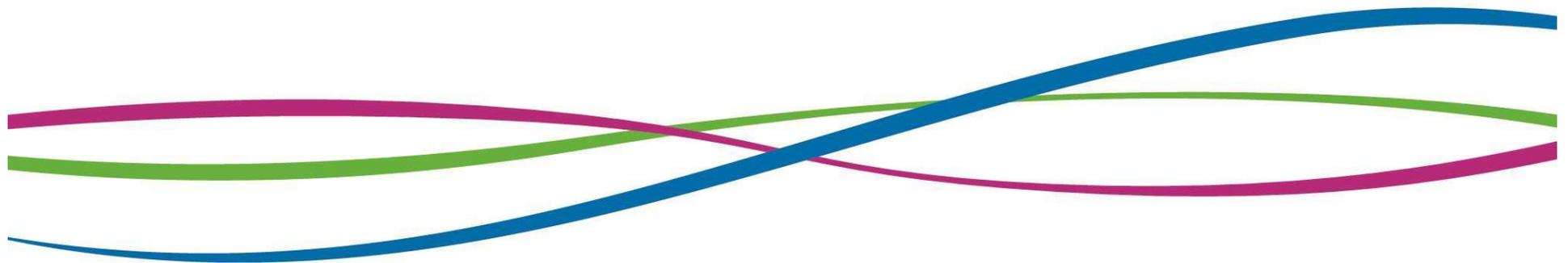


# Mortality & Learning from Deaths update:

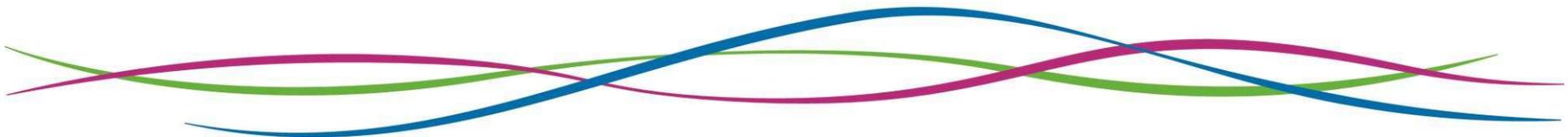
## Wolverhampton



# Presentation Outline

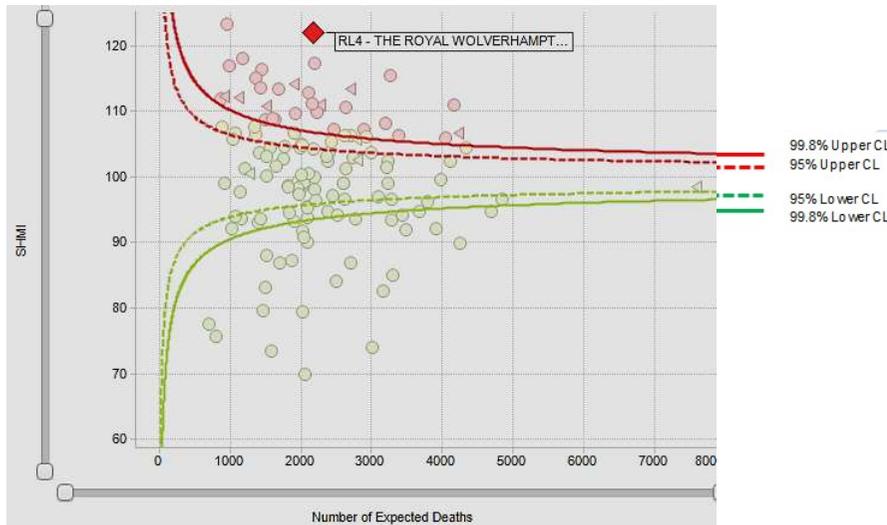
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- Hospital Mortality ratio (determinants)
- Governance set-up and assurance process
- Learning from Deaths (LfD) pathway
- Trust Mortality Strategy
- Trust Improvement plan (Mortality)
- Key developments 2019

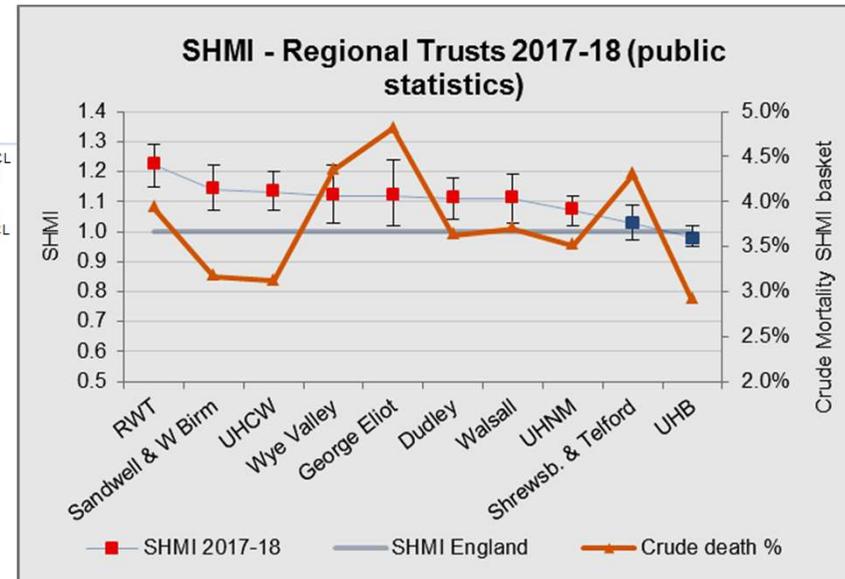


SHMI England Apr 17 – Mar 18 (published)

RWT value **121.94** – higher than expected



Circles – acute trusts in England; triangles – regional trusts

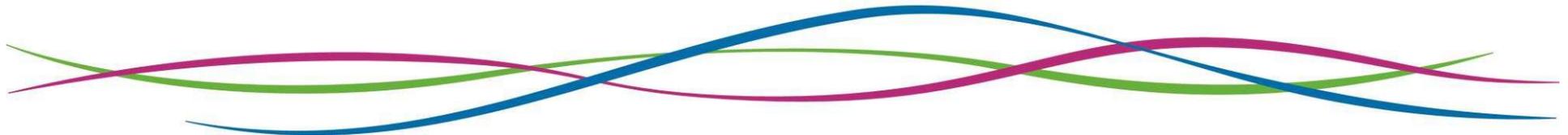


- RWT – 1 of 35 acute trusts in England with higher than expected SHMI (99.8 CI)
- Regionally, 8 trusts have higher than expected SHMI (99.8 CI)

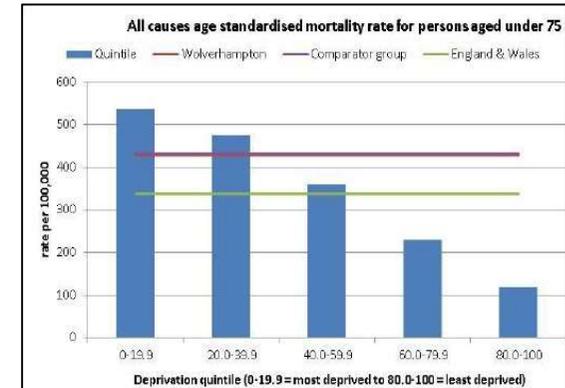
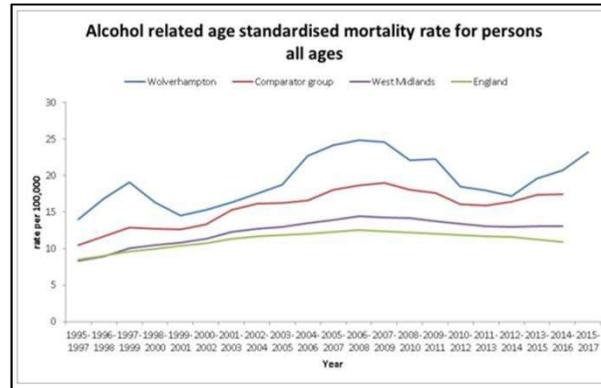
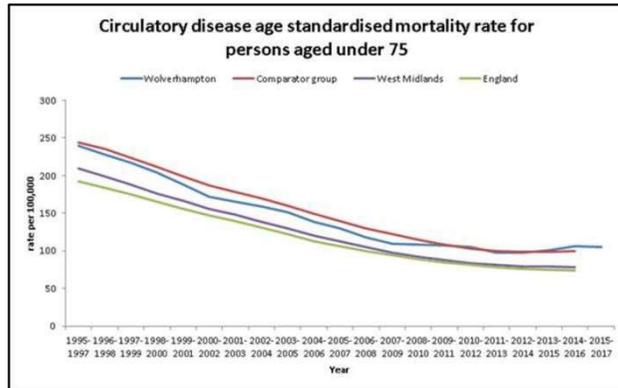
## Hospital Mortality Ratio (Determinants)

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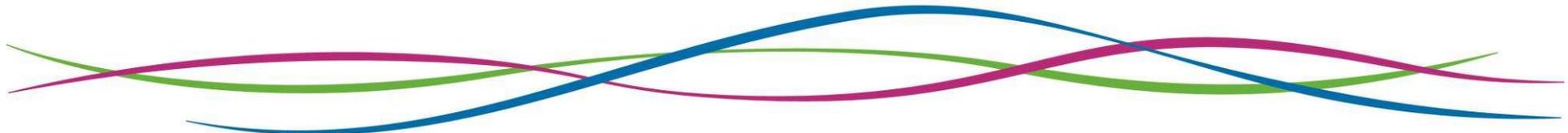
- **Quality** of Care
- **Pathways** (admission and discharge)
- **Severity** of illness of those admitted (not accounted in SHMI)
- **Coding** practices (primary diagnosis and co-morbidities)
- **Place** of Death (proportion dying in hospital)
- **EoL** infrastructure and care for the dying in the community
- **Deprivation** profile
- **Risk factors** (Un-modelled) in the population (e.g. smoking, alcohol)



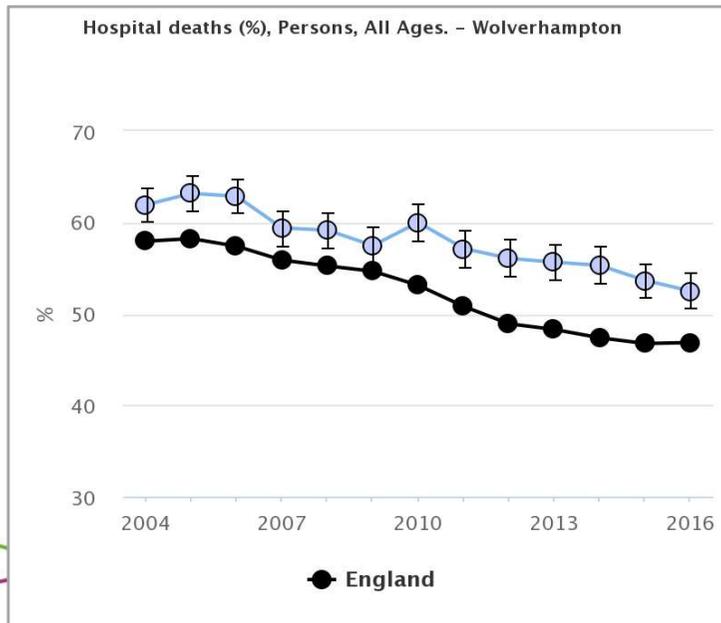
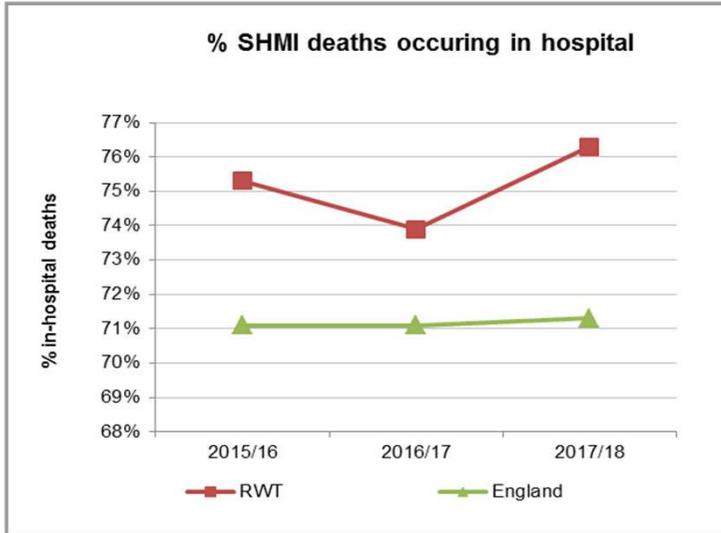
# City-wide ONS data



- Compared to similar Local Authorities (based on deprivation), Wolverhampton has a similar overall death rate (adjusted for age).
- There has been some increase in deaths from circulatory diseases (such as heart disease and stroke) in recent years. Circulatory diseases, cancers and respiratory diseases account for the top 3 causes of death in Wolverhampton, and share common risk factors (e.g. smoking, obesity).
- Wolverhampton remains significantly high for overall death rates, specifically for deaths related to alcohol, which has been a persistent theme for many years



# Place of Death



Compared with benchmark: Better (Green), Similar (Yellow), Worse (Red), Lower (Blue), Higher (Orange), Not Compared (Grey)

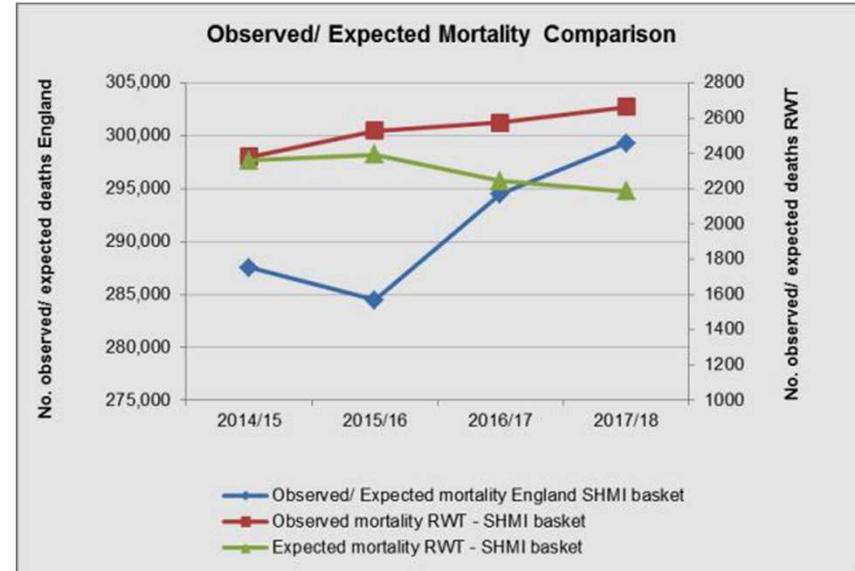
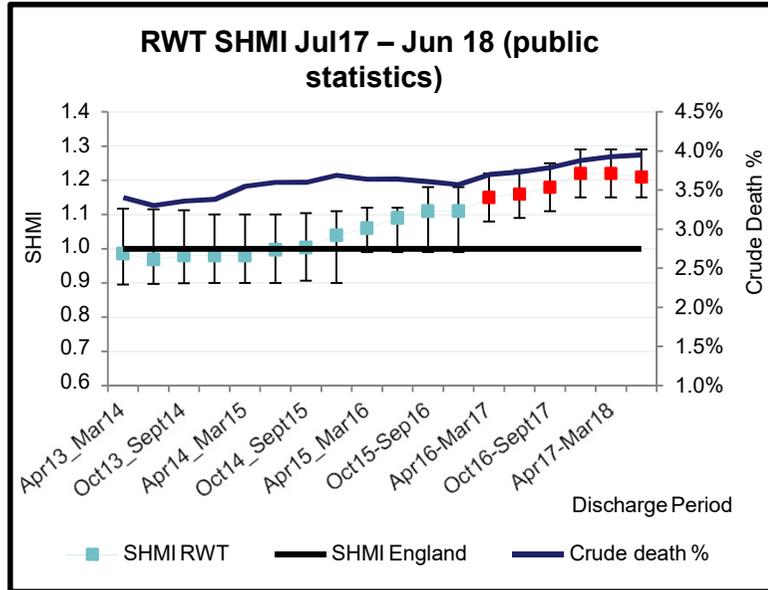
Wolverhampton: 267 Count, 56.3% Value

Region England: 48.4% Value

England: 45.6% Value

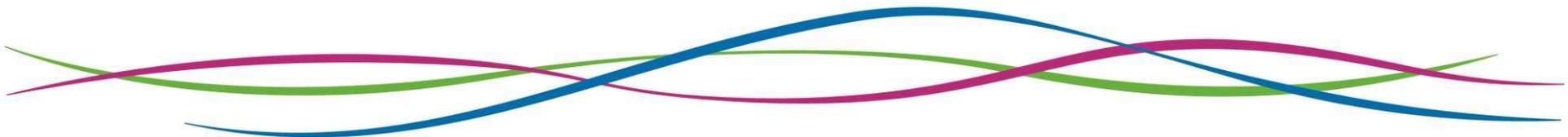
Indicator	Period	Recent Trend	Count	Value	Region England			England		Best/Highest
					Value	Worst/Lowest	Range	Best/Highest		
Hospital deaths (%), Persons, Aged 0 - 64 years.	2016	↓	267	56.3%	48.4%	45.6%	32.1%	40.3%	60.3%	
Hospital deaths (%), Persons, Aged 65 - 74 years.	2016	↓	228	54.0%	50.6%	49.2%	35.2%	64.5%	64.5%	
Hospital deaths (%), Persons, Aged 75 - 84 years.	2016	↓	382	53.9%	53.1%	50.5%	40.6%	67.4%	67.4%	
Hospital deaths (%), Persons, Aged 85 years and over.	2016	↓	472	48.9%	46.3%	43.8%	29.8%	66.3%	66.3%	
Hospital deaths (%), Persons, All Ages.	2016	↓	1,349	52.5%	49.3%	46.9%	38.3%	63.1%	63.1%	
Care home deaths (%), Persons, Aged 0 - 64 years.	2016	→	18	3.8%	2.5%	2.9%	0.7%	13.0%	13.0%	
Care home deaths (%), Persons, Aged 65 - 74 years.	2016	→	33	7.8%	7.9%	8.6%	2.6%	19.2%	19.2%	
Care home deaths (%), Persons, Aged 75 - 84 years.	2016	↑	110	15.5%	17.2%	18.7%	4.1%	27.8%	27.8%	
Care home deaths (%), Persons, Aged 85 years and over.	2016	↑	309	32.0%	34.7%	36.7%	11.2%	50.9%	50.9%	
Care home deaths (%), Persons, All Ages.	2016	↑	470	18.3%	20.1%	21.8%	5.2%	32.8%	32.8%	
Home deaths (%), Persons, Aged 0 - 64 years.	2016	↑	142	30.0%	32.4%	33.9%	21.8%	44.7%	44.7%	
Home deaths (%), Persons, Aged 65 - 74 years.	2016	↑	113	26.8%	29.4%	30.3%	19.7%	39.7%	39.7%	
Home deaths (%), Persons, Aged 75 - 84 years.	2016	↑	167	23.6%	23.0%	23.8%	17.4%	30.7%	30.7%	
Home deaths (%), Persons, Aged 85 years and over.	2016	↑	155	16.1%	15.9%	16.4%	10.0%	28.4%	28.4%	
Home deaths (%), Persons, All Ages.	2016	↑	577	22.5%	22.8%	23.5%	17.1%	29.7%	29.7%	
Deaths in Other Places (%), Persons, Aged 0 - 64 years.	2016	→	27	5.7%	6.7%	7.2%	2.6%	13.9%	13.9%	
Deaths in Other Places (%), Persons, Aged 65 - 74 years.	2016	→	6	1.4%	1.8%	2.0%	0.6%	9.7%	9.7%	
Deaths in Other Places (%), Persons, Aged 75 - 84 years.	2016	→	11	1.55%	1.17%	1.36%	0.44%	4.94%	4.94%	
Deaths in Other Places (%), Persons, Aged 85 years and over.	2016	→	5	0.52%	0.79%	1.01%	0.25%	6.52%	6.52%	
Deaths in Other Places (%), Persons, All Ages.	2016	→	49	1.91%	1.98%	2.20%	1.11%	6.66%	6.66%	
Hospice deaths (%), Persons, Aged 0 - 64 years.	2016	→	20	4.2%	10.1%	10.4%	0.5%	18.5%	18.5%	
Hospice deaths (%), Persons, Aged 65 - 74 years.	2016	↑	42	10.0%	10.2%	10.0%	1.1%	31.9%	31.9%	
Hospice deaths (%), Persons, Aged 75 - 84 years.	2016	→	39	5.5%	5.5%	5.6%	0.8%	18.1%	18.1%	
Hospice deaths (%), Persons, Aged 85 years and over.	2016	→	24	2.49%	2.23%	2.08%	0.35%	8.38%	8.38%	
Hospice deaths (%), Persons, All Ages.	2016	↑	125	4.9%	5.8%	5.7%	0.2%	14.3%	14.3%	

# SHMI Trend



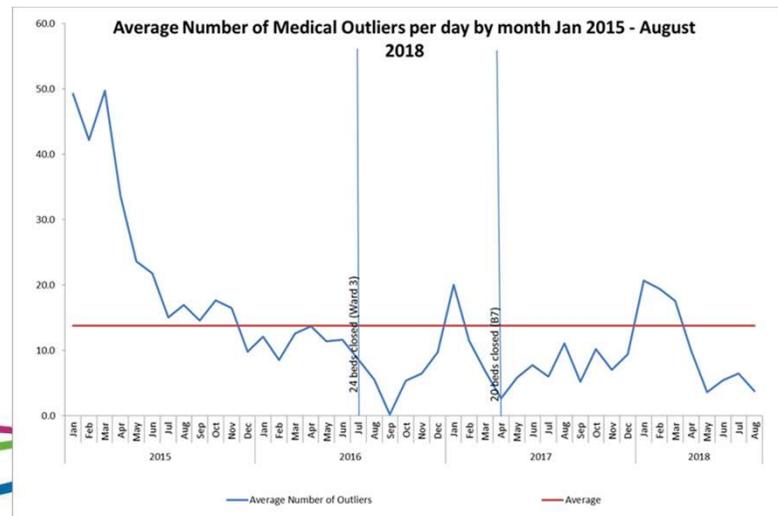
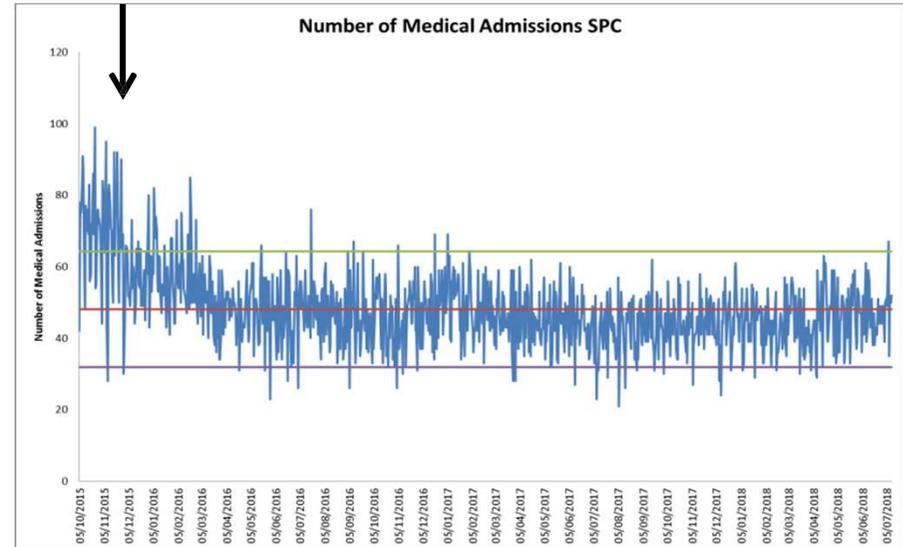
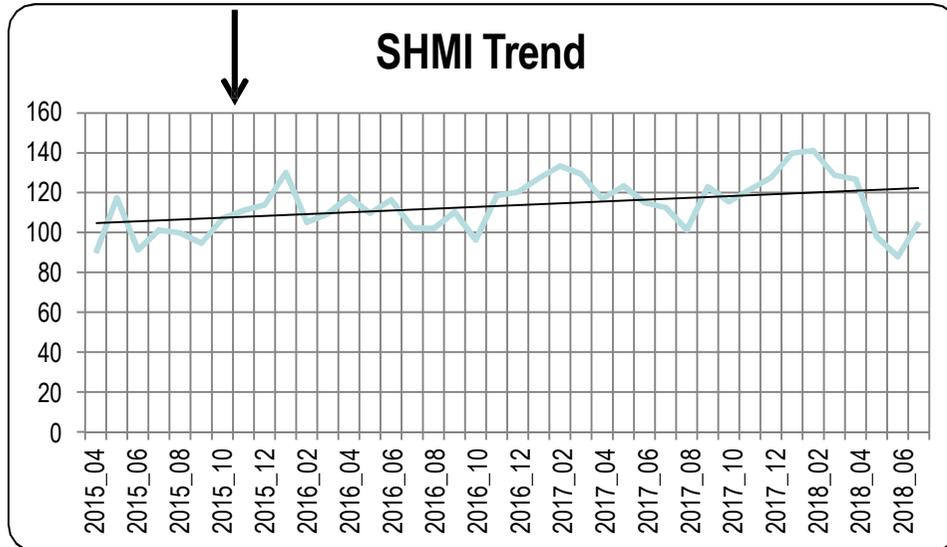
$$SHMI = \frac{\text{observed deaths}}{\text{expected deaths}}$$

- **Expected mortality** is calculated for each admission to hospital at diagnosis group level
- Statistical construct based on the interaction between age, gender, diagnosis group and comorbidity score; all based on coded clinical information recorded at the time of admission to hospital

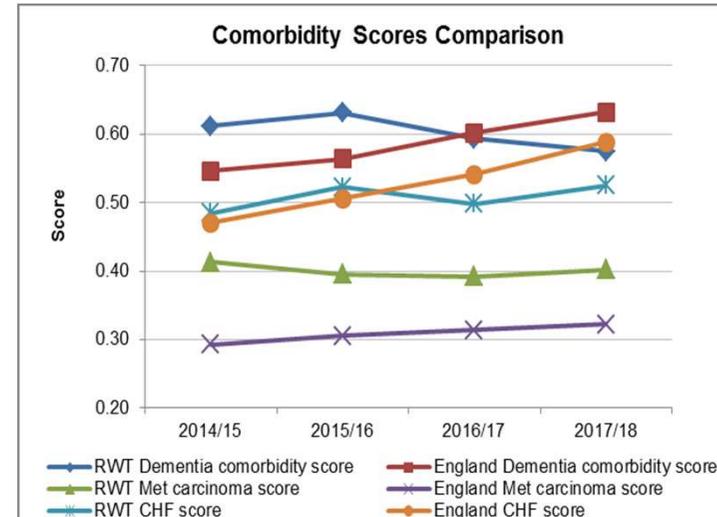
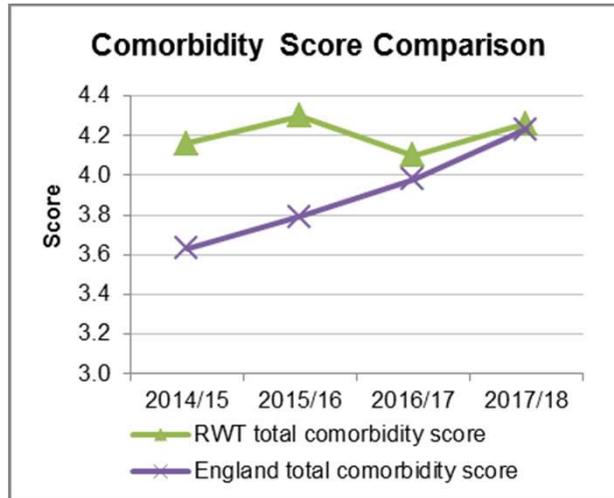


# Change in Admission Pathway

## Physician A model in ED

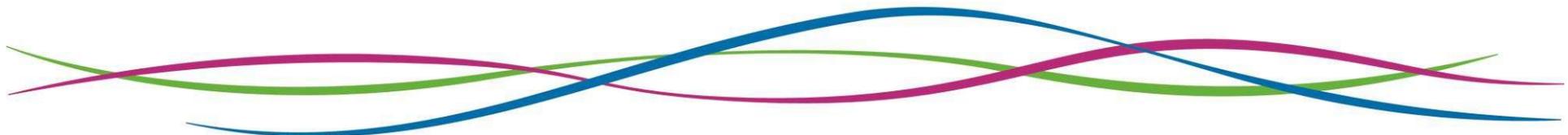


# Coding Co-morbidities

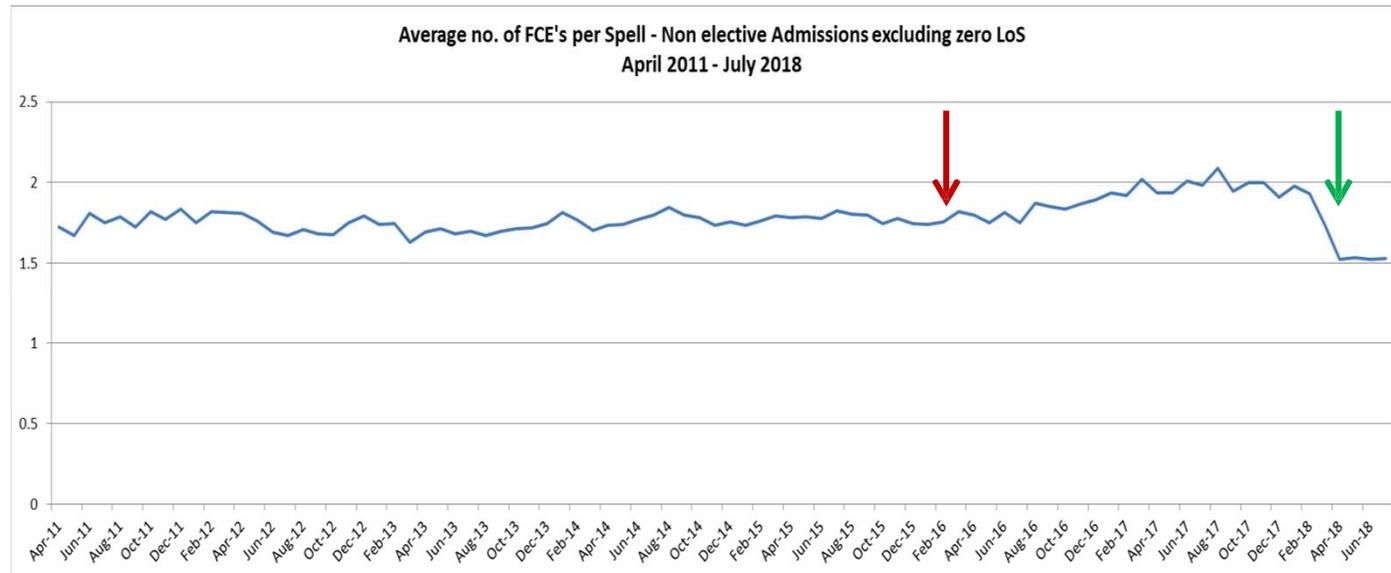


- Co-morbidity score recorded during the 1<sup>st</sup> episode of care for admission in the SHMI dataset.
- Dementia, Congestive Heart Failure and Metastatic Carcinoma have the highest scores when recorded as a comorbidity.
- For metastatic carcinoma, RWT is higher compared to England, but there hasn't been any increase. For dementia and CHF, the scores are lower than National average and there hasn't been an increase either; a drop is seen in 2016-17.

Administrative Data in the 1<sup>st</sup> FCE do not accurately reflect the characteristics of admitted patients

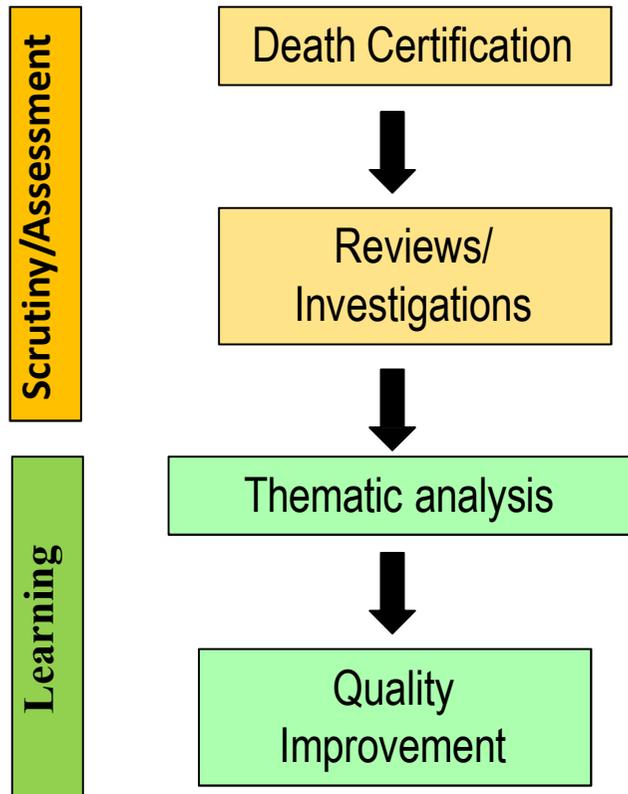


# FCEs/spell

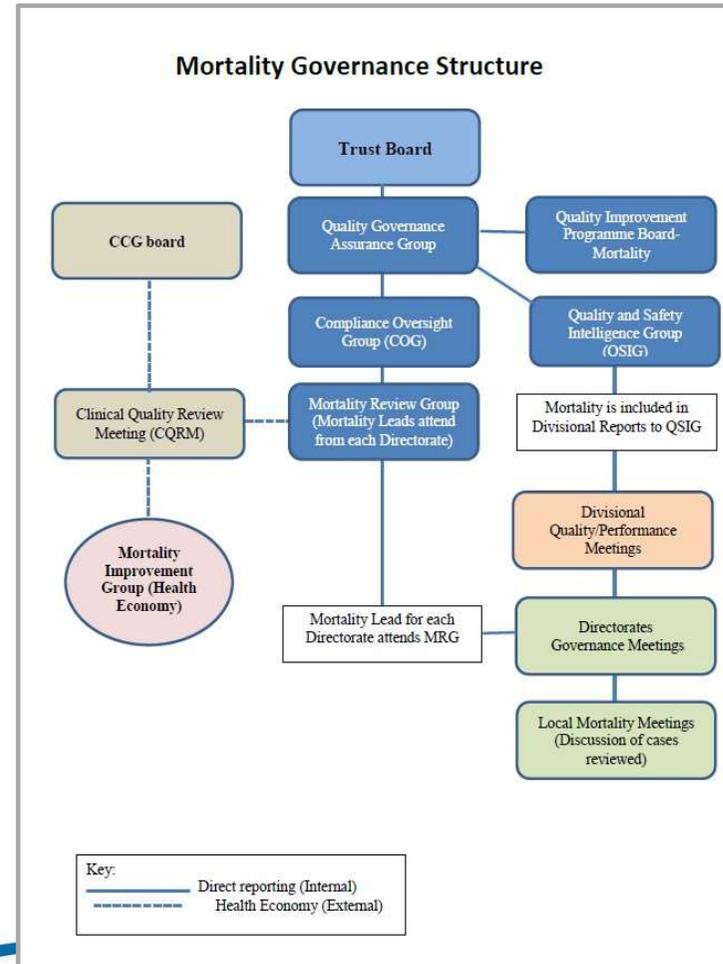


- The multiple short episodes on admission to the acute medical unit were leading to the suboptimal coding of primary and secondary conditions.
- Changes were made from April 2018 to address this; the acute medical admission is now recorded as one episode until the patient moves to another ward or is discharged.

## Key Components



## Governance Structure



# Process: Scrutiny/Review/Investigation

## Medical Examiners

- Accurate death certification
- Discussion with bereaved families
- Proportionate scrutiny of records
- Identify deaths for SJR review

## Case note review

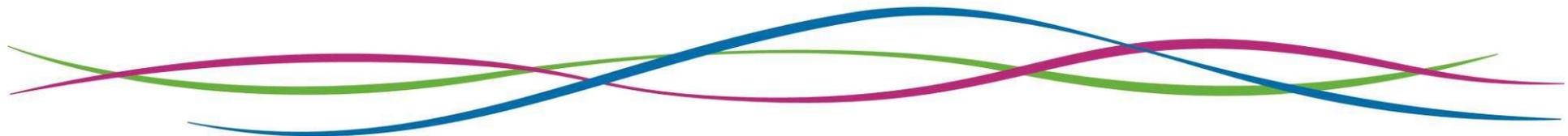
- SJR methodology
- 2 Stage process
- Multidisciplinary approach
- Quality assured

## Investigation

- RCA
- Serious incident framework
- Systematic analysis of what, how and why?
- Identify changes to reduce future risks

## National Mortality Review

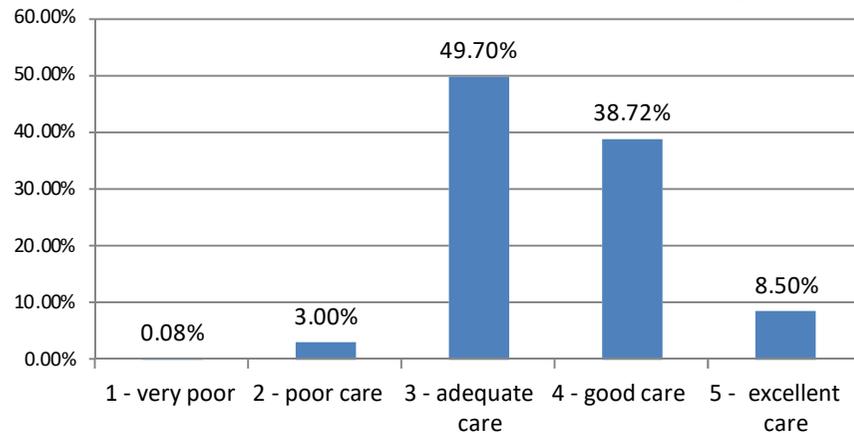
- LeDeR programme
- MBRRACE
- Child Death review programme



## Outcome of SJR

- Around 2000 hospital deaths/year
- Roughly 70% of all hospital deaths reviewed

**SJR 1 - Trust - Phase 6 Overall Care Assessment score (by judgement)**



**Poor/very poor care triggers Stage 2 Review**

## Outcome of Audits

- Over 250 deaths audited
- Roughly 2% of cases care was not satisfactory

NCEPO D Grading	Grade Description	No. Cases
1	Good practice	183
2	Room for improvement (Aspects of clinical care that could have been better)	33
3	Room for improvement (Aspects of organisational care that could have been better)	6
4	Room for improvement (Aspects of clinical and organisational care that could have been better)	8
5	Less than satisfactory (Several aspects of clinical and/or organisational care which were below acceptable standards)	3

# Mortality Reviews-Thematic Analysis

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## **Themes for improvement:**

Documentation

Sepsis screening and management

Identification, review and escalation of deteriorating patient

End of Life Care

Delayed transfer of care

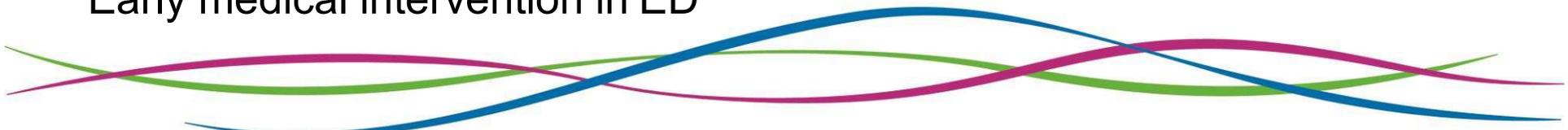
MCA/DOLs knowledge and implementation

## **Areas of Good Practice:**

7DS- weekend consultants ward rounds

Pressure ulcer management

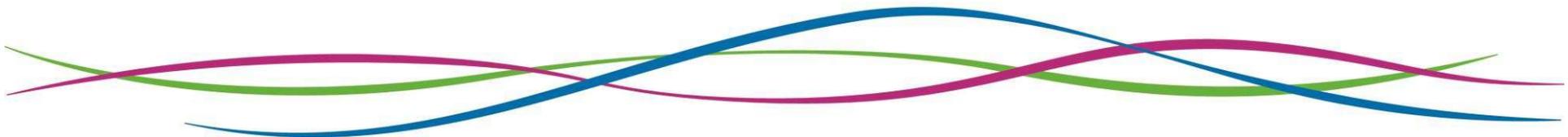
Early medical intervention in ED



# Examples of service improvement:

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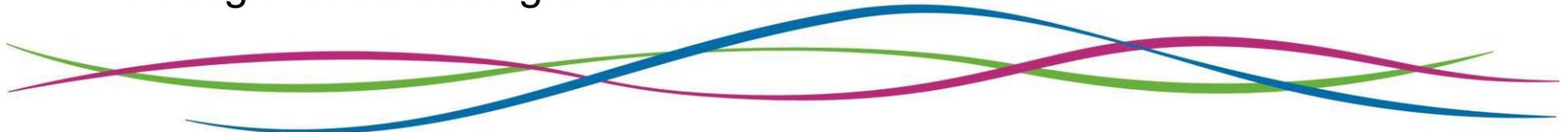
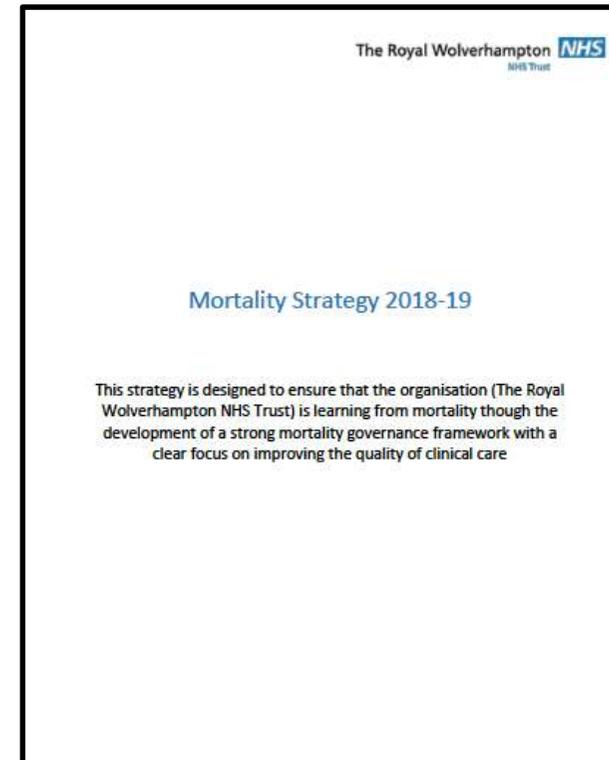
- Physician A model in ED
- 7 day service
- Consultant expansion (Medicine)
- Clinical Fellowship programme
- Additional doctors to cover medical wards during weekends
- E- prescribing
- Patient flow initiatives: SAFER/R2G/Stranded patients
- Pathway specific (reduction in number of cardiac arrests)
- Proactive nurse recruitment
- Nursing metrics: reduction in HAPU, falls with harm and late observations



# Trust Mortality Strategy

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- Timely mortality reviews and/or RCAs to identify learning from deaths
- Lessons learnt are shared and linked to the quality improvement agenda
- Clinical pathways to deliver high quality care
- City wide implementation of End of Life Care in line with Gold Standard framework
- Engagement with bereaved families and relatives
- Accurate capture of administrative data to reflect the population being treated through robust coding and documentation

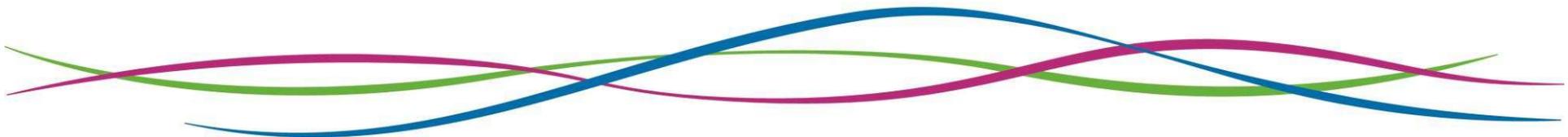


# Trust Improvement Plan (Mortality)

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## **Workstreams:**

- Programme Management
- City Wide Programme Approach
- Standardised Policy and Processes
- Quality and Safety of Care
- Education
- Workforce
- Communication



# Improvement Plan- Workstreams

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## Programme Management

- Establish programme board and action plan
- Agree TOR for MRG
- Develop Mortality Strategy
- Analytic support
- Monitor impact of intervention
- Board assurance

## City-Wide Approach

- Agree TOR for MIG
- City-wide mortality strategy
- Scope Eol activity and re-design pathway
- Care Home in-reach support and evaluate impact on admissions

## Policy & Process

- Re-establish RWT Eol group
- Update Death certification and LfD policy
- Monitor compliance with mortality policy
- Establish process for primary care reviews

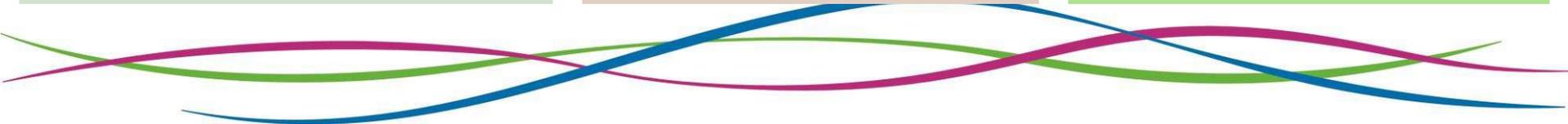
## Workforce

- Expansion of Palliative care and critical care outreach teams
- Support for Sepsis, Stroke & VTE management
- Review staff recruitment plans
- Monitor vacancies

## Education & learning

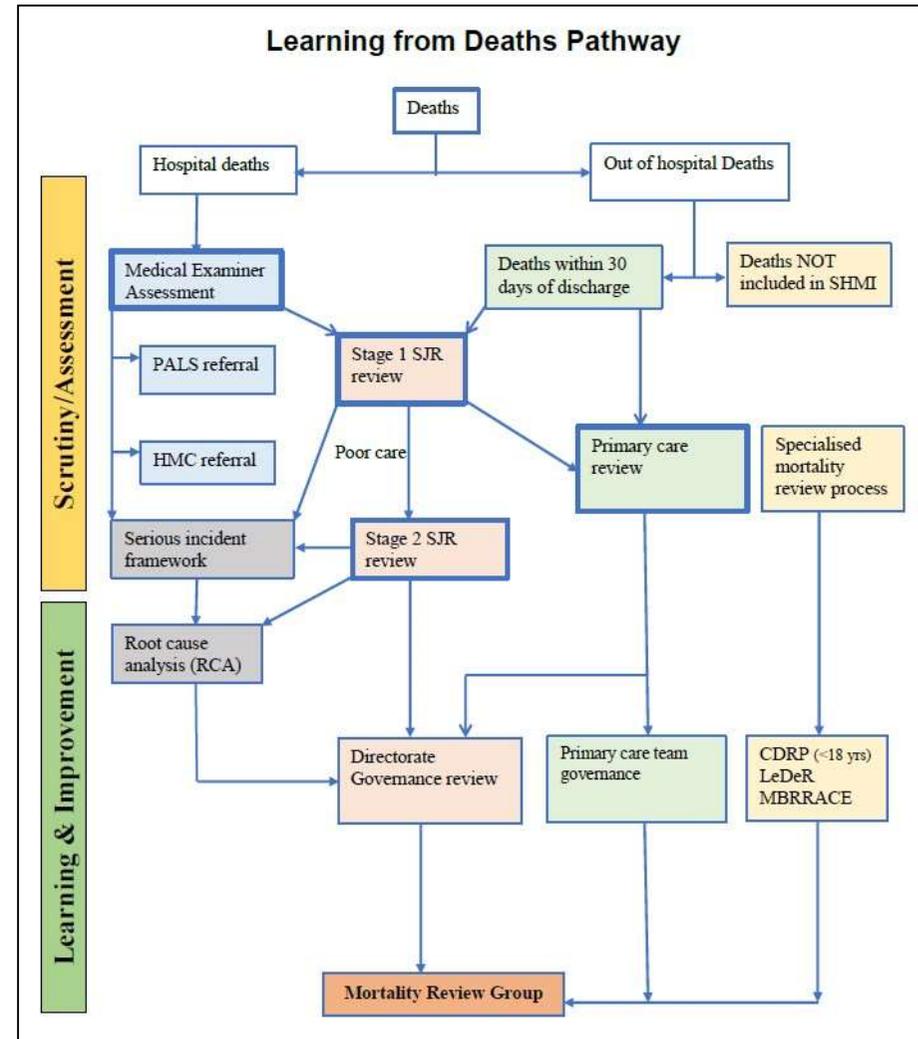
- Training for Medical examiners and mortality reviewers
- Mortality Learning log
- Share learning from mortality reviews

## Quality & Safety

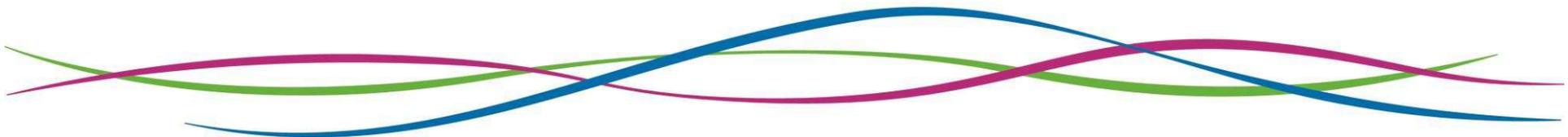
- Monitor compliance with 7day service standards
  - Care pathway audits
  - Monitor complaints and incident trends - establish SIG
- 

# Key Initiatives 2019

- Medical Examiners
- Out of Hospital Deaths (Primary Care mortality reviews)
- Review of deaths with low mortality risk
- Dedicated Mortality Reviewers
- Bereavement service (lead nurse appointment)
- IT platform (LfD pathway)
- Coding:
  - Clinician/coder co-working (pilot on AMAU)
  - Co-morbidity proforma
- Mortality Dashboard



# Mortality Dashboard



Thank you for your attention

