The Royal Wolverhampton
NHS Trust

Quality Improvement Programme 1 - Mortality
1 October 2018

Agenda Item No: 7.4

Safe & Effective | Kind & Caring | Exceeding Expectation

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Quality Improvement Programme 1 - Mortality

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September 2018

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Mortality indicators

There are 2 main types of mortality indicators:

1. **Crude mortality**:
   Number of Deaths / Number of Discharges

2. **Standardised mortality**:
   Number of Observed deaths / Number Expected deaths
   HSMR/SHMI/RAMI

   Measures differ, although they share the same data and similar approaches

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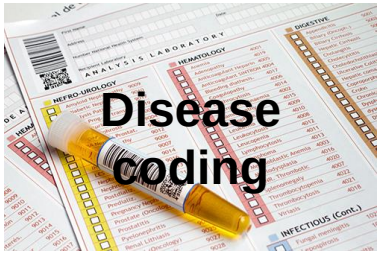
Quality of care

Lifestyle factors

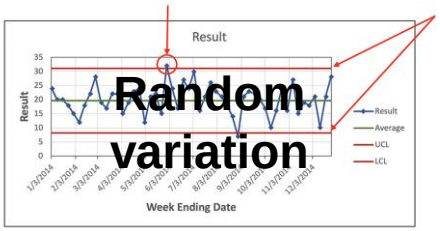

Disease coding


Deprivation

Case mix adjustment


Choice of place of death


Hospice availability



Random variation


Multiple other variables

= Hospital mortality

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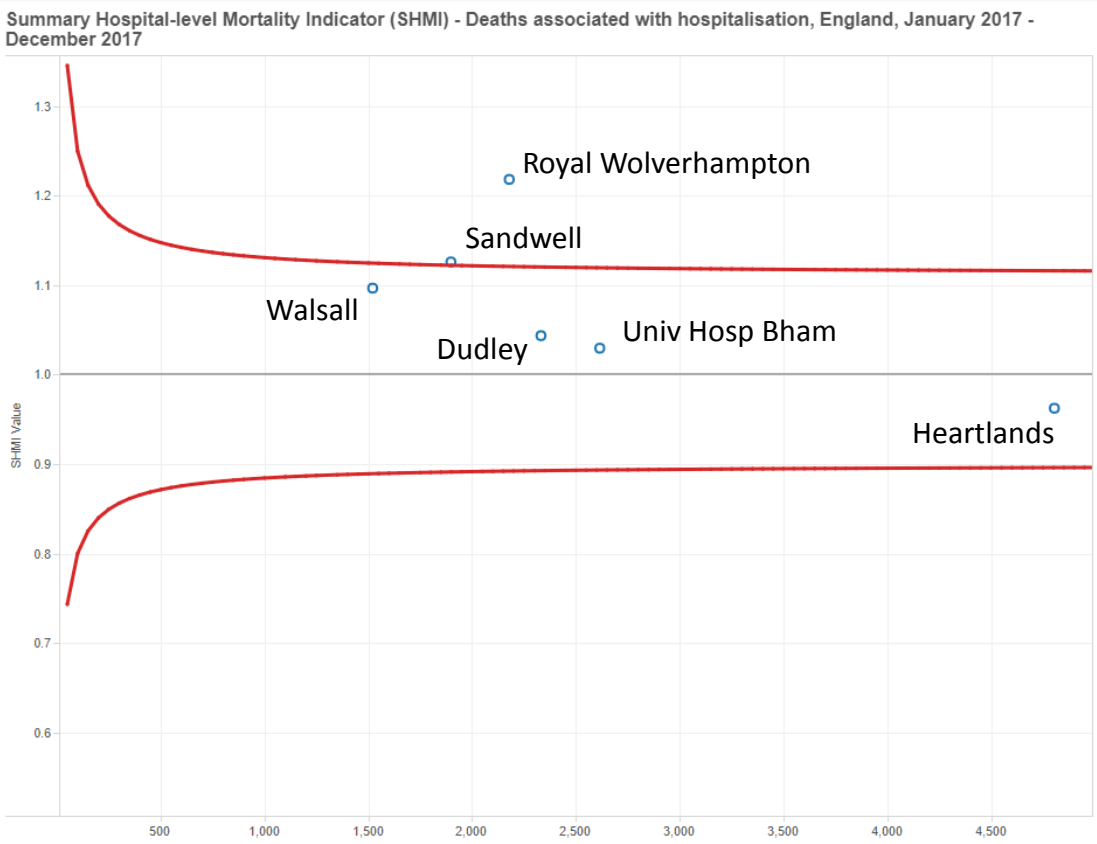
Funnel Plot



Higher than expected

As expected

Below expected

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NHSI approach to mortality

1. *What does the trust understand are the drivers for elevated mortality ratios?*
   Evidence from internal or external reviews of services or coding, learning from case notes, CQC mortality outliers, analyses of mortality ratio

2. *Do we have a robust improvement plan?*
   Do we have a trust wide quality improvement methodology that underpins the plan If so do they have SMART objectives?

3. *Are we providing reliable care?*
   Do we have assurance from ward to board that patients are receiving timely assessments for e.g. sepsis, VE, AKI, and deterioration as well as DNACPR planning

4. *Is there a clear governance structure with appropriate Board engagement?*

5. *What are our next steps?*

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1 What does the Trust understand are the drivers for elevated mortality ratios?

	2015/16	2016/17	2017/18	Trend
SHMI	105.34	116.7	121.89	↑
Expected number of deaths	2387	2190	2170	↓
Number of patients discharged who died in hospital or within 30 days	2515	2556	2645	↑
Number of mortalities occurring in the hospital	1895	1878	2015	↑
Number of total discharges	68655	68345	66662	↓
Percentage of mortalities occurring in hospital	75.35%	73.47%	76.18%	↑
Percentage of admissions with palliative care coding	1.29%	1.30%	1.50%	↑
Average comorbidity score per spell	4.22	4.07	4.23	↔
Crude mortality rate	3.66%	3.74%	3.97%	↑
Excess Deaths	128	366	475	↑

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Our learning from deaths

Outcomes related to avoidability identified in cases noted via the Trust's mortality review group in July were:

- End of Life pathway
- DNACPR
- Sepsis treatment initiation
- Recognition of the 'deteriorating patient'
- Overall contemporaneous documentation

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2 Do we have a robust improvement plan?

6 streams of work

- Program management
- City-wide programs
- Policies and processes
- Quality/safety
- Education
- Workforce

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3 Are we providing reliable care?

Quality Dashboard

Patient Experience	Target	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18
Number of cancelled operations on the day of surgery for non-medical reasons	Surveillance only	17	32	24	33	42	52	56	51	13	20	27	22	24
Cancelled operations as a % of elective admissions	<0.8%	0.21%	0.62%	0.43%	0.58%	0.92%	0.94%	1.11%	1.00%	0.26%	0.38%	0.51%	0.41%	0.47%
Cancelled operations as a % of elective admissions (cumulative)	<0.8%	0.28%	0.32%	0.34%	0.36%	0.40%	0.45%	0.50%	0.53%	0.26%	0.32%	0.39%	0.39%	0.41%
Number of cancelled operations not re-admitted within 28 days	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of urgent cancelled operations cancelled for a 2nd time	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of complaints as a % of admissions		0.33%	0.34%	0.44%	0.37%	0.30%	0.44%	0.44%	0.40%	0.32%	0.38%	0.33%	0.36%	0.45%
Complaints response rate against Policy	90%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
FFT response rates (Trust Wide - excluding ED & Maternity)		21.0%	18.3%	20.1%	16.9%	20.0%	20.7%	19.6%	20.2%	19.4%	19.2%	17.9%	20.5%	21.4%
FFT recommendation rates (Trust Wide - excluding ED & Maternity)		92.9%	93.3%	93.2%	92.8%	93.9%	93.8%	93.4%	92.9%	93.3%	92.8%	93.9%	94.1%	93.9%
FFT response rates (Emergency Department)		14.2%	12.7%	12.9%	11.1%	11.6%	13.9%	13.0%	15.8%	14.8%	14.4%	16.5%	16.5%	16.3%
FFT recommendation rates (Emergency Department)		84.8%	84.0%	83.1%	80.5%	82.0%	82.3%	81.6%	82.5%	83.1%	86.8%	86.4%	86.3%	87.0%
Late observations (Trust Wide)	5%	6.53%	5.96%	5.69%	6.07%	6.64%	6.90%	6.24%	6.14%	4.15%	4.04%	4.42%	4.74%	4.68%
Late patient moves (after 10pm)		230	246	231	225	261	235	257	310	230	214	253	276	238
Duty of Candour - Element 1: notifying patients and families of the incident and investigation taking place. Due 10 working days after incident is reported to STEIS	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Duty of Candour - Element 2: sharing outcome of investigation with patients/relatives. Due 10 working days after final RCA report is submitted to CCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Patient Outcomes														
Safety Thermometer - Harm Free Care	95%	94.98%	96.47%	95.59%	96.87%	96.95%	96.13%	96.63%	96.23%	96.83%	96.80%	95.15%	95.83%	97.02%
Pressure Injuries - all cases		26	33	46	38	29	49	17	24	27	21	31	23	22
Patient falls - rate per 1,000 occupied bed days	<5.6	2.94	3.35	3.02	3.02	2.51	3.31	3.22	3.69	3.71	3.30	3.01	3.19	3.61
Patient Safety														
VTE % risk assessment data	95%	95.51%	95.00%	95.04%	96.41%	95.70%	96.10%	95.75%	95.76%	92.65%	92.03%	91.50%	91.31%	92.83%
Clostridium Difficile	3	4	2	3	2	1	3	0	0	3	5	1	1	5
MRSA Bacteraemia	0	0	0	1	0	1	0	0	0	0	1	0	1	0
E.Coli	Surveillance only	31	26	20	26	32	38	28	21	40	27	39	27	31
% Rate of medication error		0.73%	0.86%	1.06%	0.82%	0.83%	0.73%	0.89%	1.01%	1.34%	1.39%	1.25%	1.69%	1.68%
Serious incident reporting - report incidences within 48 hours	0	0	3	0	0	3	0	0	1	1	1	0	0	0
Serious incident reporting - update on immediate actions within 72 hours	0	2	0	0	0	0	0	0	1	0	0	0	0	0
Serious incident reporting - share investigations report/action plan (60 days)	0	4	0	1	5	3	4	7	5	2	4	1	4	6
Never Events	0	1	0	1	2	0	0	0	0	2	0	2	0	0
Radiation incident rate - radiotherapy		0.3	0.6	0	0.8	0.3	0.56	0.28	0.22	1.6	1.6	0.5	0.7	0.3
Radiation incident rate - radiology		0.44	0.64	0.33	0.28	0.28	0.5	0.45	0.6	1.09	0.58	0.46	0.51	0.57
Care hours per patient - total nursing & midwifery staff actual	7.6						7.3		7.0	7.1	7.3	7.3	7.4	6.9
Care hours per patient - registered nursing & midwifery staff actual	4.5						4.5		4.3	4.4	4.8	4.7	4.7	4.3
Care hours per patient - healthcare workers actual	3.0						2.8		2.7	2.6	2.5	2.6	2.7	2.6
The % of patients who met the criteria of the local protocol for sepsis screening and were screened for sepsis and for whom sepsis is appropriate - Emergency Department	90%									95.2%				
The % of patients who met the criteria of the local protocol for sepsis screening and were screened for sepsis and for whom sepsis is appropriate - Acute Inpatient Departments	90%									75.8%				
The % of patients who present with suspected sepsis to emergency departments and other units that directly admit emergencies, and were administered intravenous antibiotics within 1 hour - Emergency Department	90%									45.9%				
The % of patients who present with suspected sepsis to emergency departments and other units that directly admit emergencies, and were administered intravenous antibiotics within 1 hour - Acute Inpatient Departments	90%									83.1%				
Maternity														
C-Section rates - elective	<12%	11.5%	10.0%	13.4%	11.0%	9.9%	11.4%	12.6%	12.2%	10.9%	10.7%	7.9%	10.7%	11.2%
C-Section rates - emergency	<14%	19.4%	16.1%	12.9%	17.4%	16.1%	17.0%	20.6%	17.1%	16.8%	17.7%	18.4%	14.7%	20.9%
Midwife to birth ratio	</=30	32.0	32.0	31.5	31.0	31.0	31.0	31.0	30.0	30.0	30.0	29.0	29.0	29.0
FFT response rates (Maternity only)		7.3%	1.9%	11.7%	4.2%	6.6%	6.7%	9.4%	7.2%	3.0%	4.6%	3.6%	5.4%	4.5%
FFT recommendation rates (Maternity only)		94.2%	86.1%	93.6%	96.3%	96.5%	92.6%	98.0%	94.3%	100.0%	97.8%	93.9%	96.7%	98.5%

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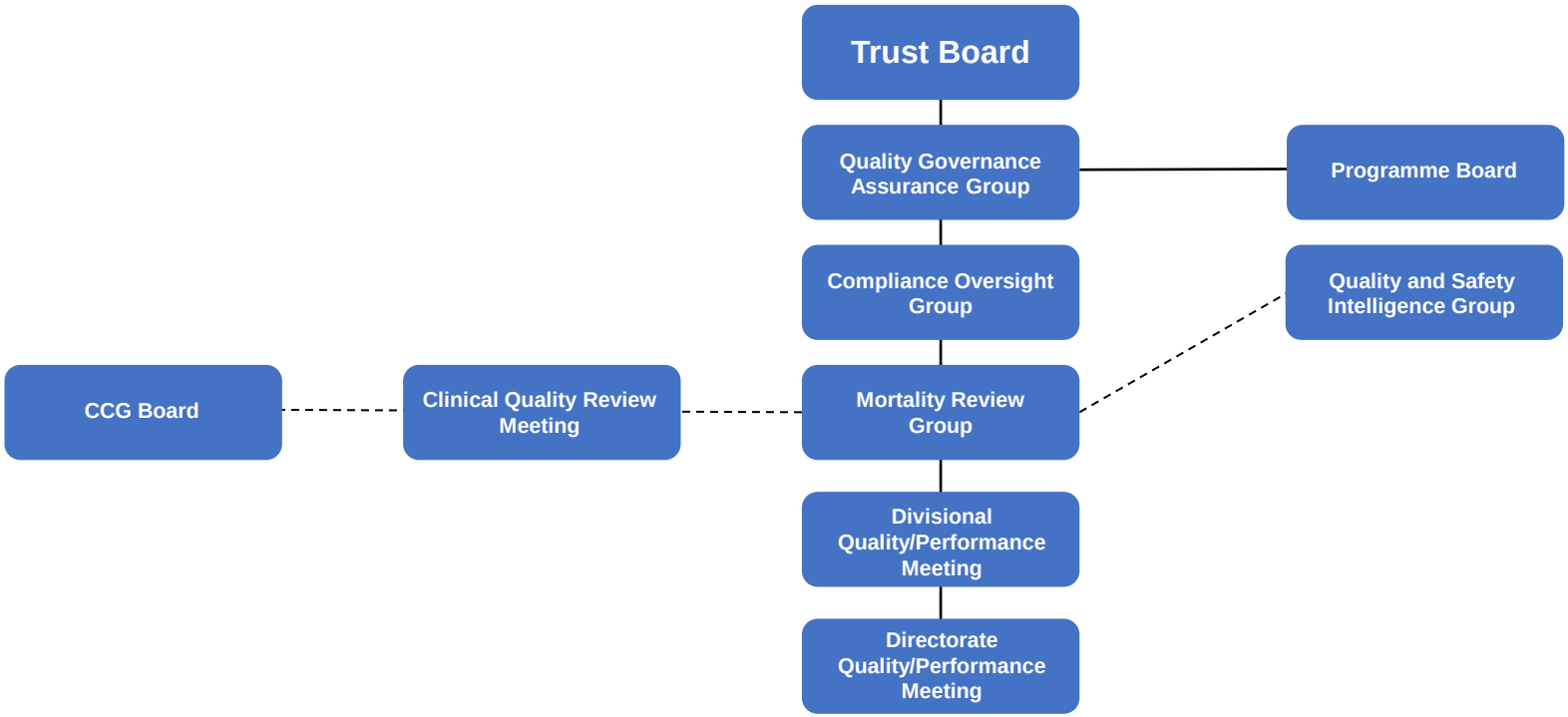
4 Is there a clear governance structure with appropriate Board engagement?

QI Improvement Programme 1 - Mortality Governance Structure



5 What are our next steps?

Programme management

- RWT Mortality Strategy
- Dashboard
- External Analytic support
- External Medical expertise

City-wide management

- City-wide Mortality strategy
- System-wide review – End of life care / Nursing home support

Policy / Process

- New Medical Examiner role
- Learning from deaths
- More coding dialogue

Quality

- Quality improvement audits alongside mortality data

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5 What are our next steps?

Education

- Learning from completed reviews

Workforce

- Expansion of Palliative care team
- Investment into Sepsis, Stroke & VTE management
- Robust recruitment plans
- Ensure appropriate safe staffing levels across the Trust
- Deteriorating patient and outreach team

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Thank you