



## Medical AI tool improves surgery outcomes at NHS trust

Camgenium's medical analytics platform is monitoring clinical performance at Frimley Health NHS Foundation Trust.

### Overview

Observatory, an AI-powered clinical analytics tool that assesses hospital performance using risk-adjusted outcomes is currently in use at Frimley Health NHS Foundation Trust. The tool is part of Camgenium's Hospital Products platform and is used to monitor clinical performance during surgery to improve outcomes at the hospital.

### Project background

Frimley Health NHS Foundation Trust's acquisition of Heatherwood and Wexham Park Hospitals presented the board of Frimley Park with a due diligence challenge. Heatherwood and Wexham Park Hospitals had been failing to meet national targets and the Care Quality Commission (CQC) had raised concerns about quality of care. The hospitals were also in financial deficit. Having discovered that the Observatory tool was being piloted by professor Sir Mike Richards at the CQC, the organisation decided that the tool could help to investigate mortality and morbidity of surgical patients. This could be implemented at consultant level, and be used as a basis for wider hospital improvements.

### Identifying quality & efficiency improvements with tangible data

As well as helping Frimley Health NHS Foundation Trust gain a better understanding of mortality and morbidity at Heatherwood and Wexham Park Hospitals NHS Foundation Trust, the Observatory system revealed a number of other safety issues. Dr Timothy Ho, Medical Director, explained that the insights generated from the Observatory system provided a starting point for discussion with clinical colleagues about these wider safety issues at the hospital.

Dr Ho argued, "Once we could see how Observatory was able to provide this level of insight, we decided to use it at Frimley Park to review performance at consultant level."

Frimley Health NHS Foundation Trust is now using Observatory across its three main sites and are seeing tangible benefits to using the system. Dr Ho, continues, "I'm able to get a whole suite of reports giving me an overview of consultant level performance. The team then produces individual reports which we can use to highlight issues with individual practice. Peer comparison means we can have those difficult conversations with consultants. You can't start this conversation by saying the data shows you are underperforming, because that individual will simply question the data. It takes time to show that performance is a concern."

By moving beyond anecdote and relying on an analysis of data that can be trusted by clinicians, the organisation has found that it is able to begin a dialogue with consultants whose performance is lower than expected, or where clinical practice needs to be challenged. This in turn has led to improvements in efficiency, particularly in surgical theatre usage.

## Future Quality Improvements

By implementing the Observatory analytics tool at Frimley Health NHS Foundation Trust, the trust is now able to utilise it's other capabilities. Dr Ho explains they are now able partake in national initiatives such as sepsis prevention.

Dr Ho states, "The morbidity metrics are linked to acute kidney injury so we can start to make comparisons and measure performance. We have recently carried out a trust-wide intervention in sepsis which we wouldn't have been able to do without insights from Observatory."



## Summary

The Observatory tool successfully enabled Frimley Health NHS Foundation Trust gain a better understanding of mortality and morbidity at Heatherwood and Wexham Park Hospitals. The pioneering analytics tool was also able to identify recommendations from improvements on wider safety issues at the hospital.

Frimley Health NHS Foundation Trust is now using Observatory across its three main sites and the benefits are significant.

Observatory provides NHS trusts with clear, data-driven recommendations tailored for clinicians and healthcare executives. The reports generated from the system, illustrate consultant level performance and also individual reports, highlighting any issues with individual practice.

Camgenium will continue to support Frimley Health NHS trust with actionable clinical insights to enable safer care, improve outcomes for patients and lower costs for the hospital.