

# Advancing Quality

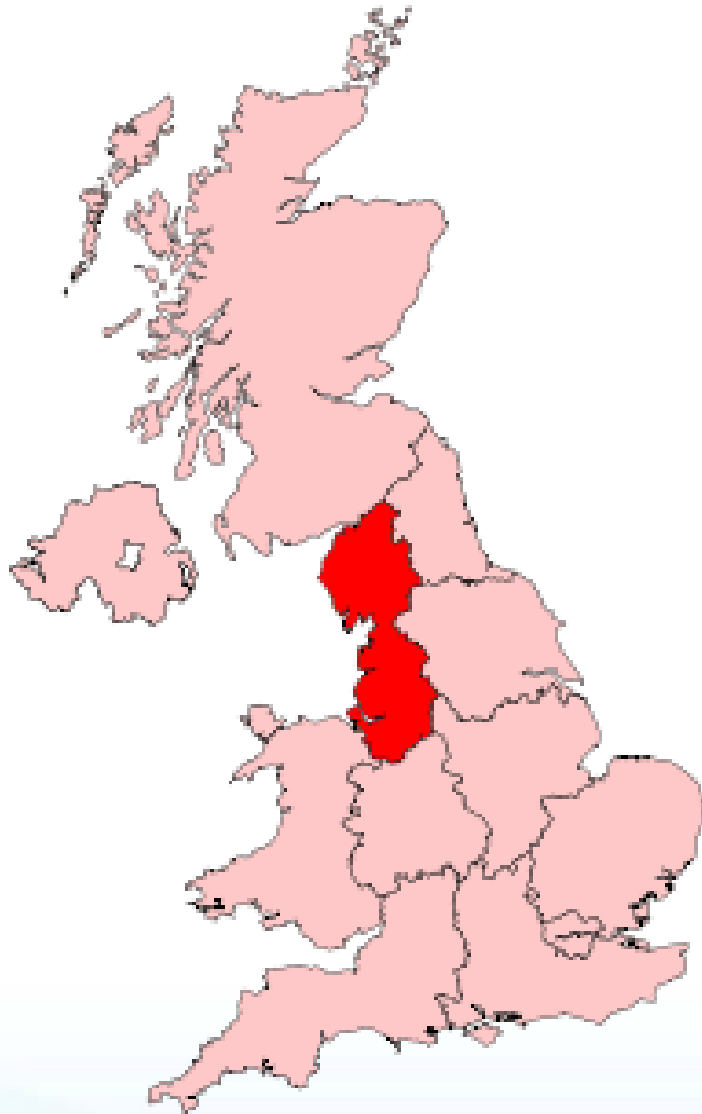
## Pay for performance scheme

Julia Hickling – AQuA Director

# Advancing Quality

- North West of England
- Where did it come from?
- How does it work?
- Results
- Outcomes and benefits

# North West of England



- Population 7m
- Covers 6% of UK land mass
- Diverse mix of urban and rural populations
- 87% people live in urban areas
- High levels of deprivation
- Lowest life expectancy in UK

# The NHS in the North West

In 2010/11

- £13bn budget
- £1850/ per head population
- 38 hospitals. Mix of acute & mental health
- 33 commissioners
- 1 ambulance trust
- 1300 GP Practices
- 216,000 staff
- 3.5m A&E attendances



# Five years a go...no systematic way of defining high quality



Towards  
 World Class  
 Commissioning



Adding life to years and years to life

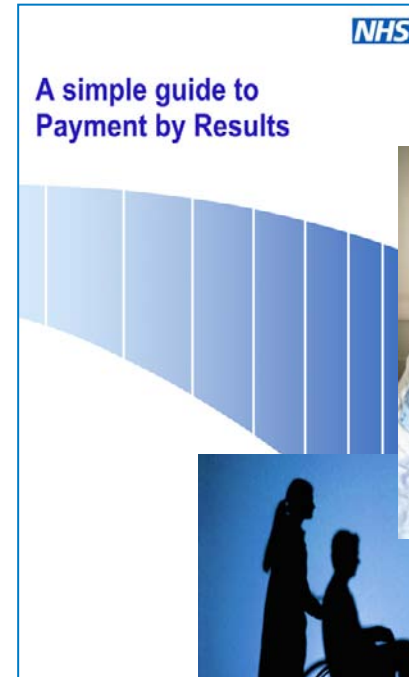


*An organisation with a memory*

Report of an expert group on learning from adverse events in the NHS, chaired by the Chief Medical Officer

... and no common agreement and variable knowledge of what of 'best' should be

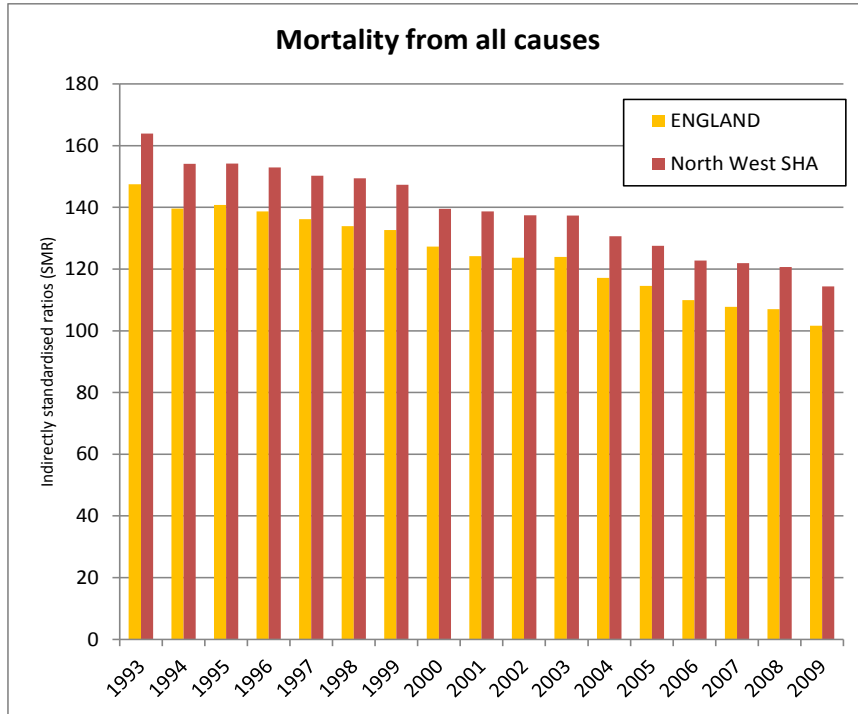
# Never certain that we were comparing apples with apples



Focus was on outputs  
rather than outcomes



# Widely recognised set of problems...outcomes improving but above national average and gap not closing ...



Trust type		Quality of Services	Use of Resources
<b>All types 2006/07</b>			
<b>Excellent</b>	North West	9.5%	17.5%
<b>Good</b>		33.3%	34.9%
<b>Fair</b>		52.4%	33.3%
<b>Weak</b>		4.8%	14.3%
<b>Excellent</b>	National	16.4%	14.4%
<b>Good</b>		31.0%	22.9%
<b>Fair</b>		44.2%	36.5%
<b>Weak</b>		8.3%	26.2%

... but spend not aligned to outcomes and no coherent pan Region wide programme to tackle this

# Founded on a shared vision and understanding



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Clinical Quality and Financial Performance are Inseparable



# And a recognition that ...

- Would only work if managerial and clinical community both involved
- Focus on outcomes not just quantity
- Clinicians needed to be empowered to deliver high quality care
- Managers needed to be incentivised to participate
- And needed to be funded...

Each North West PCT gave 0.1 %  
of their budget to develop AQ.

Equates to

87p

per head of population

# How it works...

*Evidence  
based  
measures*

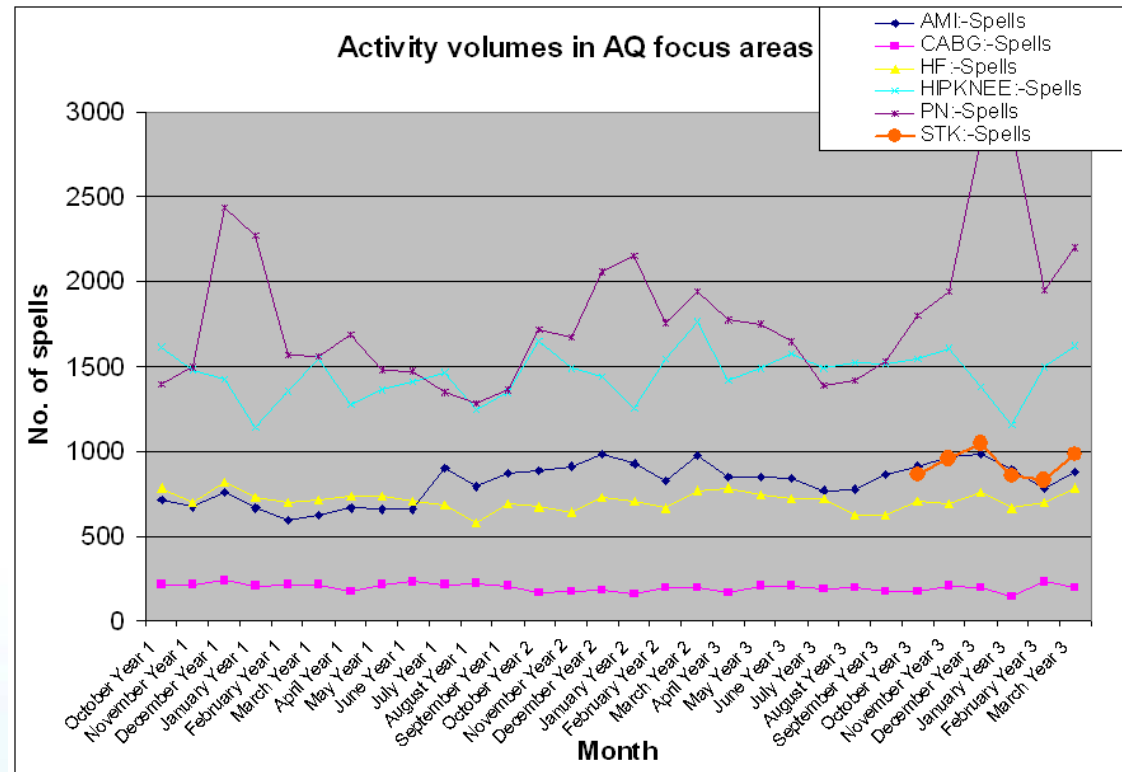
*Robust data  
collection*

*Supporting  
change*

*Incentives*

# Evidence Based Measures

- 5 original acute inpatient conditions
  - Have since added Stroke, Dementia, Early Intervention Psychosis
- Clinical consensus of clear evidence base
- Highly relevant to the North West population
- 8% of adult inpatient admissions



# Evidence Based Measures

## Acute myocardial infarction (AMI)

1. Aspirin at arrival
2. Aspirin prescribed at discharge
3. ACE or ARB for LVSD
4. Smoking cessation advice/counseling
5. Beta blocker at arrival
6. Beta blocker prescribed at discharge
7. Thrombolytic received within 30 minutes of hospital arrival
8. PCI received within 90 minutes of hospital arrival

## Hip and knee replacement

1. Prophylactic antibiotic received within one hour prior to surgical incision
2. Prophylactic antibiotic selection for surgical patients
3. Prophylactic antibiotics discontinued within 24 hours after surgery end time
4. Recommended Venous Thromboembolism prophylaxis ordered
5. Appropriate Venous Thromboembolism prophylaxis within 24 hours prior to surgery to 24 hours after surgery

## Community-acquired pneumonia (CAP)

1. Oxygenation assessment within 24 hours prior to or after hospital arrival
2. Initial antibiotic selection
3. Blood culture collected prior to first antibiotic administration
4. Antibiotic timing, first dose of antibiotics within six hours after hospital arrival
5. Smoking cessation advice/counseling

## Coronary artery bypass graft (CABG)

1. Aspirin prescribed at discharge
2. Prophylactic antibiotic received within one hour prior to surgical incision
3. Prophylactic antibiotic selection for surgical patients
4. Prophylactic antibiotics discontinued within 48 hours after surgery end time

## Heart failure (HF)

1. Left Ventricular Systolic (LVS) assessment
2. Detailed discharge instructions
3. ACEI or ARB for LVSD
4. Smoking cessation advice/counseling

# Evidence Based Measures cont..

## **Stroke – live from October 2010**

1. Admission to a stroke unit within 4 hours of hospital arrival
2. Brain scan within 24 hours of hospital admission
3. Swallowing disorder screening with 24 hours of hospital admission
4. Aspirin received within 24 hours of hospital admission
5. Physiotherapy assessment received within 72 hours of hospital admission
6. Occupational therapy assessment within 72 hours of hospital admission
7. Weighed at least once during the admission

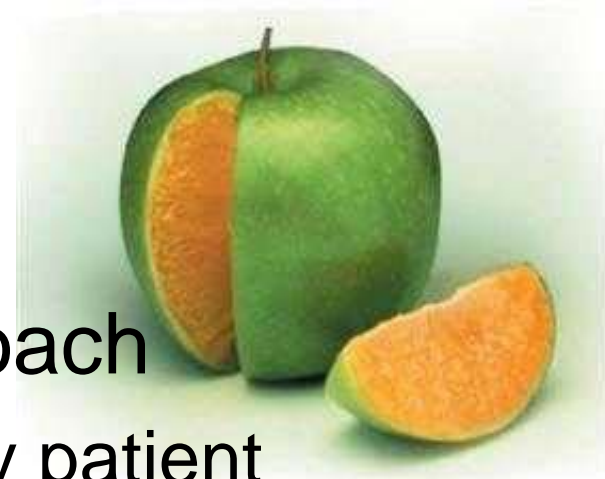
## **Dementia – live from January 2011**

1. Functional capacity assessment
2. Cognitive ability assessment
3. Physical health assessment
4. Tailored care plan
5. Depression & anxiety assessment

## **Early Intervention Psychosis – live from January 2011**

1. Risk assessment
2. Care co-ordinator
3. Medication review

## Robust data



- Rules based / algorithmic approach
  - Identifying patient cohorts – every patient
  - Data dictionary & reasons for exclusion from a measure
- Web based measure data collection
  - Utilise existing data where available
- Meaningful ways of measuring improvements



# Meaningful ways of measuring improvements

	Patient 1	Patient 2	Patient 3	Overall Trust Scores
<b>Measure 1</b>	✓	✓	✗	<b>2 of 3 = 66.6%</b>
<b>Measure 2</b>	✓	✓	✓	<b>3 of 3 = 100%</b>
<b>Measure 3</b>	✗	✓	✗	<b>1 of 3 = 33.3%</b>
<b>Measure 4</b>	✓	✓	✓	<b>3 of 3 = 100%</b>
<b>Measure 5</b>	✓	✓	✓	<b>3 of 3 = 100%</b>
<b>Opportunities taken</b>	<b>4 of 5</b>	<b>5 of 5</b>	<b>3 of 5</b>	<b>12 of 15</b>
<b>Composite Process Score</b>	<b>80%</b>	<b>100%</b>	<b>60%</b>	<b>80%</b>
<b>Patient Appropriate Care (all or nothing)</b>	<b>0 of 1</b>	<b>1 of 1</b>	<b>0 of 1</b>	<b>1 of 3</b>
<b>Appropriate Care Score</b>	✗	✓	✗	<b>33.3%</b>

# A culture of change & collaboration

- Regular collaborative learning events
- Involvement from all provider & commissioner organisations
- Created networks of clinical and non clinical communities
- A willingness to share and learn



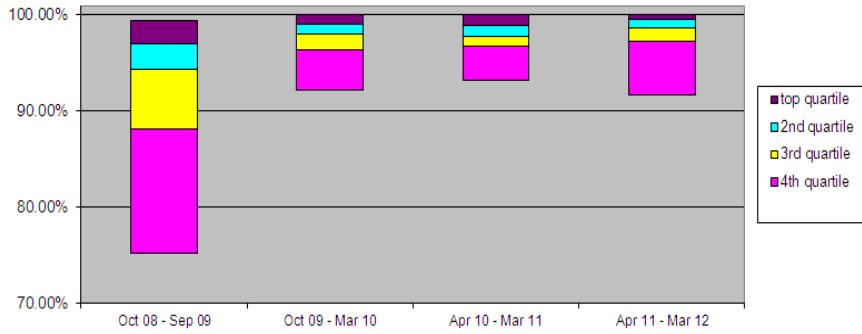
# Incentives

- Financial reward helped in the early years
- Now clearer how different incentives work for different audiences
  - Knowledge that patients are receiving the right care every time
  - Transparent, non judgemental reporting using agreed metrics that support deliver of best practice
  - Sharing comparative data allows for friendly competition
  - Collaborative learning

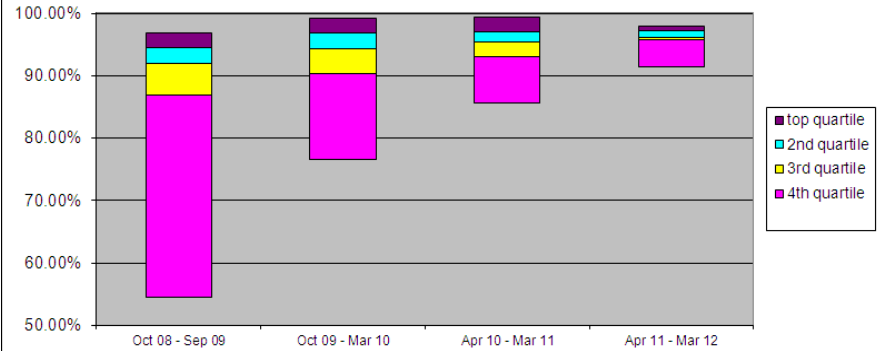


# Reducing variation

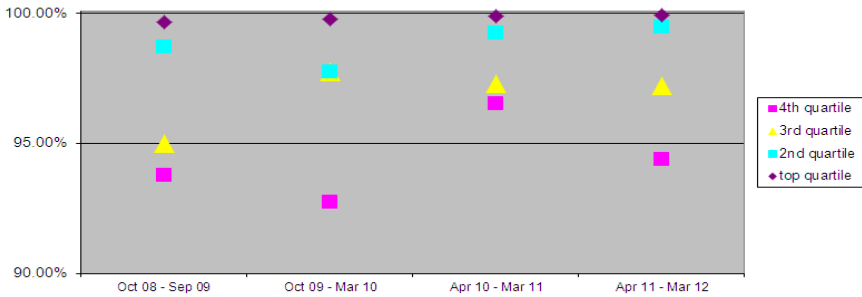
AMI CQS range by performance quartile



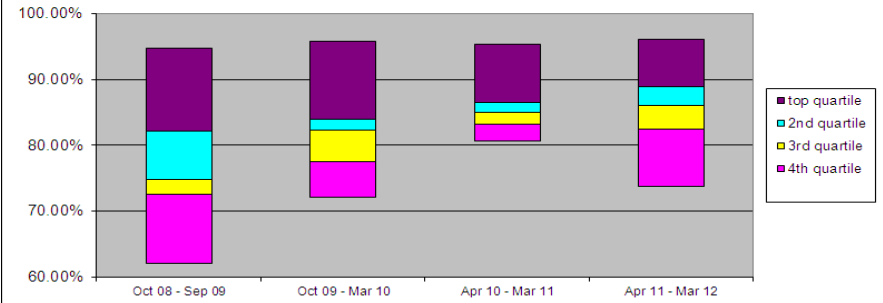
HK CQS range by performance quartiles



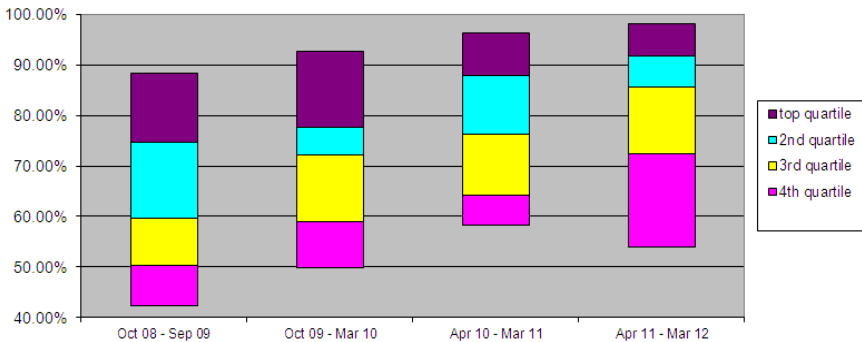
CABG CQS range by performance quartile



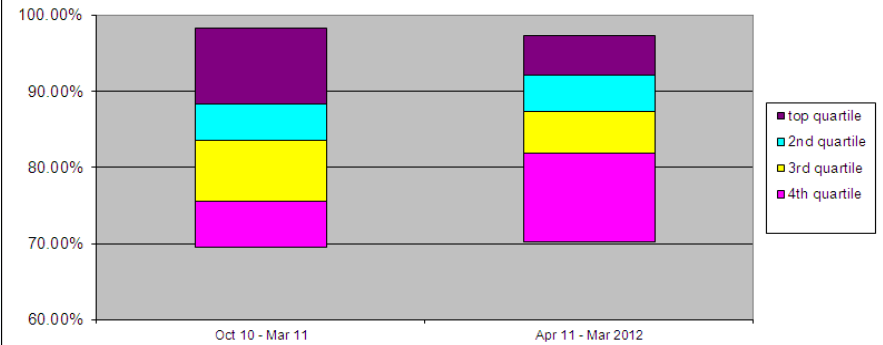
PN CQS range by performance quartile



HF CQS range by performance quartiles



Stroke CQS range by performance quartile



*The* NEW ENGLAND JOURNAL *of* MEDICINE

SPECIAL ARTICLE

# Reduced Mortality with Hospital Pay for Performance in England

Matt Sutton, Ph.D., Silviya Nikolova, Ph.D., Ruth Boaden, Ph.D.,  
Helen Lester, M.D., Ruth McDonald, Ph.D., and Martin Roland, D.M.

# 900 lives saved

***“The introduction of pay for performance in all NHS hospitals in one region of England was associated with a clinically significant reduction in mortality.”***

***“Risk adjusted, absolute mortality for the conditions included in the pay-for-performance programme decreased significantly with an absolute reduction of 1.3 percentage points and a relative reduction of 6%, equivalent to **890 fewer deaths during the 18-month period.**”***



# Bed days saved

# 20,000

# Return on investment

**£1** → **x 10**  
investment in health gain

# In conclusion, a programme that is:

- Reduces mortality
- Is cost effective and efficient
- Improves the patient experience
- Incentivises clinicians to do the right thing and that the thing is done right
- Supports local service improvements

# Any questions