



## CLEAR UEC case study 2019

# Oxford University Hospitals NHS Foundation Trust

Optimising ED capacity and workforce to reduce waits and improve patient experience

## AT A GLANCE

### CLEAR CHALLENGE

Long waits for assessment and congestion in the ED of the John Radcliffe Hospital in Oxford which has around 100,000 attendances a year.

### KEY CHANGES

Transformation of the ED walk-in assessment process including new navigator and senior decision maker roles, new Ambulatory Emergency Care Unit and extending the hours of the Urgent Care Centre.

### FORECAST BENEFITS

Waiting times for assessment reduced by 70 minutes for more than 48,000 patients and fewer patient moves with more than 32,000 nurse and doctor handovers eliminated.

## THE CHALLENGE

Despite improvements to the John Radcliffe Hospital's ED including a major expansion to meet increasing demands, challenges persisted to care delivery. Demand was exceeding capacity leading to congestion. This was leading to prolonged lengths of stay with patients waiting on average 70 minutes for assessment and streaming. Out of hours the volume of ED attendances was often exceeding the resources available resulting in poor patient experience.

## WHAT THEY DID

The national CLEAR team guided two of the trust's frontline clinicians in ED through its 26-week education programme and four stage methodology to understand the key factors behind the service pressures and support them to come up with new models of care. More than three years of patient, workforce and finance data was analysed. This was combined with interviews with a range of staff including divisional and clinical leads, consultants, operational managers and nurses as well as clinical observation. This analysis enabled patient flow through the ED to be visualised and generated ideas for new ways of working. Future workforce modelling and the estate's needs were then calculated.

## CLEAR RECOMMENDATIONS

The CLEAR programme highlighted the need for more flexible and responsive staffing including a new navigator role as part of a transformation of the ED walk-in assessment process to reduce wait times. The post would stream patients to the most appropriate location within ED or the hospital within 15 minutes of arrival. Three arrival streams would be created: paediatrics, adult walk-ins and ambulance arrivals.

Clinical shift patterns should be optimised to match demand with the introduction of third 12-hour nursing shift and increasing the nursing workforce by up to four nurses per 24 hours (22 FTE) to enable more flexibility and deployment as needed reducing bottlenecks. An extra senior decision maker (ST4+ or advanced nurse practitioner) to be introduced for ambulatory emergency care patients to reduce waits and arrange early investigations.

An Ambulatory Emergency Care Unit (AEC) should be created which would be able to treat one third of adult ED attendances which needed more comprehensive management not suitable for primary care. The hours of Urgent Care Centre (UCC) and the Ambulatory Assessment Unit (AAU), should also be extended from 9pm to midnight.

## FORECAST IMPACT

The introduction of the navigator role is forecast to reduce assessment waiting times for 48,500 walk-in patients by up to 70 minutes with most seen in under 15 minutes, improving efficiency and reducing hidden clinical risk.

There would be reduced patient moves with the creation of the new AEC which would aim to deliver all clinical care in a single area, improving patient experience and potentially eliminating more than 28,000 nurse and 4,750 doctor handovers a year.

The extended opening hour for UCC and AAU would result in a 50% reduction in evening activity on ambulatory majors, enabling staff to care for other patients more effectively.

"The benefit of CLEAR is giving clinical staff experience of informatics and QI techniques with real world data sets. This develops an awareness and shared vocabulary with data scientists and informatics teams that can be leveraged over the length of their entire career."

Dr. Adham Khalek, ED  
Consultant and OUH Clinical  
Informatics Lead