

Response to the Covid-19 pandemic from an NHS Acute Hospital Estates perspective

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Excellent



Compassionate



Respectful

Mid and South Essex NHS Foundation Trust

Provides acute hospital services to a population of 1.2 million people.



Broomfield Hospital 126,000 M²

24 hour ED

500 + Beds

Full range of acute services/diagnostics

Orthopaedic Trauma centre

Specialist regional burns unit

27 Operating theatres/ICU

Basildon Hospital 107,000 M²

24 hour ED

600+ Beds

Full range of acute services/diagnostics

Specialist regional cardiothoracic centre

17 Operating theatres/ICU

Southend Hospital 96,000 M²

24 hour ED

500 + Beds

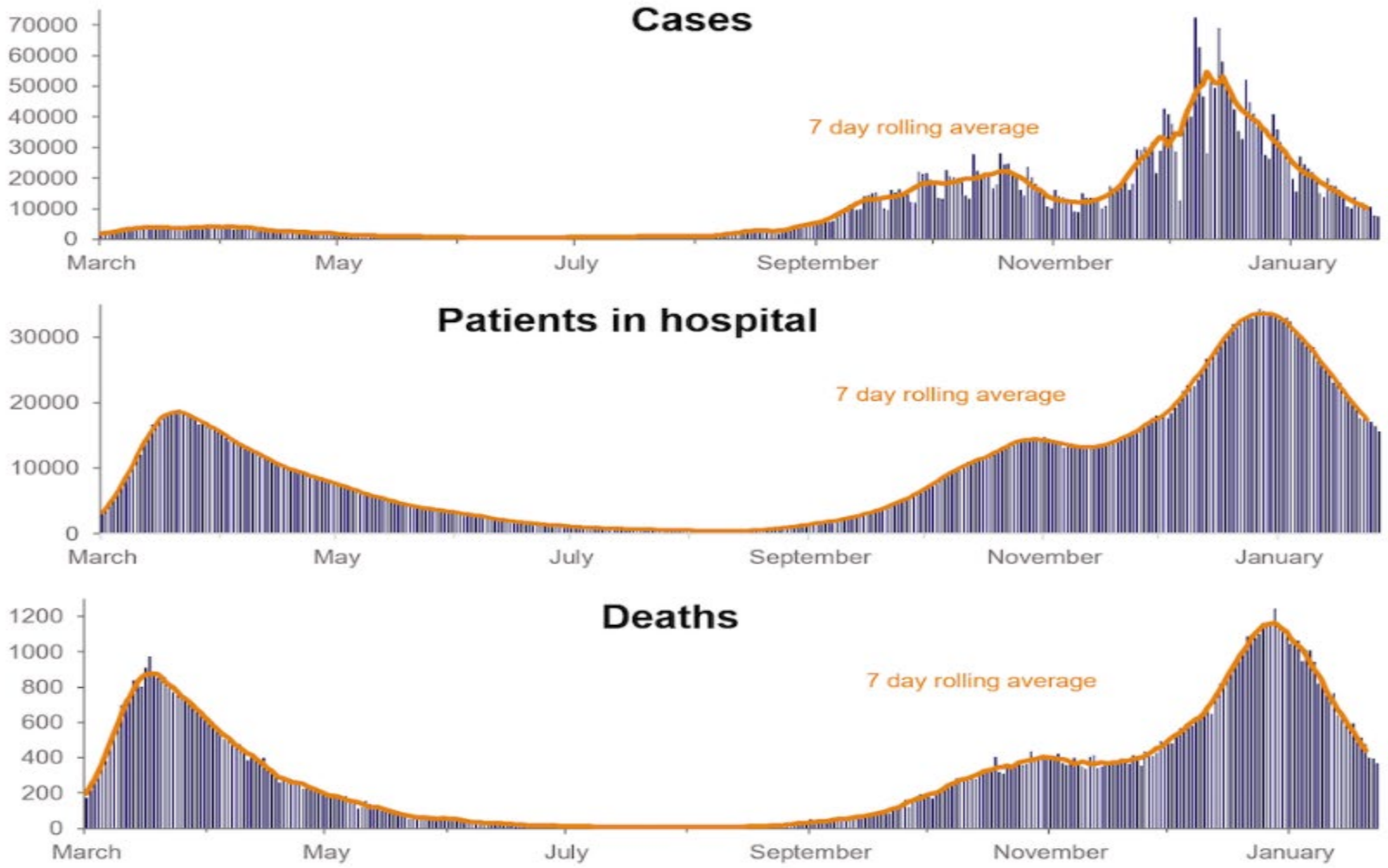
Full range of acute services/diagnostics

Specialist Cancer centre

20 Operating theatres /ICU



The Covid 19 timeline March 2020 – Feb 2021



Service reconfiguration

- Infectious (Red) and non –infectious (Green) pathways for emergency and urgent care patients – impact on ED departmental space designation
- Rapid expansion of capacity for patients requiring ICU support
- Increase in beds designated for Covid +ve patients
- Decrease in beds available for non-covid patients = cancelled operations
- Implementation of social distancing measures = reduction in diagnostic and non urgent activity + relocation of non clinical services + increased agile/off site working
- Increased mortuary capacity
- Provision of increased capacity pathology for PCR testing
- Provision of facilities for increased sample collection
- Provision of facilities for vaccination (from early 2021)
- PPE storage and distribution facilities



Covid-19 – The impact and the Estates response

Oxygen



Covid-19 – The impact and the Estates response

Oxygen

- High occupancy of ICU beds + overflow ICU beds in e.g. Theatre recovery areas
- High number of patients ventilated/CPAP
- VIE and distribution pipework undersized to cope with demand
- Single piped system leading to low pressure at system extremities
- Insufficient data available to monitor demand/peak loads against system capacity - requiring installation of digital telemetry
- 24/7 maintenance of evaporators required to maintain performance
- Rationing of use of O² therapy implemented + clinically agreed reduction in O² saturation levels
- Close control and monitoring of O² usage at ward/departmental level to minimise wastage
- Increased use of O² cylinders + contingency procurement of oxygen concentrators



Infection control measures

- Zonal/departmental segregation
- Ventilation
- Social distancing
- Screening
- Enhanced cleaning
- PPE
- Security of the environment
- Training, education and communications
- Local and national guidance

Remote working – a lasting legacy?

- Non-clinical support staff working off-site
- Technology critical to enable access to files, meetings, email, etc
- Psychology, productivity, culture of remote working
- The future of the non-clinical estate – rationalisation opportunity?

Other considerations

- Reduction in income from public car parks - £1 million +
- Loss of income to retail outlets/on-site restaurants
- Significant increase in FM costs for enhanced cleaning and site security
- Capital project impact
- Robustness of supply chains

Recovery

- To what extent should estates configuration changes be reversed?
- Addressing the elective backlog – estates changes to meet 110%
- Future design considerations – ventilation/O²/resilience of infrastructure and flexibility in design and future use of healthcare spaces.
- Emergency Preparedness Resilience and Response – Fit for purpose?
- Lessons learned and future guidance.

Thank you