

Optimising Management For Children In Our Region

Dr. Craig McDonald
Consultant Paediatrician
Bucks Healthcare NHS Trust



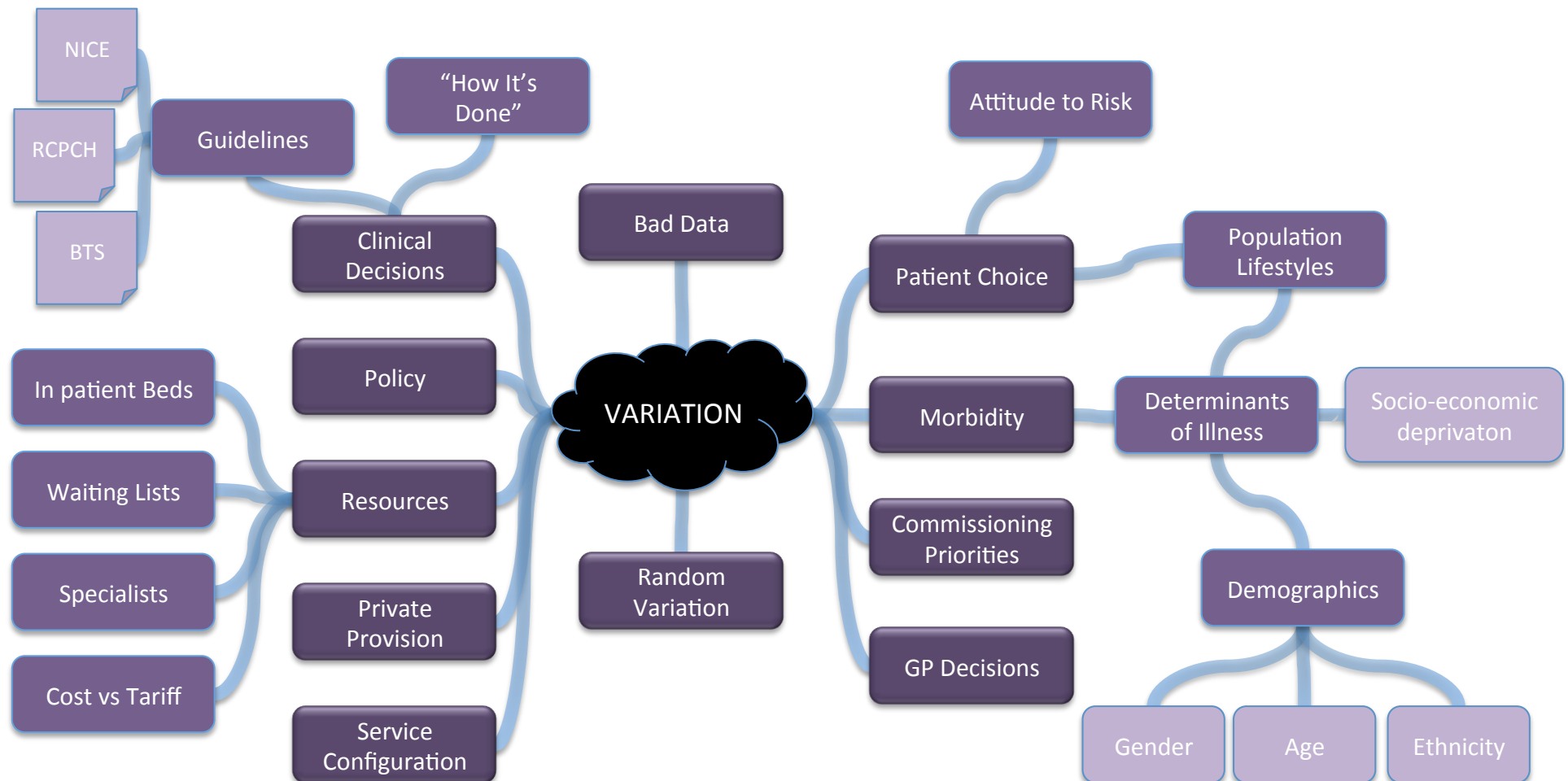
Equity In Delivery of Healthcare

- Variation in healthcare is ubiquitous
 - Variation in immunisation rates between GP practices
 - Variation in patient outcomes for surgical procedures
 - Variability in access to research across different hospitals
 - Variation in inpatient management of common conditions

Introduction

- The NHS Institute for Innovation and Improvement
 - “if all NHS organisations improved their performance to match the top-performing 25%, the NHS could save about £3.6 billion”
- Don Berwick
 - “Variation is a thief. It robs from processes, products and services the qualities that they are intended to have. ... **Unintended** variation is stealing healthcare blind today.”

Causes Of Variation

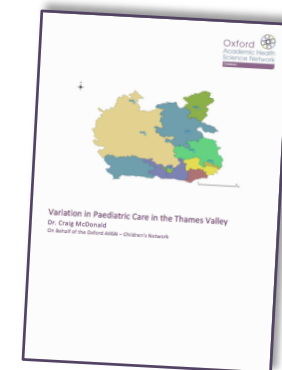


Types of Variation

- Systemic vs unintended
- *Systemic variation*
 - *Variation outwith the control of clinicians and commissioners*
 - *Variation in population / demographics etc*
- *Unintended*
 - *“Variation in the utilization of health care services that cannot be explained in patient illness or patient preferences.”*
 - *Different thresholds among clinicians for admission / treatments / interventions*

Reducing Variation

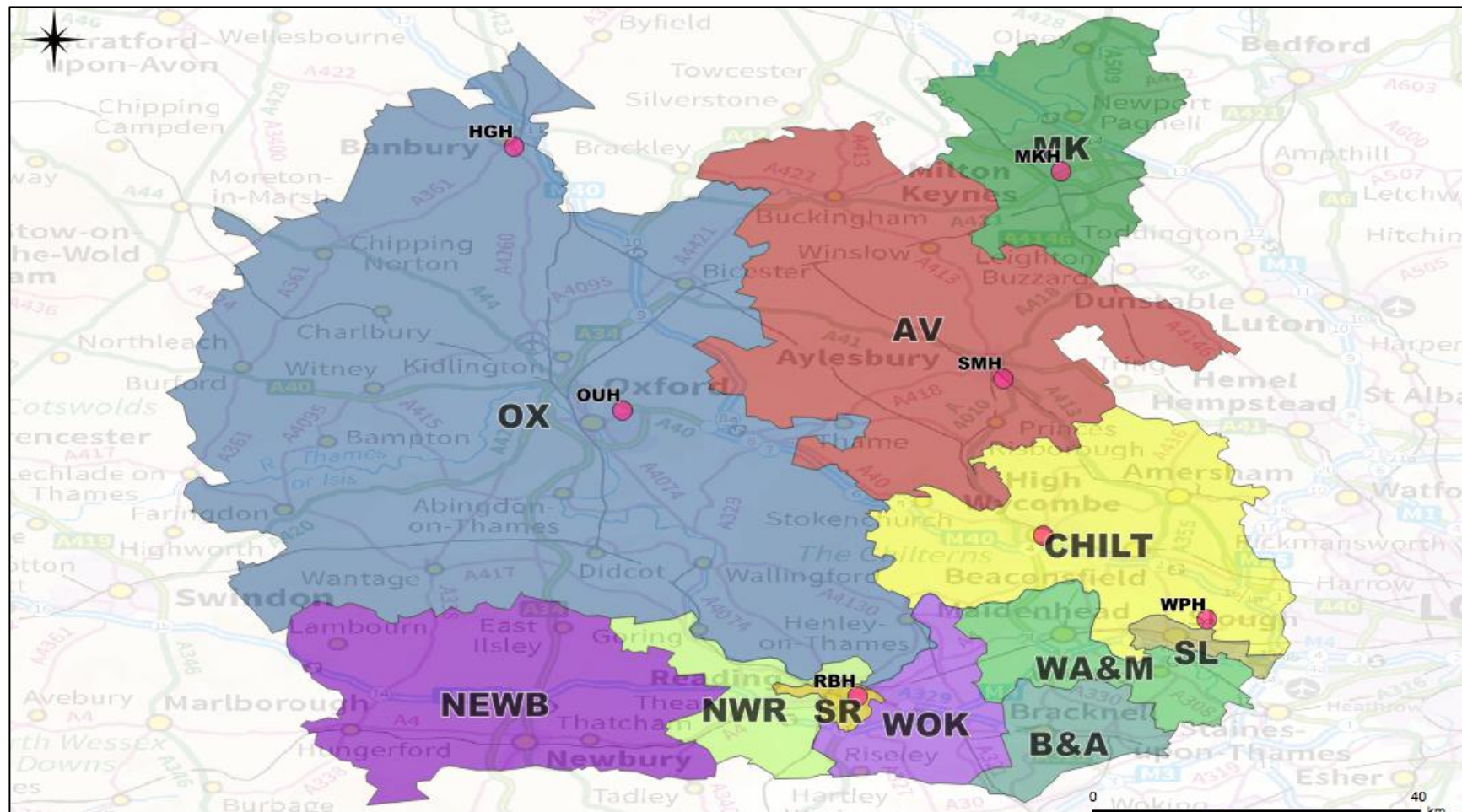
- 1st step to reducing unintended variation is the gathering and publication of patient outcomes
- Variation in admission rates for common reasons for paediatric admissions
 - Pneumonia
 - Bronchiolitis
 - Sepsis / Fever
 - Gastroenteritis
 - Asthma
- Variations in management of Pneumonia
 - BTS audit



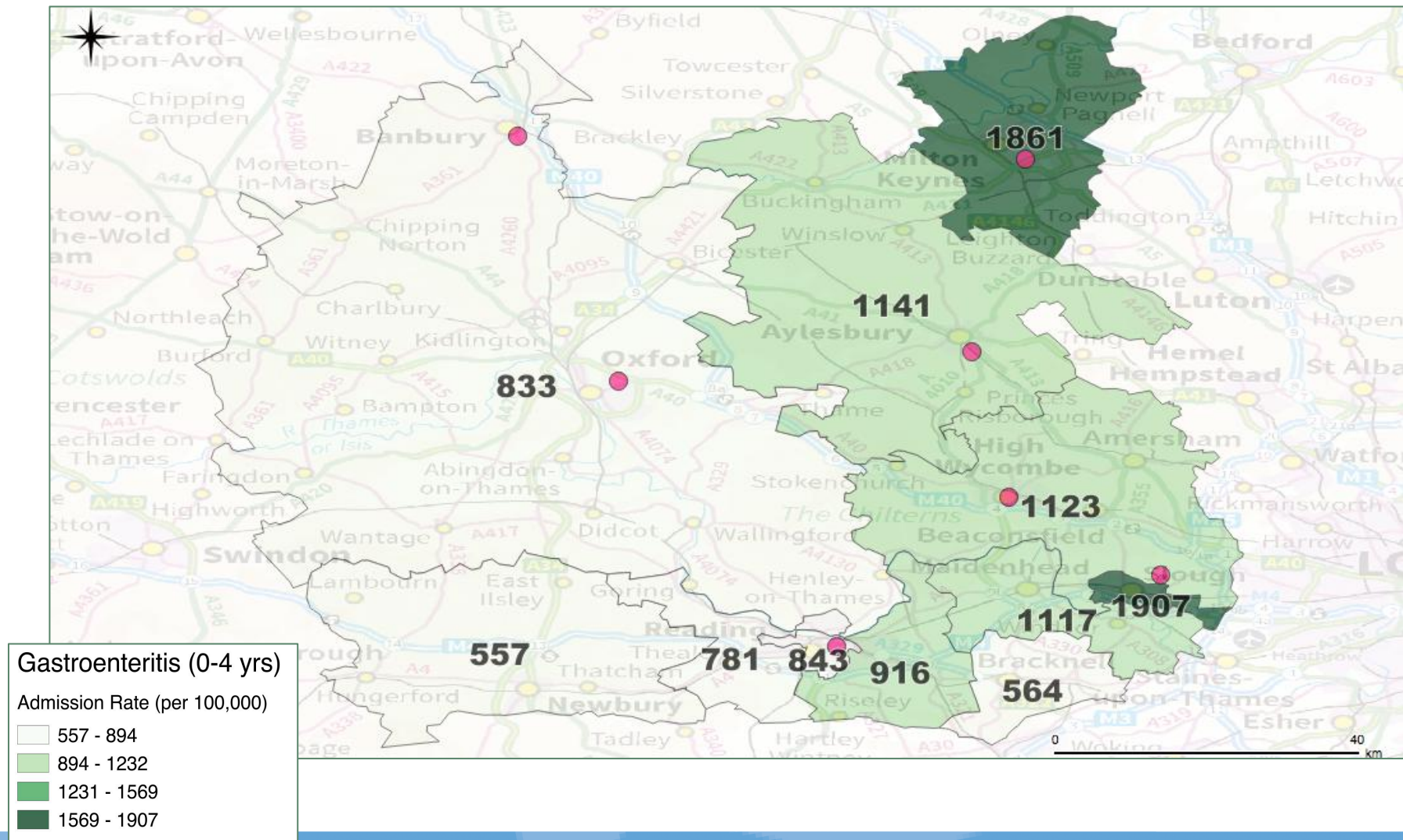
Admission Rates

- Admission Rates
 - Hospital Episode Statistics
 - Primary or secondary diagnosis
 - Grouped by CCG
 - Population
 - Population for 0-4 years and 5-17 years for each CCG
- Length of Stay
 - %ge of admissions discharged in <24 hours
 - Average LOS for the remainder

The Thames Valley

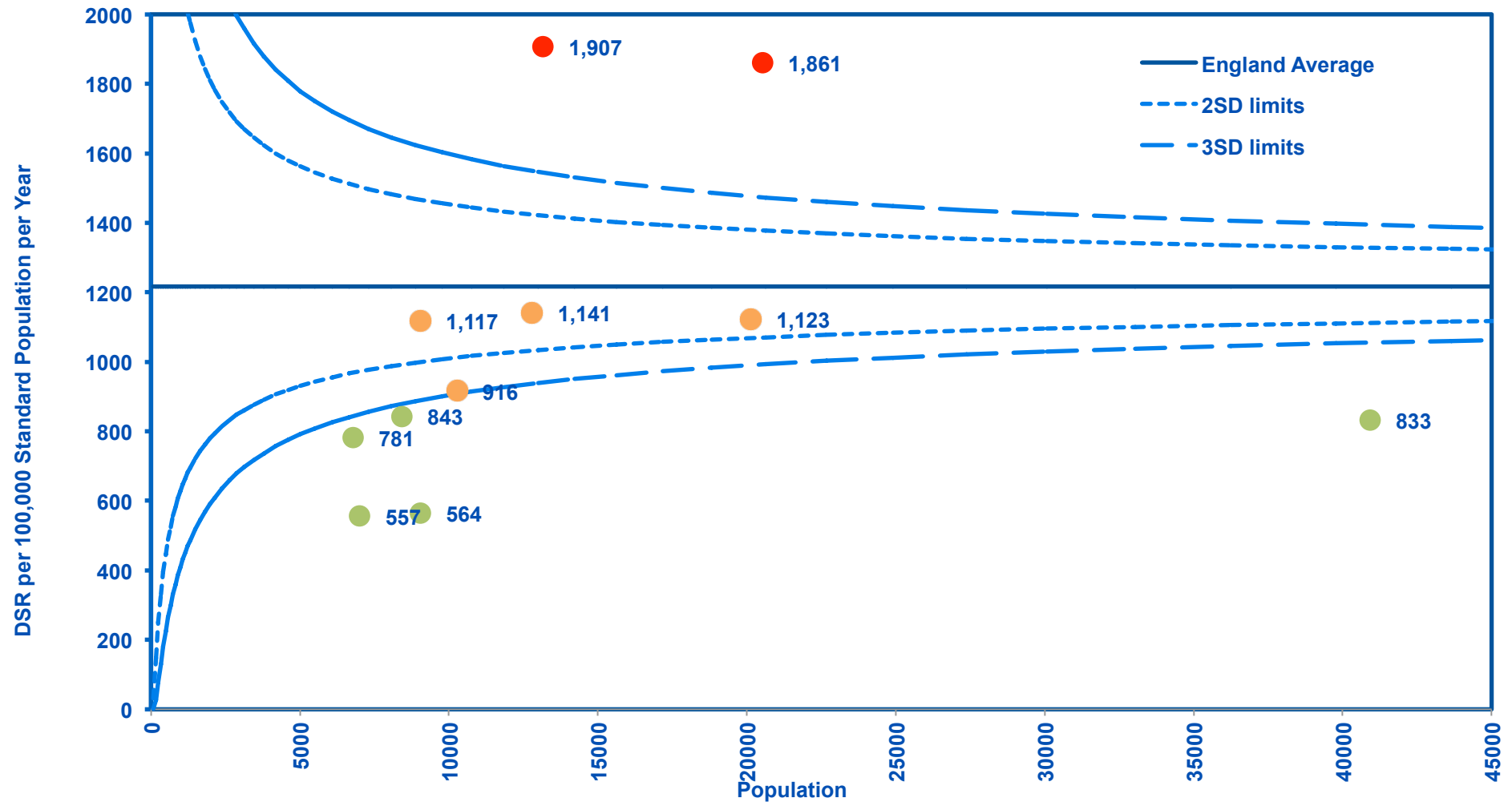


Results - Maps





































































Results II – Funnel Plots

Gastroenteritis (0-4yrs)



Results - Dashboard

	Gastroenteritis	Bronchiolitis	Asthma	Pneumonia	Fever / Sepsis (0-4)	Fever / Sepsis (5-17)
Aylesbury Vale						
Bracknell and Ascot						
Chiltern						
Milton Keynes						
Newbury and District						
North & West Reading						
Oxfordshire						
Slough						
Reading						
Windsor, Ascot and Maidenhead						
Wokingham						
Variation in Admission Rate	3.5	4	2.9	3.7	4.6	7.6

Length of Stay

- Day Case Rates

	Min	Max	Thames Valley
Gastroenteritis	64%	82%	77%
Bronchiolitis	47%	80%	69%
Asthma	69%	85%	80%
Pneumonia	29%	64%	42%
Fever / Sepsis (all ages)	28%	66%	61%

- Length of Stay (for admissions >24 hours)

	Min	Max	Thames Valley
Gastroenteritis	3.9 days	11.8 days	5.3 days
Bronchiolitis	3.2 days	7.2 days	4.4 days
Asthma	2.8 days	8.7 days	4.6 days
Pneumonia	3.3 days	10.7 days	6.23 days
Fever / Sepsis (all ages)	5.6 days	12.3 days	8.6 days

BTS Pneumonia Audit

- BI-Annual Audit of practice in UK against current recommendations
- Data from 2012/13 compared between institutions

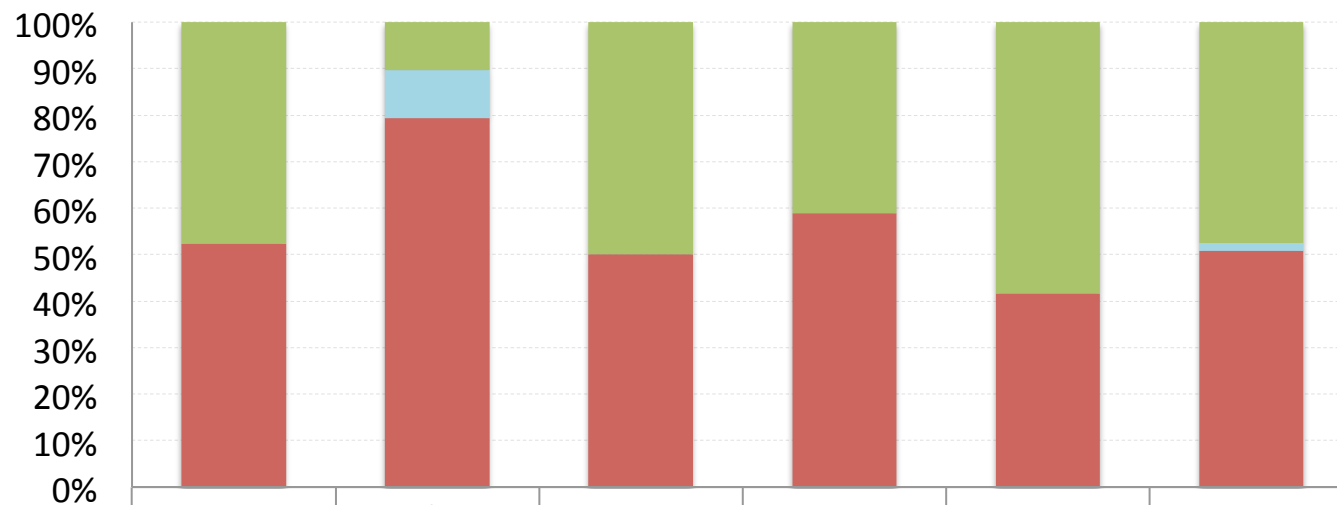
Hospital	Number of patients
Horton Hospital	21
Milton Keynes General Hospital	29
Royal Berkshire Hospital	20
Stoke Mandeville Hospital	51
The John Radcliffe	24
Total	145

BTS Pneumonia

- Significant differences in patients at admission across hospitals
 - No Requiring O2
 - 10% at HGH vs 72% SMH
 - Presence of Wheeze
 - <20% JR / HGH vs 40—50% in other hospitals

BTS Pneumonia

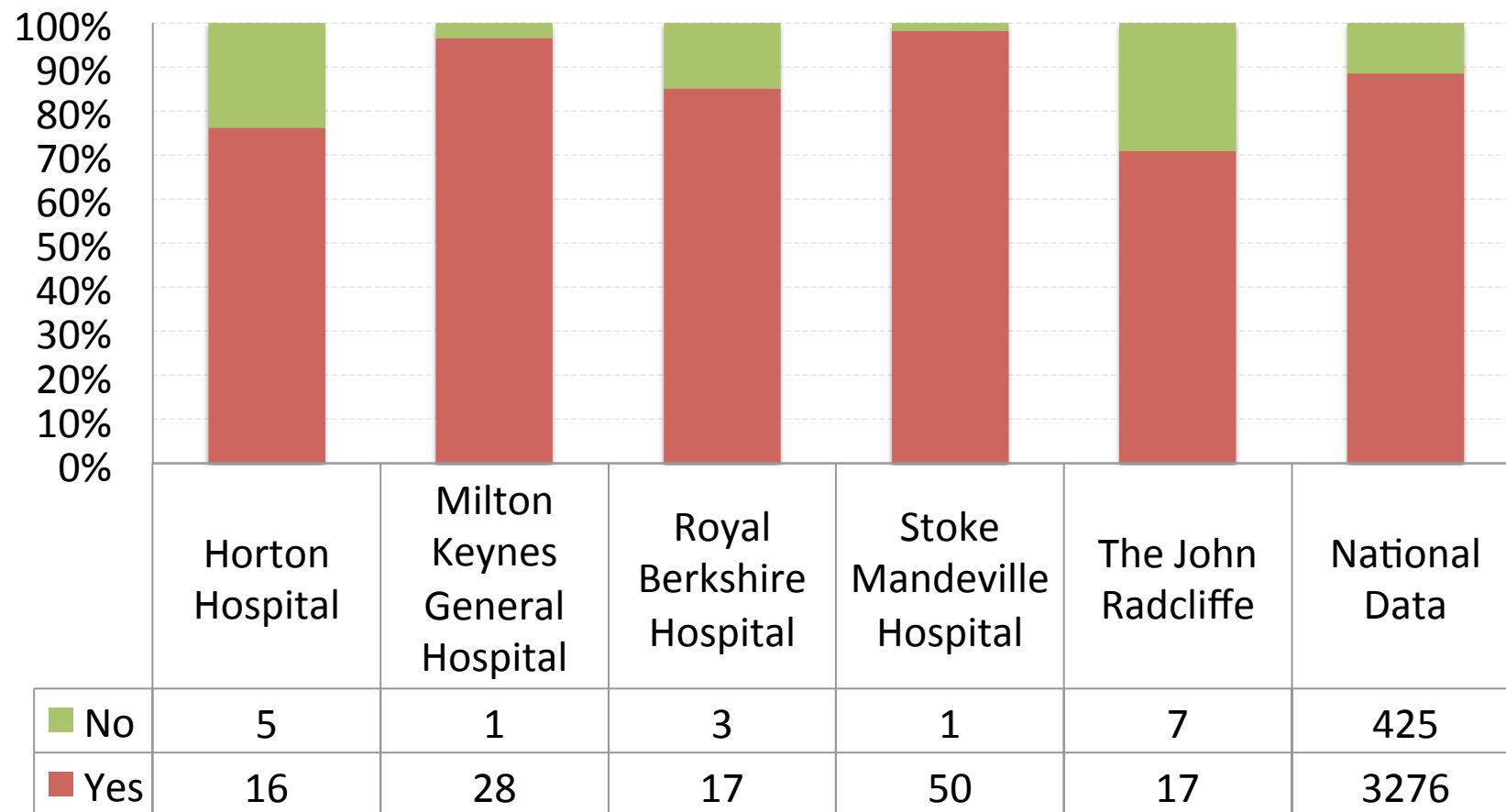
Blood Cultures Taken?



	Horton Hospital	Milton Keynes General Hospital	Royal Berkshire Hospital	Stoke Mandeville Hospital	The John Radcliffe	National Data
No	10	3	10	21	14	1753
No Data / Not Recorded		3				59
Yes	11	23	10	30	10	1875

BTS Pneumonia

Percentage of children receiving chest x-ray



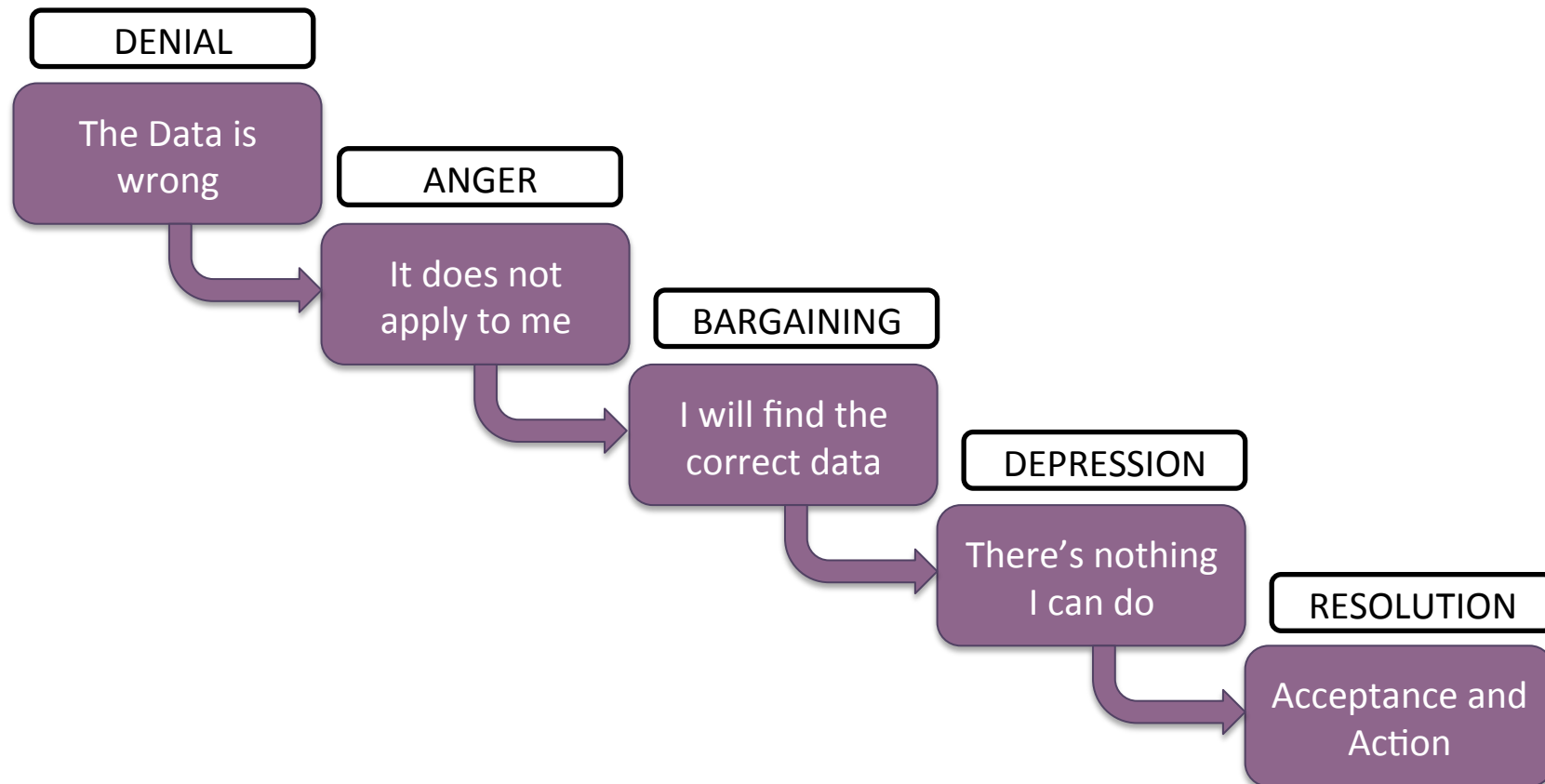
Management of Pneumonia

- 1st line antibiotic
 - Significant variation in PO amoxicillin as 1st line
 - from 2% at Milton Keynes to 62% at the Horton
 - Majority treated with **either** amoxicillin or co-amoxiclav +/- a macrolide.
- Use of Intravenous antibiotics
 - Significant variation in patients receiving IV Antibiotics
 - 45% at RBH to 79% John Radcliffe (?more complicated)

Summary

- Across the Thames Valley there is significant variation in
 - Admission rates
 - Length of stay
 - Management of pneumonia
- So What?

5 Stages of “Data Grief”



(With Apologies to Elisabeth Kubler Ross)

What Next?

- Report circulated
 - Commissioners
 - Providers
- Meeting with Guideline leads across region
- Starting to work towards synchrony
- Central location for guideline lists
- Training – Pneumonia e-Learning package
- Due Sept 2015
- Audits planned for winter 2015
- Bronchiolitis & Gastroenteritis

Variation in antibiotic prescribing

- Abx guidelines from each hospital
- Benchmarking exercise
- Local resistance patterns explored
- Move to harmonise prescribing guidelines