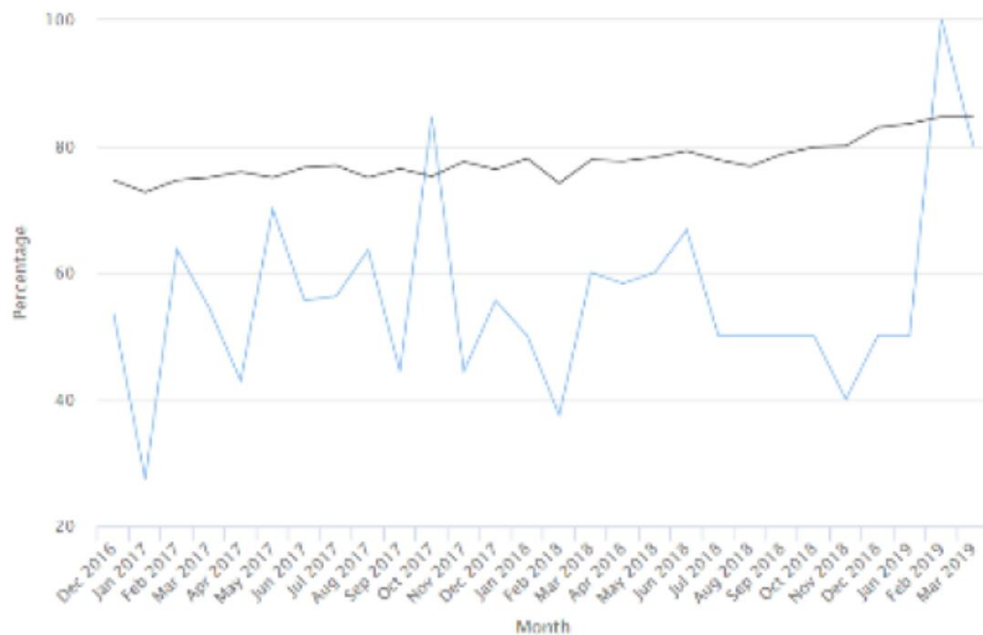


## Documentation of risk



Click and drag in the plot area to zoom in

Click on legend items to hide/show data



● Control chart

— Hospital

— AHSN

— Hospital median performance (for run chart)

— National

— Similar hospital size

## Documentation of risk



Click and drag in the plot area to zoom in  
Click on legend items to hide/show data

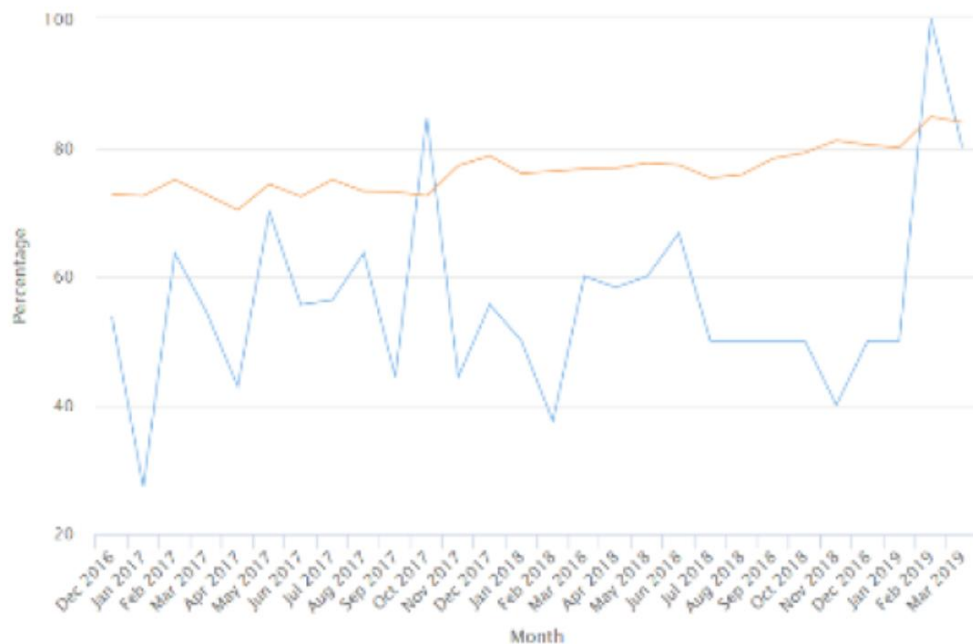


## Documentation of risk



Click and drag in the plot area to zoom in

Click on legend items to hide/show data



● Control chart

— Hospital

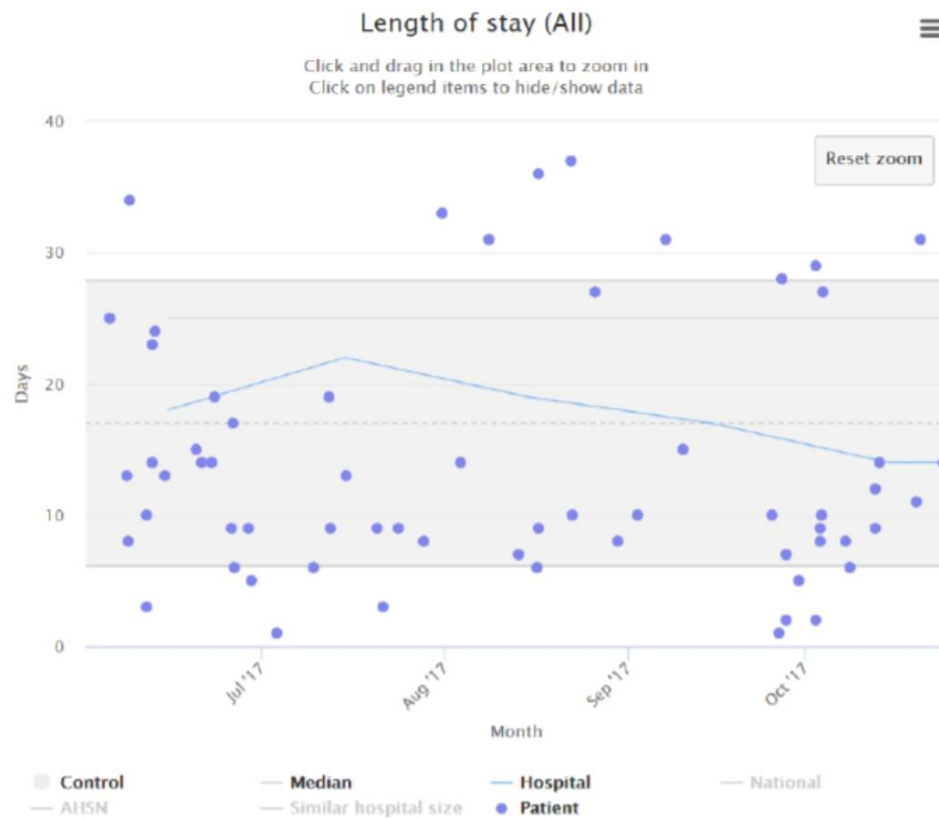
— AHSN

— Hospital median performance (for run chart)

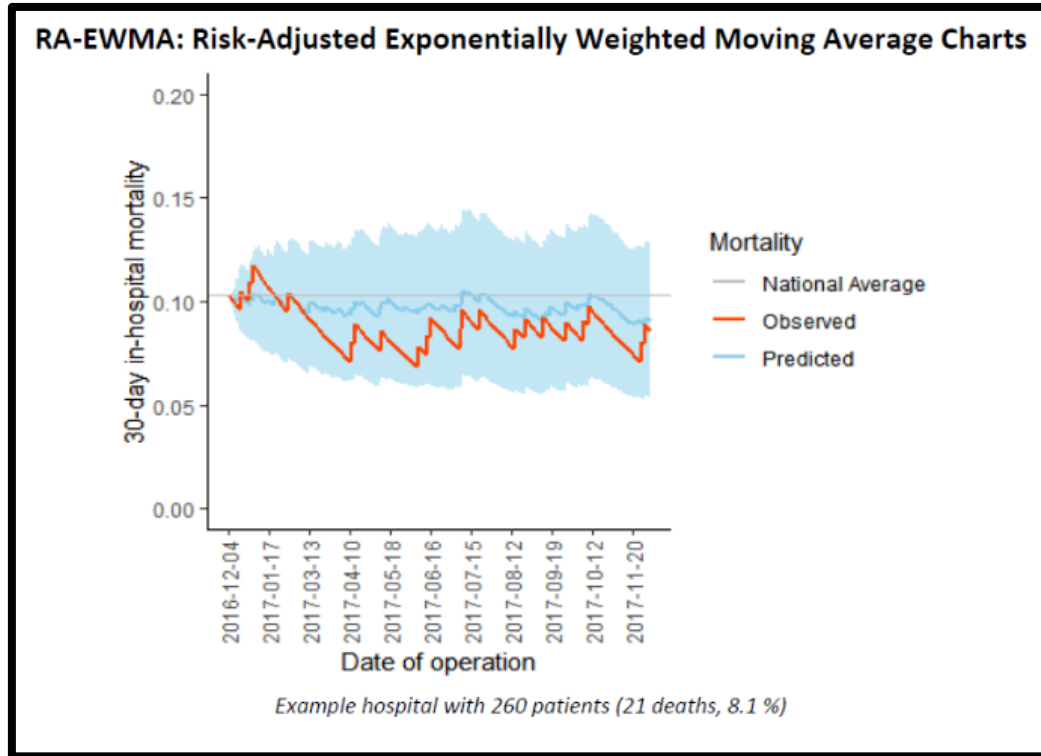
— National

— Similar hospital size

Length of stay chart demonstrating dots of individual patient data:

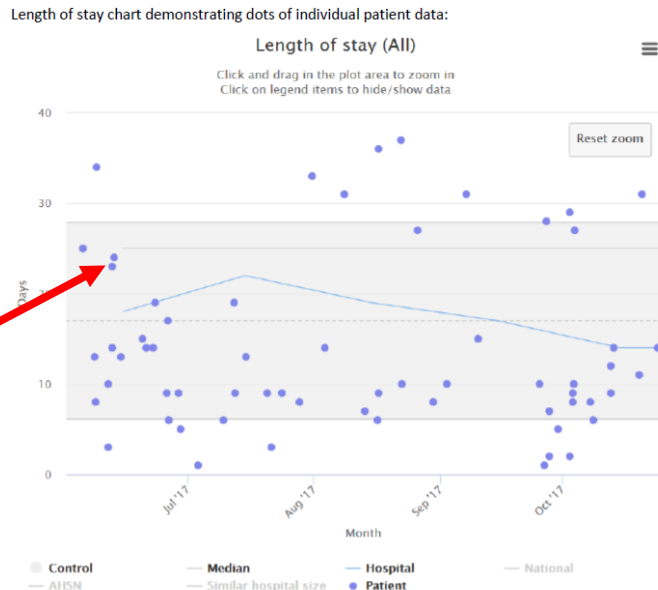


# Real-time mortality



# Who gets to see what

- Trust – all charts
- AHSNs
  - Separate login needed
  - AHSNs cannot have access to patient level data

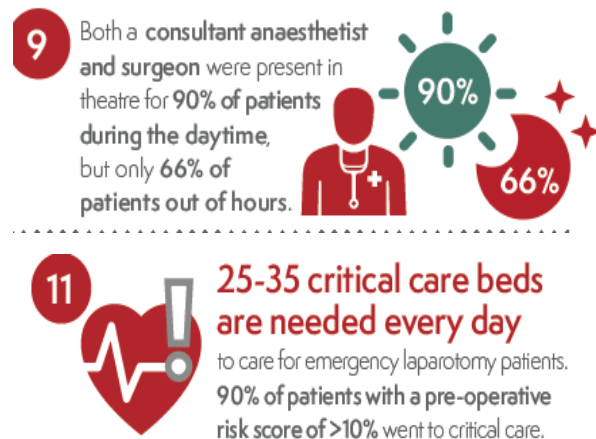


# The Emergency Laparotomy BPT

Bundled at patient level

80% of high risk patients get:

- Consultant presence
- AND
- Admission to recognised critical care (not PACU)

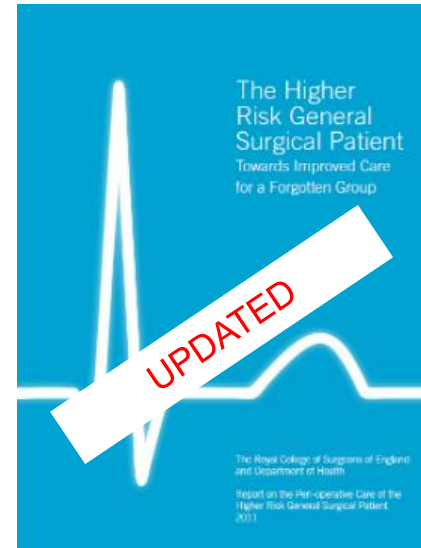




# An agreed pathway for emergency laparotomy patients is required as a pre-condition for accessing the BPT

Diagnostic & Treatment  
Agreed by clinicians  
involved in delivery of  
care:

- ED
- Radiology
- Surgery
- Anaesthesia
- Critical care
- Elderly care





# **How will data be collected for the BPT?**

## **What cases will my Trust get paid for?**

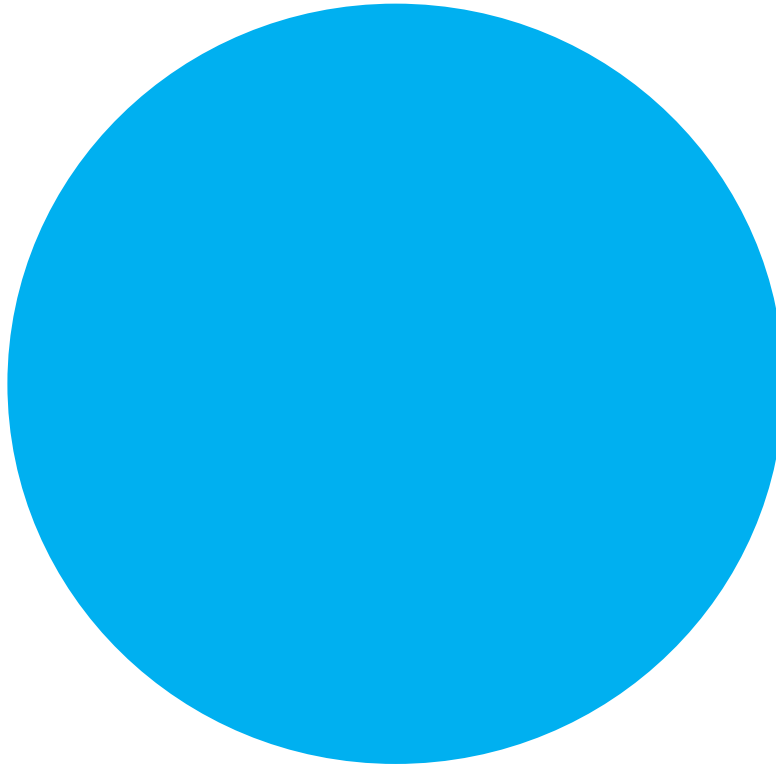
- Collected via NELA
- Paid according to HRG code

# Average difference £700 ....

HRG name	Non-BPT (£)	BPT (£)	Extra
Very Major Small Intestine Procedures, ≥19 with CC Score 8+	11,080	12,284	1,204 
Very Major Small Intestine Procedures, ≥19 with CC Score 5-7	7,502	8,318	816
Very Major Small Intestine Procedures, ≥19 with CC Score 2-4	5,744	6,368	624 
Very Major Small Intestine Procedures, ≥19 with CC Score 0-1	4,657	5,163	506
Complex Large Intestine Procedures, ≥19, with CC Score 9+	11,344	12,577	1,233
Complex Large Intestine Procedures, ≥19, with CC Score 6-8	8,585	9,518	933
Complex Large Intestine Procedures, ≥19, with CC Score 3-5	6,996	7,756	760
Complex Large Intestine Procedures, ≥19, with CC Score 0-2	5,994	6,645	651
Proximal Colon Procedures, ≥19, with CC Score 0-2	5,128	5,685	557

# What cases will my Trust get paid for?

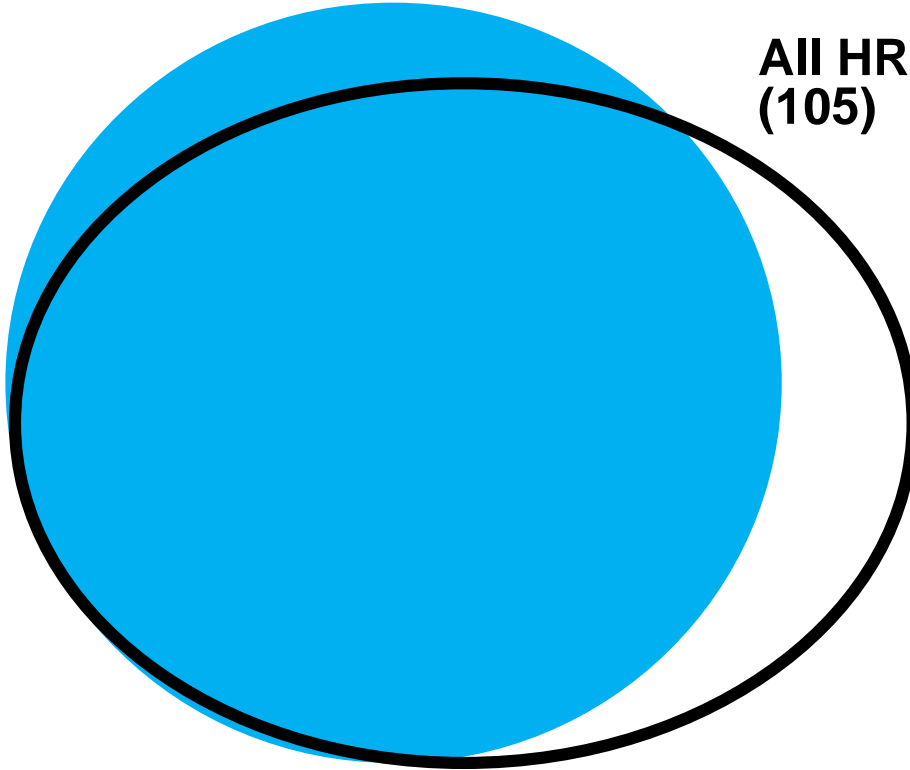
All NELA cases (100)



# What cases will my Trust get paid for?

All NELA cases (100)

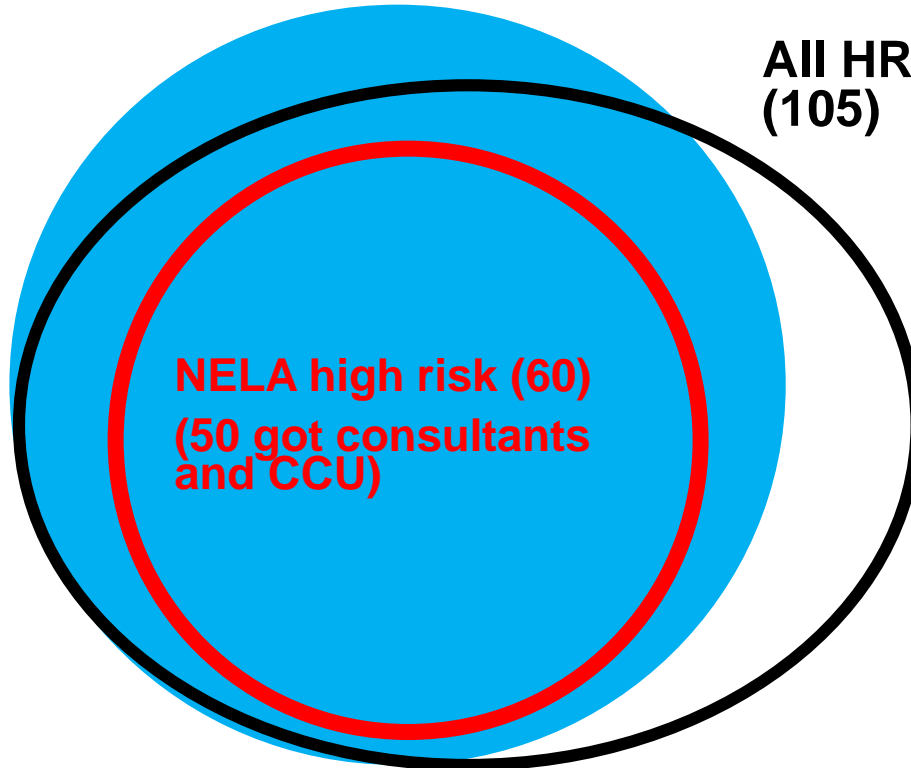
All HRG coded cases  
(105)



# What cases will my Trust get paid for?

All NELA cases (100)

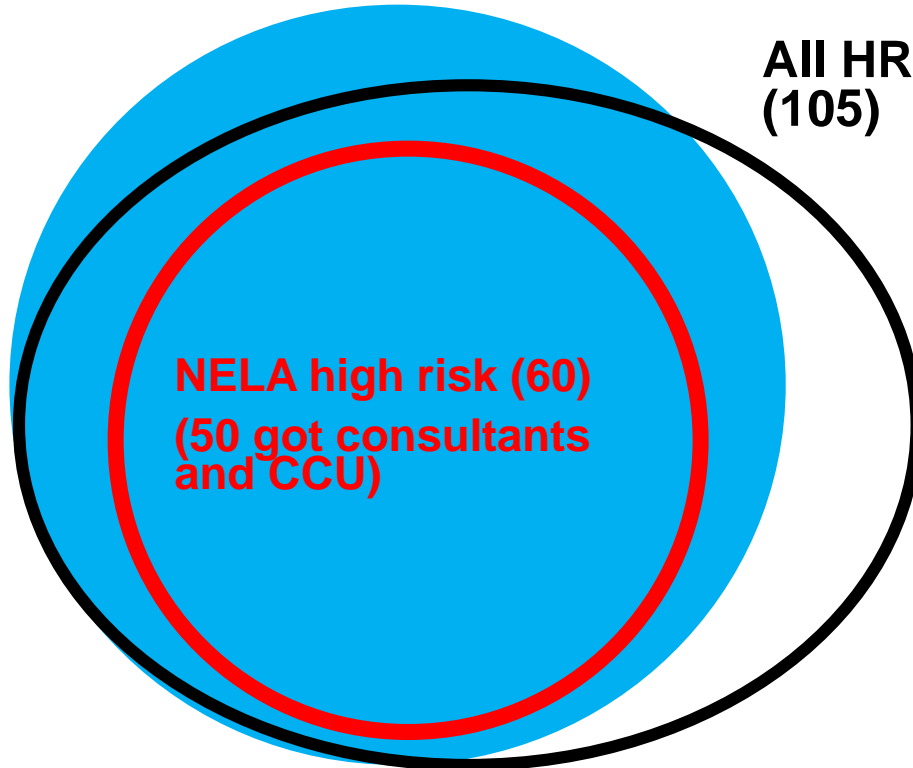
All HRG coded cases  
(105)



# What cases will my Trust get paid for?

All NELA cases (100)

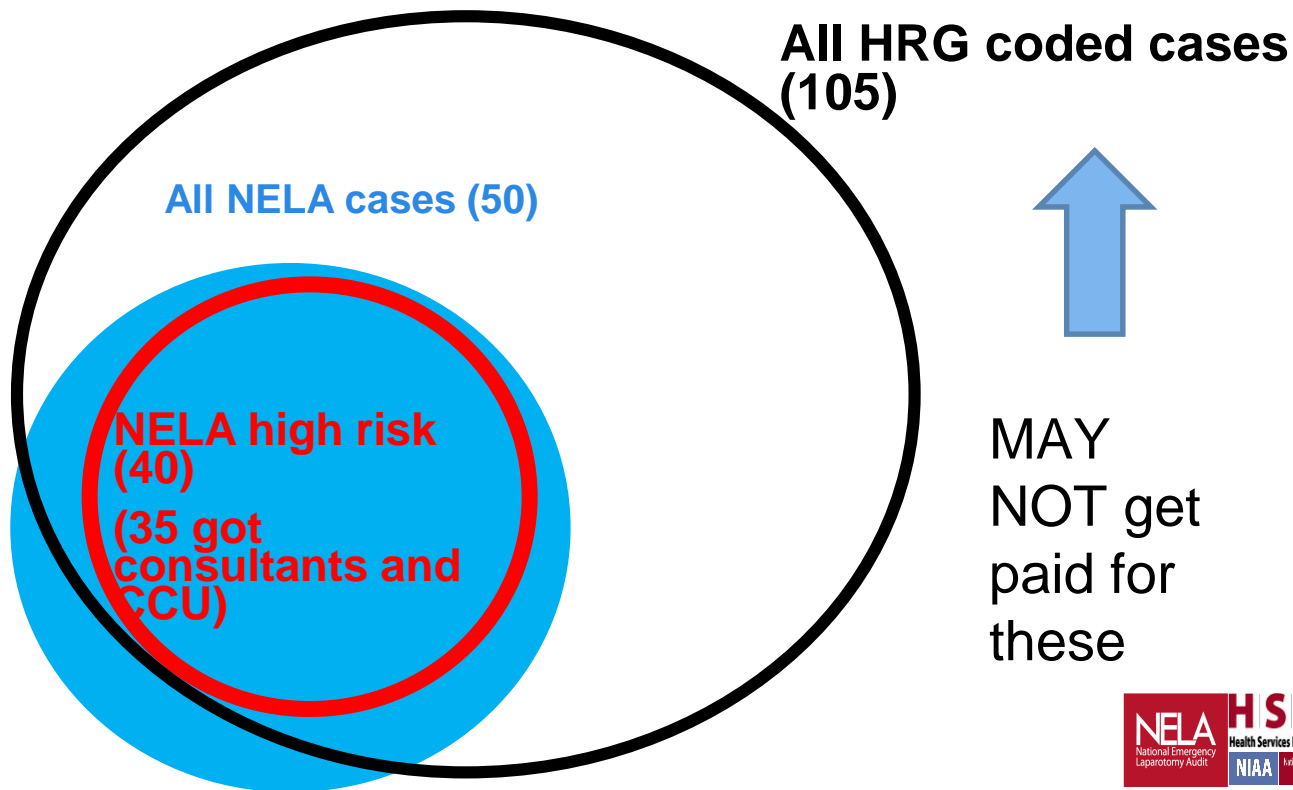
All HRG coded cases (105)



Paid for these

$$105 \times \text{£}700 = \text{£}73,500$$

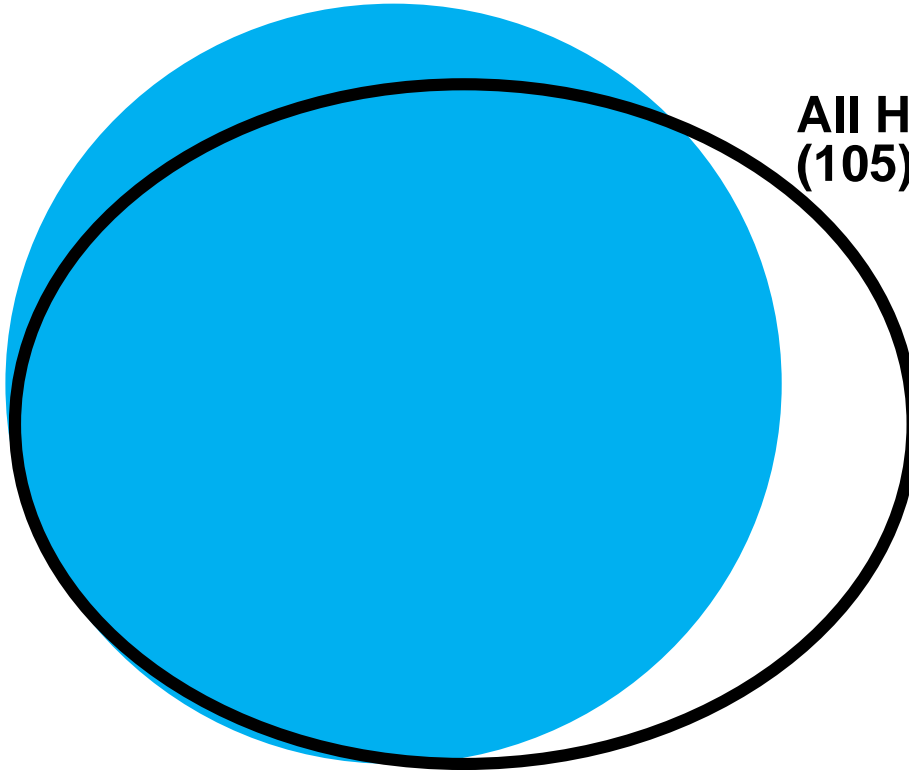
# What about case ascertainment?





# What about (missing) risk assessment?

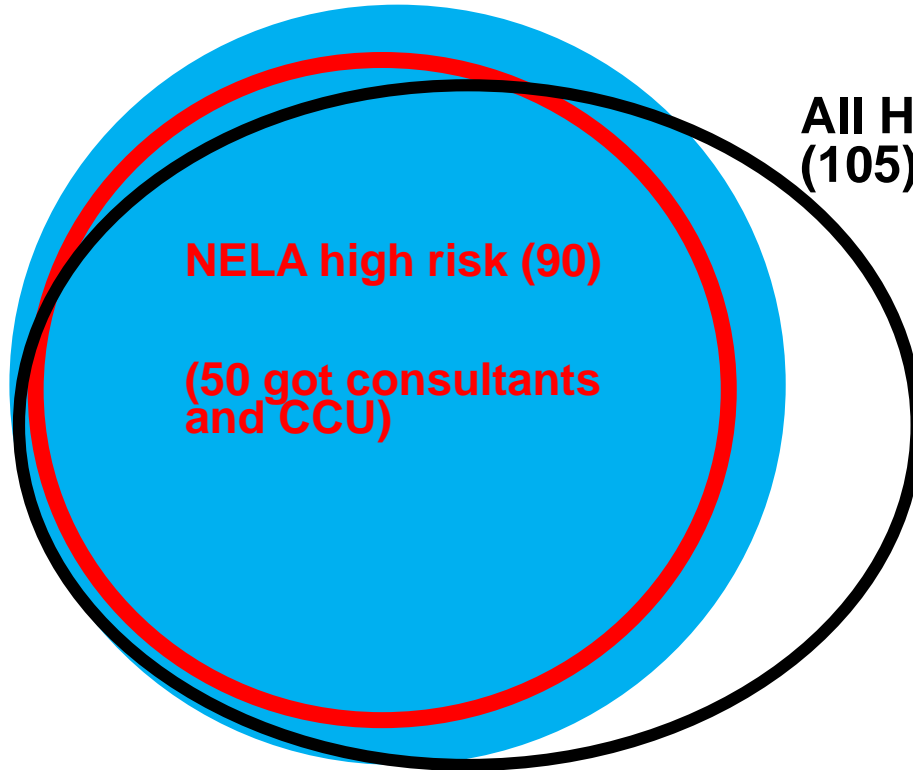
All NELA cases (100)



All HRG coded cases  
(105)

# What about (missing) risk assessment?

All NELA cases (100)



All HRG coded cases  
(105)



Not met  
criteria  
Will lose  
£73,500

# How is high risk identified?

- The BPT only applies to high risk patients who are high risk pre-op AND post-op.

# How is high risk identified?

- The BPT only applies to high risk patients who are high risk pre-op AND post-op.



# How is high risk identified?

- The BPT only applies to high risk patients who are high risk pre-op AND post-op.
- From April 2019, no more POSSUM
- NELA risk score, or clinical judgement. In the absence of risk assessment, the patient will be considered as high risk
- [data.nela.org.uk/riskcalculator/](https://data.nela.org.uk/riskcalculator/)

# Quarterly reports

- Existing Quarterly report will be combined with BPT report
- 60-day cut-off (+ few)
- Locked cases only



The Newcastle upon Tyne Hospitals



NHS Foundation Trust

# How the Best Practice Tariff works - a Trust perspective

Jo McCallum

27<sup>th</sup> March 2019

#NENCEMLap

*Healthcare at its very best - with a personal touch*

# What are Best Practice Tariffs

## Best Practice Tariffs

Introduced in waves since 2010/11

Priced and structured to incentivise clinical best practice & reduce clinical variation

Move away from average cost per episode

No one-size fits all approach



# BPT Terms

Term Used	Description
Conventional price (tariff)	The price that would apply if there were not a BPT or for activity covered by the HRG unrelated to the BPT (where set at sub-HRG level).
BPT price (tariff)	The price paid for activity where the requirement(s) of the BPT are achieved. This will normally be higher than the conventional price.
Base price (tariff)	The price paid for activity where the requirement(s) of the BPT are not achieved. This will normally be lower than the conventional price
Conditional top-up payment	<p>This is the difference between the BPT price and base price.</p> <p>For BPTs where SUS+ automates the base price, this is the amount to be added as a local adjustment where the BPT requirement(s) are met.</p> <p>For BPTs where SUS+ automates the BPT price, this is the amount to recover as a local adjustment where the BPT requirement(s) are not met.</p>

# NuTH Approach

- New BPT introduced (could be non-mandatory BPT)
- Liaison with clinical lead or team
- Model financial impact (based on current or expected performance and any required investment)
- Feed into contractual negotiations with commissioners
- Factor into Trust plan and routinely monitor and report back

# Conclusion

- BPTs have had a variable impact
- Providers have previously reported little financial incentive
- Can focus attention on an area of clinical practice and, when aligned with a strong clinical drive nationally and locally, can help bring about significant improvement
- Longer term future unknown with new funding models

# Lessons Learned

- Strong clinical engagement, understanding and support
- Senior management and board involvement
- Frequent accurate reporting of finance and activity data
- Follow up of individual cases where best practice had not been delivered

**Questions?**



Academic Health  
Science Network  
North East and North Cumbria

Dr Matthew Scott

Consultant Radiologist  
The Newcastle upon Tyne Hospitals  
NHS Foundation Trust

Brief View from the wider MDT

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# Background



## NENC Abdominal Pain and EmLap Pathway

Date of Presentation \_\_\_\_/\_\_\_\_/\_\_\_\_  
Time of Presentation \_\_\_\_:\_\_\_\_ hrs  
Location: \_\_\_\_\_

NHS Number.....  
Trust Number.....  
Forename, Surname .....  
Date of Birth.....  
Postcode.....

### Patient with Abdominal Pain

**EXCLUDE:**  
Diarrhoeal illness  
Biliary colic  
Ureteric colic  
Urinary sepsis  
Pregnant patient  
Minor GI bleeding

NEWS2 score of 3 or more?

Yes

No

☐ Urgent surgical referral MRCS or above TIME \_\_\_\_:\_\_\_\_  
☐ Manage sepsis – **\*\*antibiotics\*\***  
☐ Take bloods incl. amylase; ABG & lactate. **Request CXR**  
☐ NEWS 5+ Escalate to senior ED Dr & senior surgeon

**Within 1 hour**

Surgical review MRCS grade  
Is there *likely* significant intraabdominal pathology?

No

Yes

☐ Urgent **EmLap** CT scan Time requested \_\_\_\_:\_\_\_\_  
☐ Scan within 1 hour Time completed \_\_\_\_:\_\_\_\_  
☐ Scan reported within 1 hour Reported \_\_\_\_:\_\_\_\_  
☐ Reconsider need for antibiotics

Is there pathology requiring surgery?

Yes

**START LAPAROTOMY PATHWAY OVER PAGE**

TIME \_\_\_\_:\_\_\_\_ hrs

Process  
patient  
normally



# More scans?



# “Prioritisation”

Location: \_\_\_\_\_

Date of Birth: \_\_\_\_\_  
Postcode: \_\_\_\_\_

## Patient with Abdominal Pain

### EXCLUDE:

Diarrhoeal illness  
Biliary colic  
Ureteric colic  
Urinary sepsis  
Pregnant patient  
Minor GI bleeding

NEWS2 score of 3 or more?

excluded

No

Yes

<input type="checkbox"/>	Urgent surgical referral <u>MRCS or above</u>	TIME __ : __
<input type="checkbox"/>	Manage sepsis – <b>**antibiotics**</b>	
<input type="checkbox"/>	Take bloods incl. amylase; ABG & lactate. <b>Request CXR</b>	
<input type="checkbox"/>	NEWS 5+ Escalate to senior ED Dr & senior surgeon	

Within 1  
hour

Surgical review MRCS grade

Is there *likely* significant intraabdominal pathology?

No

Yes

<input type="checkbox"/>	Urgent <u>EmLap</u> CT scan	Time requested __ : __
<input type="checkbox"/>	Scan within 1 hour	Time completed __ : __
<input type="checkbox"/>	Scan reported within 1 hour	Reported __ : __
<input type="checkbox"/>	Reconsider need for antibiotics	

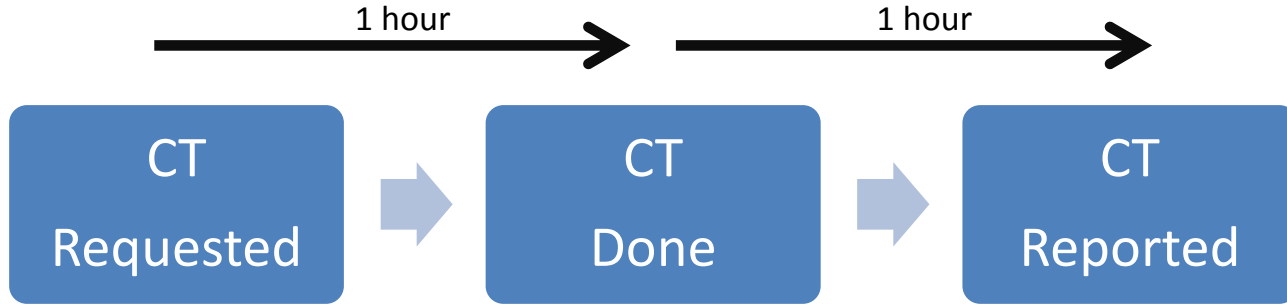
Process  
patient  
normally

No

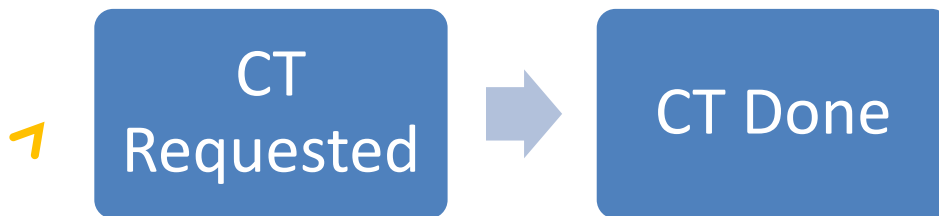
# Threshold

- Sensitivity/specificity
- Site/team specific
- Probably no increase in number of scans?
- Increase in time pressure
- ????

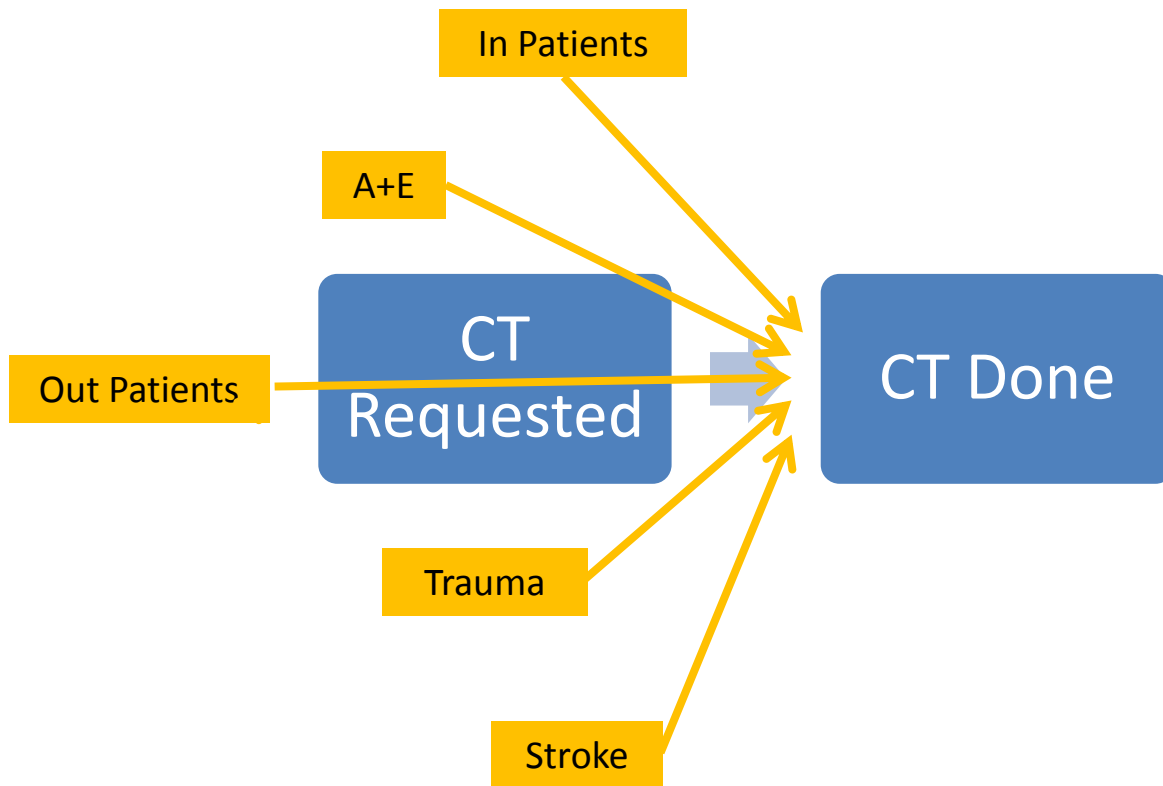
# Radiology Workflow



# Time to Scan



# Time to Scan



# Where are we now?

- **Scan** within 1 hour.
  - RVI, April to October 2018
  - 95/108 patients had CT
  - Mean time to scan(from request) = 3hours 18minutes.

Scan - TOTAL (95)		
	Number	Percentage
<1 hour	31	33
1-2 hours	22	23
2-12 hours	36	38
12-24 hours	4	4
>24 hours	2	2

# Time to Report

- Department specific
- Ownership
- Competing interests
- Lost training opportunities?



# Where are we now?

- **Report** within 1 hour.
  - RVI, April to October 2018
  - 95/108 patients had CT

Report - TOTAL (95)		
	Number	Percentage
<1 hour	37	39
1-2 hours	44	46
2-12 hours	14	15
12-24 hours	0	0
>24 hours	0	0

# The Whole Picture?

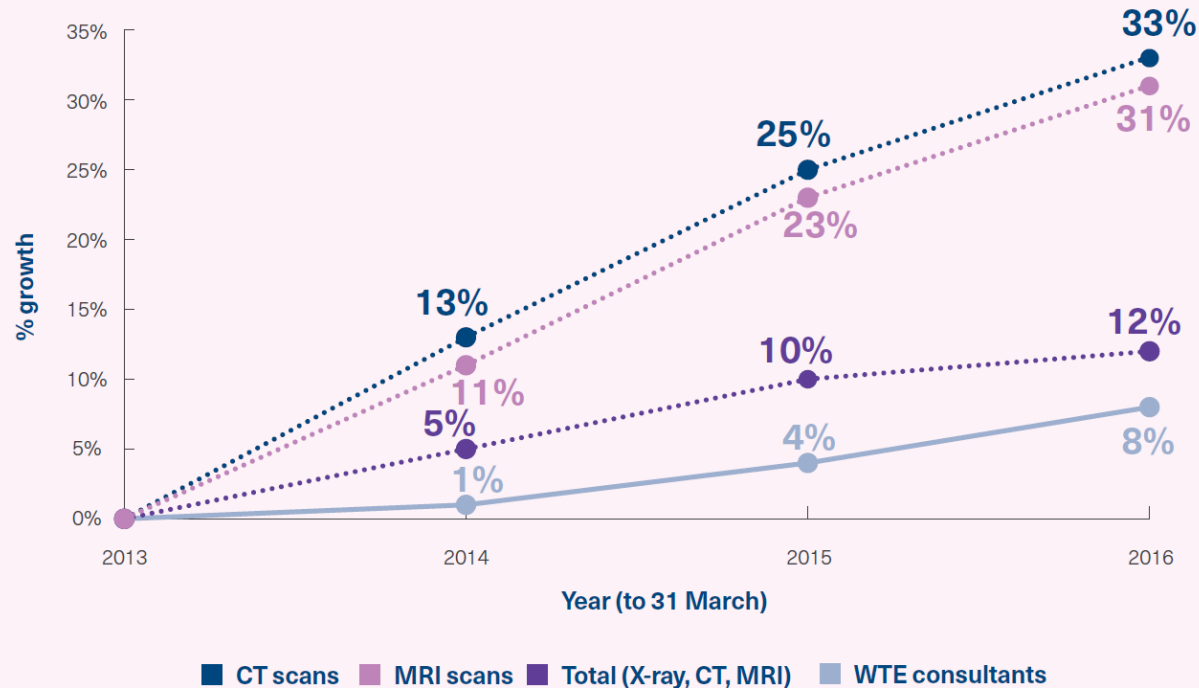
- SPR/Consultant?
- RCSEng – “high risk patients (5%+ risk) should have consultant input into diagnostic, surgical, anaesthetic, critical care elements of their pathway”
- In hours / OOH

CONSULTANT (93)		
	Number	Percentage
<1 hour	8	9
1-2 hours	16	17
2-12 hours	46	49
12-24 hours	22	24
>24 hours	1	1

REGISTRAR (66)		
	Number	Percentage
<1 hour	30	45
1-2 hours	31	47
2-12 hours	5	8
12-24 hours	0	0
>24 hours	0	0

# Outsourcing in Radiology

Figure 5. Percentage growth in the number of WTE consultant radiologists and imaging examinations in England, 2013–2016<sup>1</sup>

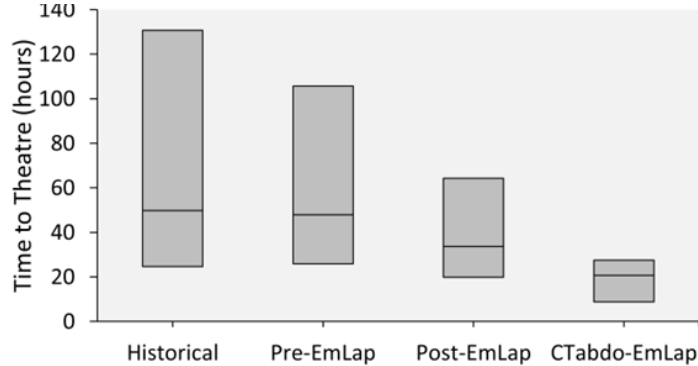


• RCR. UK Workforce census 2016 report.

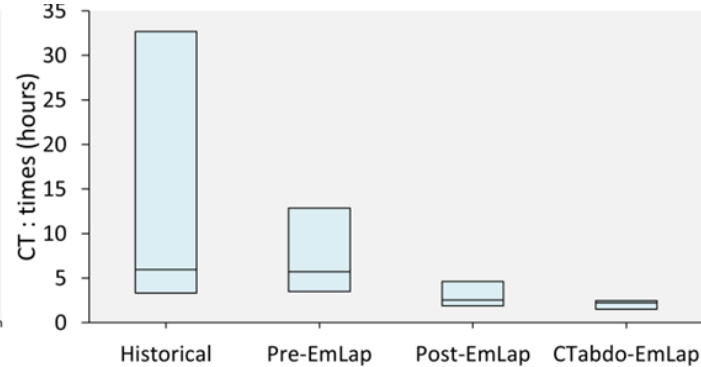
# Outsourcing in Radiology

- A reality
- Expensive
- Discrepancy rates
  - In House Consultant (3.1%/2.9%) < SPR (4.6%) < Outsourced (8.7%)
  - Clinician confidence / trust.
- Might be the only viable option

# EmLap Pathway



**Fig 1.** Door to theatre times; Median, 25<sup>th</sup> & 75<sup>th</sup> centiles



**Fig 2.** CT request to report times; Median, 25<sup>th</sup> & 75<sup>th</sup> centiles

- Sonksen, Julian & Cooke, Katie & Baig, Faisal & Patel, Rajan. (2016). Importance of enhanced access to CT scanning within an emergency laparotomy pathway. 10.1111/anae.13350.

Some may think these standards are aspirational but they call for a service standard currently being delivered in many other countries. Standards are to be achieved and are not a commentary on existing service. The only question to be asked is :  
“How can we meet these standards?”

Tony Nicholson

# Case Specific NELA Feedback Forms

Dr David Saunders

NELA Anaesthetic lead, RVI



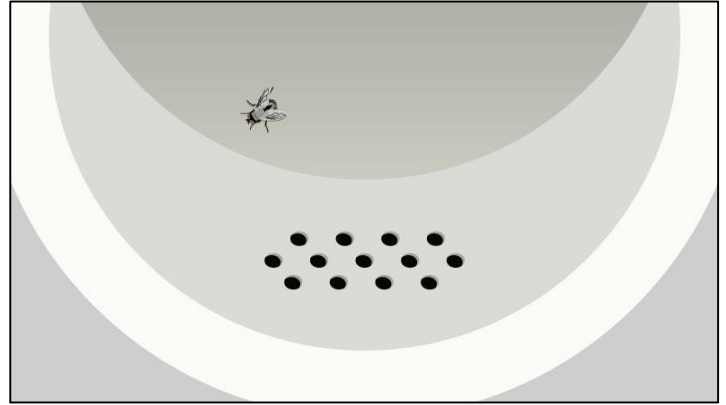
# Purpose

- Attempt to ensure complete data collection
- Opportunity to correct errors
- Nudging behaviors in right direction
- Positive feedback



# Feedback and reflection


- Needs to be:
  - Contemporaneous
  - Case specific
  - Easy to interpret
  - Non-threatening
  - Constructive, promotes reflection
  - Easy to administer
  - Time-efficient



# Mechanics

Task
Trawl theatre logbooks/ electronic records for missing case
Complete NELA data entry for case
Work out team membership at the time
Transcribe data to feedback form in Excel
Text box summary of case and state any questions
Distribute by email
Field complaints and corrections
Update NELA register online

# Example



**NELA**  
National Emergency  
Liaison Agency

RVI NELA Case Summary

Surgeon responsible	[REDACTED]
Operating surgeon	[REDACTED]
Anaesthetist responsible	[REDACTED]
Theatre anaesthetist	[REDACTED]

Name	[REDACTED]	Reviewed by core surgeon within 24 hours of admission?	Yes
Ref	ICB/0806	Documented risk assessment?	Yes
AGE	63	CT prep?	Yes
Date of admission	27.3.17	CT reported by core radiologist?	Yes
Time of admission	09:49	Surgery within required timescales?	Yes
IPSSOLD mortality risk	3.00%	Preop review by core surgeon?	Yes
Date of surgery	28.3.17	Preop review by core anaest?	Yes
Time of anaes start	11:30	Direct core surgeon involvement in theatre?	Yes
Date of discharge	30.3.17	Direct core anaes involvement in theatre?	Yes
Status at discharge	Alive	Antibiotic measured post-op?	Yes
NELA data entry started?	Yes	ICB monitoring?	Yes
NELA data entry completed?	Yes	Admission to critical care from theatre?	Yes
		Antibiotics appear to have been indicated pre-op?	Yes
		Antibiotics given pre-op? <sup>14</sup>	Yes

No indicated signs, therefore antibiotics given in theatre.


<sup>14</sup> as far as pre and intra-op data entry possible contemporaneously

<sup>15</sup> Antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted peritonised contamination

<sup>16</sup> Antibiotics given pre-op, when appear to have been indicated

Surgeon responsible	[REDACTED]
Operating surgeon	[REDACTED]
Anaesthetist responsible	[REDACTED]
Theatre anaesthetist	[REDACTED]

# Example



RVI NELA Case Summary

Surgeon responsible	
Operating surgeon	
Anaesthetist responsible	
Theatre allocation	


Case	
Name	
MRN	6281081G
AGE	63
Date of admission	27.3.17
Time of admission	00:40
P-POSSUM mortality risk	3.50%
Date of surgery	28.3.17
Time of anaes start	11:30
Date of discharge	31.3.17
Status at discharge	Alive
NELA data entry started?	Yes
NELA data entry completed?	Yes

No indicated signs, therefore antibiotics given in theatre.

\* as far as pre and intra-op data entry possible contemporaneously  
 \*Antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted perforated contamination  
 \*Antibiotics given pre-op, when appear to have been indicated

Name	
MRN	6281081G
AGE	63
Date of admission	27.3.17
Time of admission	00:40
P-POSSUM mortality risk	3.50%
Date of surgery	28.3.17
Time of anaes start	11:30
Date of discharge	31.3.17
Status at discharge	Alive
NELA data entry started?	Yes
NELA data entry completed*?	Yes

# Example



RVI NELA Case Summary

Surgeon responsible	[REDACTED]
Operating surgeon	[REDACTED]
Anaesthetist responsible	[REDACTED]
Theatre allocation	[REDACTED]

Case		
Name	[REDACTED]	Reviewed by cons surgeon within 14 hours of admission?
Notes	ICD10B05G	Documented risk assessment?
AGE	63	CT preop?
Date of admission	27.3.17	CT reported by cons radiologist?
Time of admission	09:49	Surgery within required timescales?
Pre-op/old mortality	5.00%	Preop review by cons surgeon?
Sex	M	Preop review by cons anaes?
Date of surgery	28.3.17	Direct cons surgeon involvement in theatre?
Time of anaes start	11:30	Direct cons anaes involvement in theatre?
Date of discharge	31.3.17	Lactate measured peri-op?
Status at discharge	Alive	CO monitoring?
NELA data entry started?	Yes	Admission to critical care from theatres?
NELA data entry completed?	Yes	Antibiotics appear to have been indicated pre-op? <sup>5</sup>
		Antibiotics given pre-op? <sup>6&amp;</sup>

No indicated signs, therefore antibiotics given in theatre.

\* as far as pre and intra-op data entry possible contemporaneously  
<sup>5</sup> Antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted perforated contamination  
<sup>6</sup> Antibiotics given pre-op, when appear to have been indicated

Review by cons surgeon within 14 hours of admission?	Yes
Documented risk assessment?	Yes
CT preop?	Yes
CT reported by cons radiologist?	Yes
Surgery within required timescales?	Yes
Preop review by cons surgeon?	Yes
Preop review by cons anaes?	Yes
Direct cons surgeon involvement in theatre?	Yes
Direct cons anaes involvement in theatre?	Yes
Lactate measured peri-op?	Yes
CO monitoring?	Yes
Admission to critical care from theatres?	Yes
Antibiotics appear to have been indicated pre-op? <sup>5</sup>	No
Antibiotics given pre-op? <sup>6&amp;</sup>	No



## RVI NELA Case Summary

Surgeon responsible	██████████
Operating surgeon	██████████
Anaesthetist responsible	██████████
Theatre anaesthetist	██████████

Case			
Name	██████████	Review by cons surgeon within 14 hours of admission?	Yes
MRN	62810810	Documented risk assessment?	Yes
AGE	69	CT prep?	Yes
Date of admission	27.3.17	CT reported by cons radiologist?	Yes
Time of admission	00:40	Surgery within required timescales?	Yes
P-POSSUM mortality risk	3.50%	Preop review by cons surgeon?	Yes
Date of surgery	28.3.17	Preop review by cons anaes?	Yes
Time of anaes start	11:30	Direct cons surgeon involvement in theatre?	Yes
Date of discharge	31.3.17	Direct cons anaes involvement in theatre?	Yes
Status at discharge	Alive	Lactate measured peri-op?	Yes
NELA data entry started?	Yes	CO monitoring?	Yes
NELA data entry completed?	Yes	Admission to critical care from theatres?	Yes
		Antibiotics appear to have been indicated pre-op? <sup>3</sup>	No
		Antibiotics given pre-op? <sup>3,4</sup>	No

No indicated sepsis, therefore antibiotics given in theatre.

\* as far as pre and intra-op data entry possible contemporaneously

<sup>1</sup>antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted peritoneal contamination

<sup>2</sup>antibiotics given pre-op, when appear to have been indicated



## RVI NELA Case Summary

Surgeon responsible	D. ██████████
Operating surgeon	M. ██████████
Anaesthetist responsible	D. ██████████
Theatre anaesthetist	D. ██████████

Case			
Name	██████████	Review by cons surgeon within 14 hours of admission?	Yes
MRN	15211159	Documented risk assessment?	Yes
AGE	38	CT prep?	Yes
Date of admission	01/06/2018	CT reported by cons radiologist?	Yes
Time of admission	20:35	Surgery within required timescales?	Yes
P-POSSUM mortality risk	15.00%	Preop review by cons surgeon?	Yes
Date of surgery	05/06/2018	Preop review by cons anaes?	Yes
Time of anaes start	10:45	Direct cons surgeon involvement in theatre?	Yes
Date of discharge	19/06/2018	Direct cons anaes involvement in theatre?	Yes
Status at discharge	alive	Lactate measured peri-op?	Yes
NELA data entry started?	Yes	CO monitoring?	Yes
NELA data entry completed?	Unknown	Admission to critical care from theatres?	Yes
		Antibiotics appear to have been indicated pre-op?	Yes
		Antibiotics given pre-op <sup>AK</sup>	Yes

\* as far as pre and intra-op data entry possible contemporaneously

<sup>1</sup>antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted peritoneal contamination

<sup>2</sup>antibiotics given pre-op, when appear to have been indicated



## RVI NELA Case Summary

Surgeon responsible	██████████
Operating surgeon	██████████
Anaesthetist responsible	██████████
Theatre anaesthetist	██████████

Case			
Name	██████████	Review by cons surgeon within 14 hours of admission?	No
MRN	0651776	Documented risk assessment?	Yes
AGE	21	CT preop?	Yes
Date of admission	13.3.17	CT reported by cons radiologist?	No
Time of admission	22:45	Surgery within required timescales?	Yes
P-POSSUM mortality risk	1% NELA 5-10% surgeon	Preop review by cons surgeon?	Yes
Date of surgery	14.3.17	Preop review by cons anaes?	Yes
Time of anaes start	05:00	Direct cons surgeon involvement in theatre?	No
Date of discharge		Direct cons anaes involvement in theatre?	No
Status at discharge		Lactate measured peri-op?	No
NELA data entry started?	Yes	CO monitoring?	No
NELA data entry completed?	No	Admission to critical care from theatres?	No
		Antibiotics appear to have been indicated pre-op?	Yes
		Antibiotics given pre-op?	Yes

Compiler of the record states that the patient was not seen by a consultant surgeon preoperatively. There was consultant surgeon input into the decision to operate. The P-POSSUM mortality risk is estimated by the surgeon to be 5-10% preoperatively and this is documented on the consent form. The post operative risk is 1-4% and this is documented on the operation note and on the anaesthetic chart. There was consultant anaesthetic input into the preoperative care. The supervising consultant is named as Dr. Ratogaj on the anaesthetic chart. (Ratogaj entered this into the NELA record.) (Dr. seen post op W36, recovering well following repair of perforated DU, low risk and young patient with experienced & senior (non-consultant) team in theatre)

\* as far as pre and intra-op data entry possible contemporaneously

<sup>†</sup>antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted peritoneal contamination

<sup>‡</sup>antibiotics given pre-op, when appear to have been indicated



## RVI NELA Case Summary

Surgeon responsible	Mr ██████████
Operating surgeon	Mr ██████████
Anaesthetist responsible	Dr ██████████
Theatre anaesthetist	Dr ██████████

Case			
Name	██████████	Review by cons surgeon within 14 hours of admission?	No
MRN	20529934	Documented risk assessment?	Yes
AGE	77yrs	CT preop?	Yes
Date of admission	15/08/2018	CT reported by cons radiologist?	Yes
Time of admission	19:16	Surgery within required timescales?	Unknown
P-POSSUM mortality risk	6.30%	Preop review by cons surgeon?	No
Date of surgery	16/08/2018	Preop review by cons anaes?	Yes
Time of anaes start	14:00	Direct cons surgeon involvement in theatre?	Yes
Date of discharge		Direct cons anaes involvement in theatre?	Yes
Status at discharge		Lactate measured peri-op?	Yes
NELA data entry started?	Yes	CO monitoring?	No
NELA data entry completed?	No	Admission to critical care from theatres?	Yes
		Antibiotics appear to have been indicated pre-op?	No
		Antibiotics given pre-op?	No

(DU) looks like elderly patient with ulcer from localized malignancy. Few missing fields in dataset (time of review by cons, time of decision to operate which affects judgement on whether get to theatre on time, number of procedures in 30 days) - can you correct these? Thanks

\* as far as pre and intra-op data entry possible contemporaneously

<sup>†</sup>antibiotics appear to have been indicated at time of booking, eg surgery for perforation, predicted peritoneal contamination

<sup>‡</sup>antibiotics given pre-op, when appear to have been indicated

# Quality Improvement

- “combined and unceasing efforts of [the team] to make the changes that will lead to better patient outcomes, better system performance, and better professional development” (Batelden & Davidoff, BMJ 2007)
- “...about making health care safe, effective, patient-centred, timely, efficient and equitable” (The Health Foundation, 2013)
- “hard work” (Saunders, 2019)



# Quality Assurance

- “the maintenance of a desired level of quality in a service or product, especially by means of attention to every stage of the process of delivery..” (Wikipedia 2019)
- “Requires adequate resources” (Saunders 2019)
- “Difficult to sustain” (Saunders 2019)

# How long does it take?

Task
Trawl theatre logbooks/ electronic records for missing case
Complete NELA data entry for case
Work out team membership at the time
Transcribe data to feedback form in Excel
Text box summary of case and state any questions
Distribute by email
Field complaints and corrections
Update NELA register online

# How long does it take?

Task	Duration
Trawl theatre logbooks/ electronic records for missing case	45 mins/ week (10 mins per case)
Complete NELA data entry for case	0-30 mins
Work out team membership at the time	2-10 mins
Transcribe data to feedback form in Excel	10 mins
Text box summary of case and state any questions	5 mins
Distribute by email	2 mins
Field complaints and corrections	10 mins
Update NELA register online	5 mins
Total	c40 mins per case; 3 hours per week

# Sustainability

- Blocks of 1 month or 3 months?
  - Double count time – emailing from theatre maybe
- 
- NELA data manager (nurse)
  - Reduced my time needed to perhaps 10 mins per case



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Lunch Break

#NENCEMLap

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The Newcastle upon Tyne Hospitals  
NHS Foundation Trust

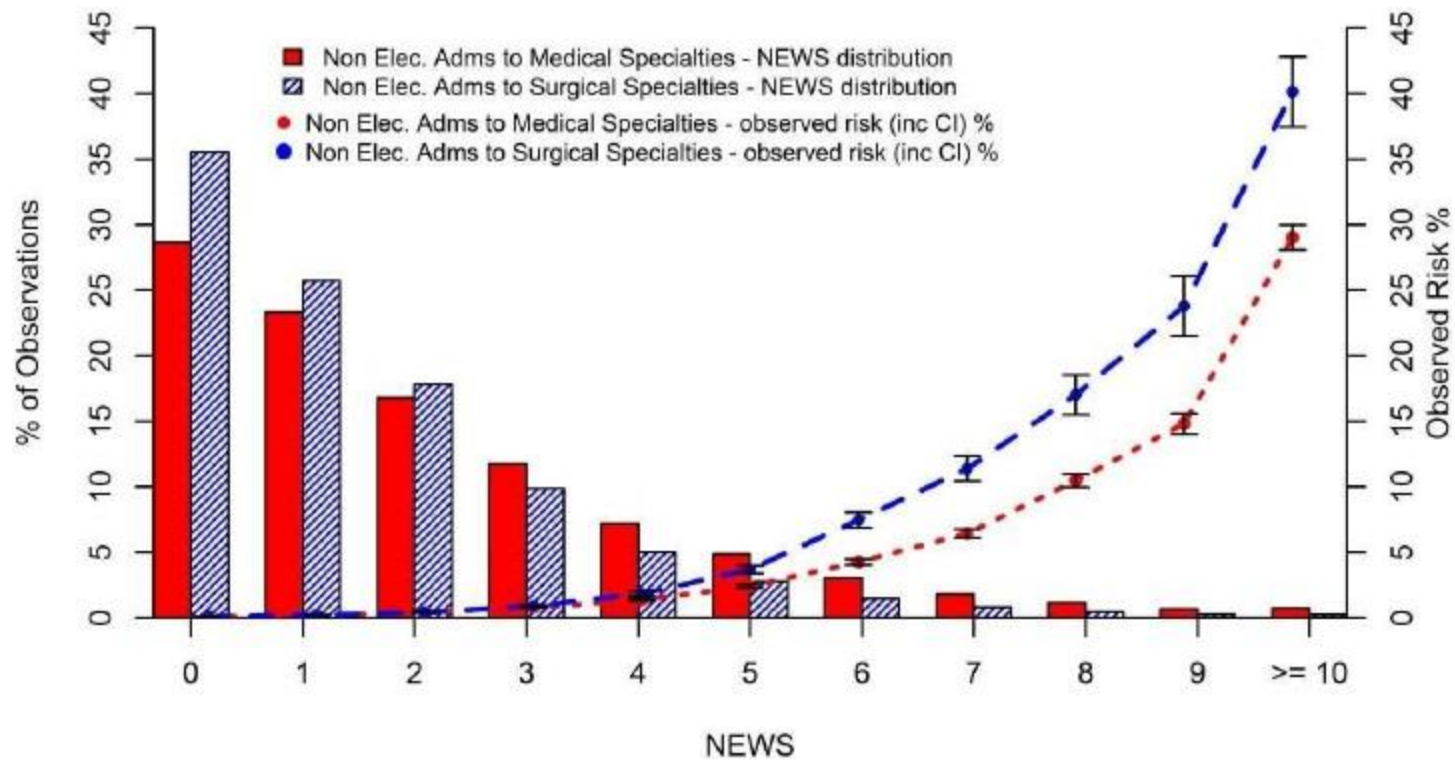
**NENC Pathway development work**

**#NENCEMLap**

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Figure 1





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# **Group work**

## **NENC Pathway development work**

**#NENCMLap**

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# **Summary, Next Steps and AOB**

**Dr David Saunders and Mr Ben Griffiths**

The Newcastle upon Tyne Hospitals  
NHS Foundation Trust

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**THANK YOU FOR COMING, HAVE A SAFE JOURNEY  
HOME**

**SPEAKER PRESENTATIONS WILL BE CIRCULATED  
SHORTLY**

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