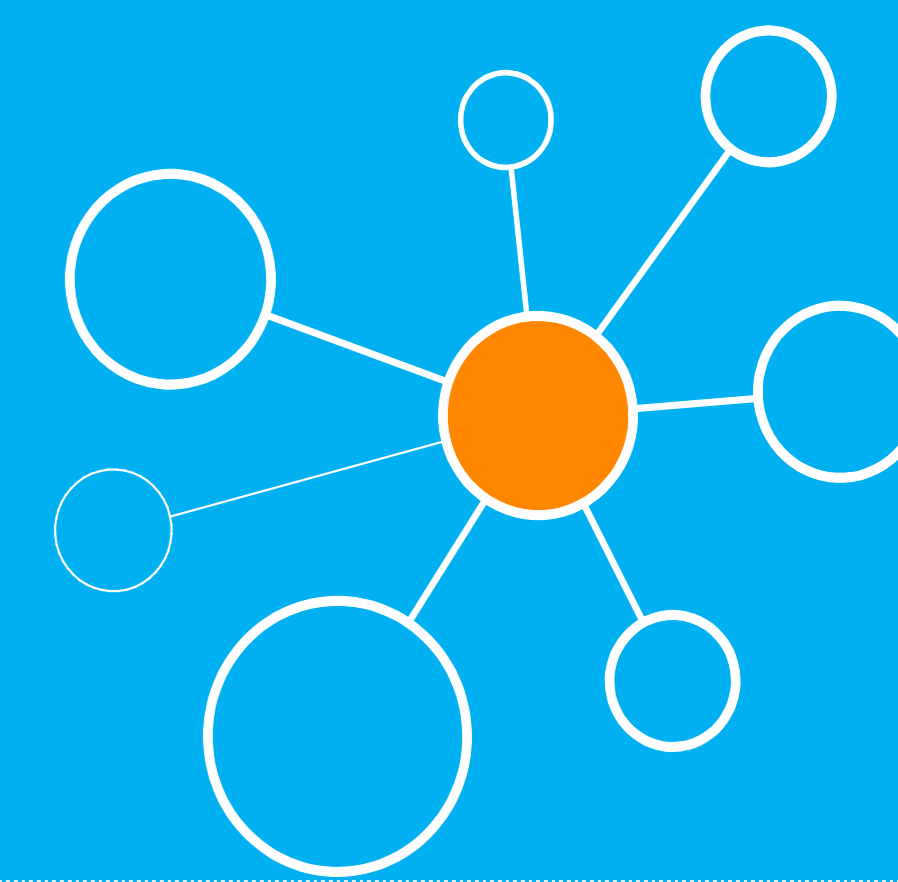


# Introduction of influenza point of care testing (POCT) to reduce hospital-acquired flu & bed days lost to flu during 2017/18 season

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## THE SAFETY CONCERN

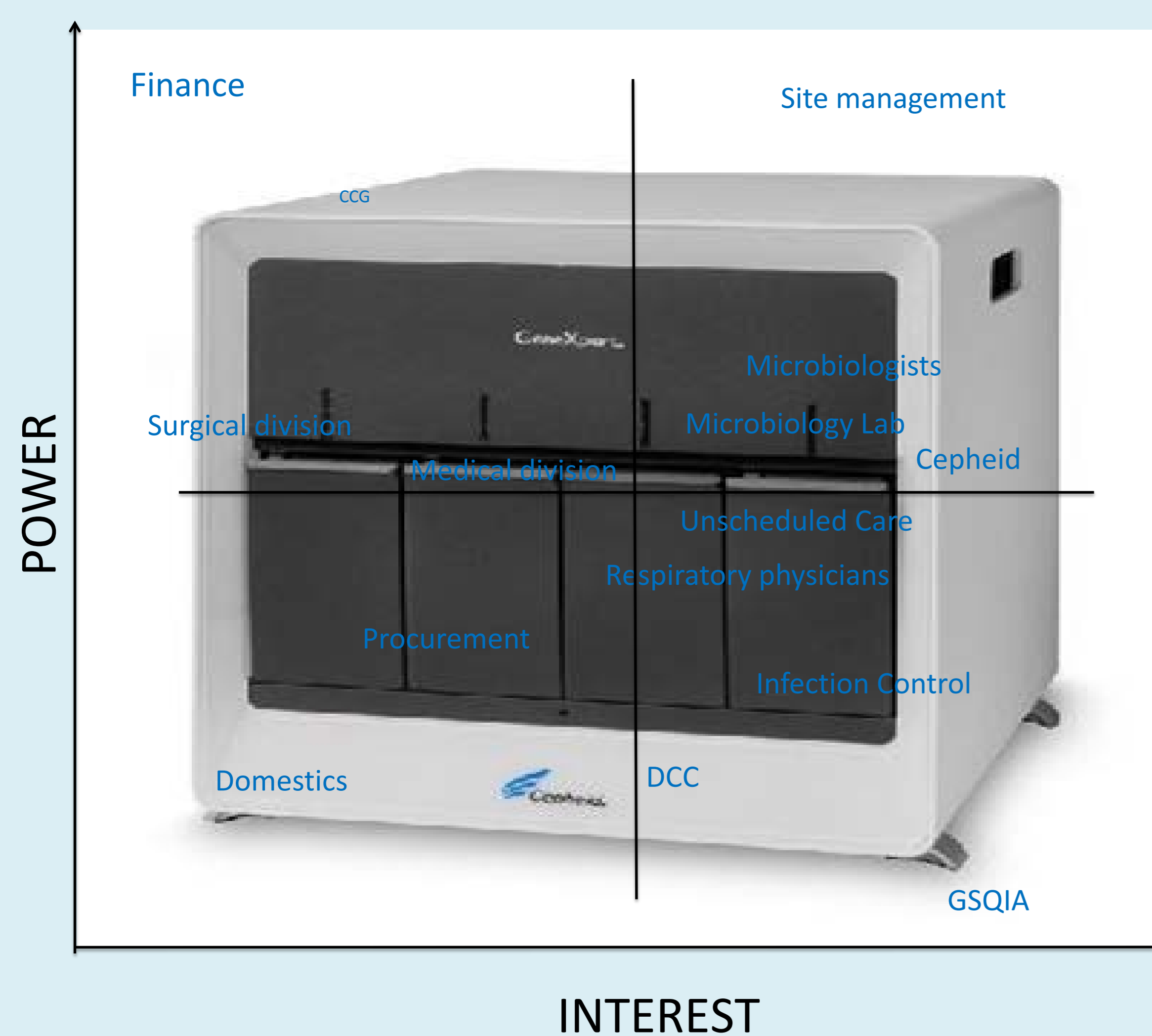
During the 2016/17 influenza season (December 2016 to March 2017) there were a significant number of cases of hospital-acquired influenza (flu +ve ≥5days into admission) and also a significant number of bed days lost to influenza at GRH. This resulted in lost revenue, breaches in ED, additional antimicrobial costs and of course a degree of reputational impact for the Trust. Hospital-acquired flu at GRH last season represented 63 out of 165 total flu positives (38.1%). There were 195 bed days lost at GRH over the time period. It was felt that this number of hospital acquired cases of influenza and this number of lost bed days was unacceptable!

## AIMS

1. To reduce the number of hospital acquired case of influenza by 50% between December 2017 and the start of April 2018
2. To reduce the number of bed days lost due to influenza by 50% between December 2017 and the start of April 2018.

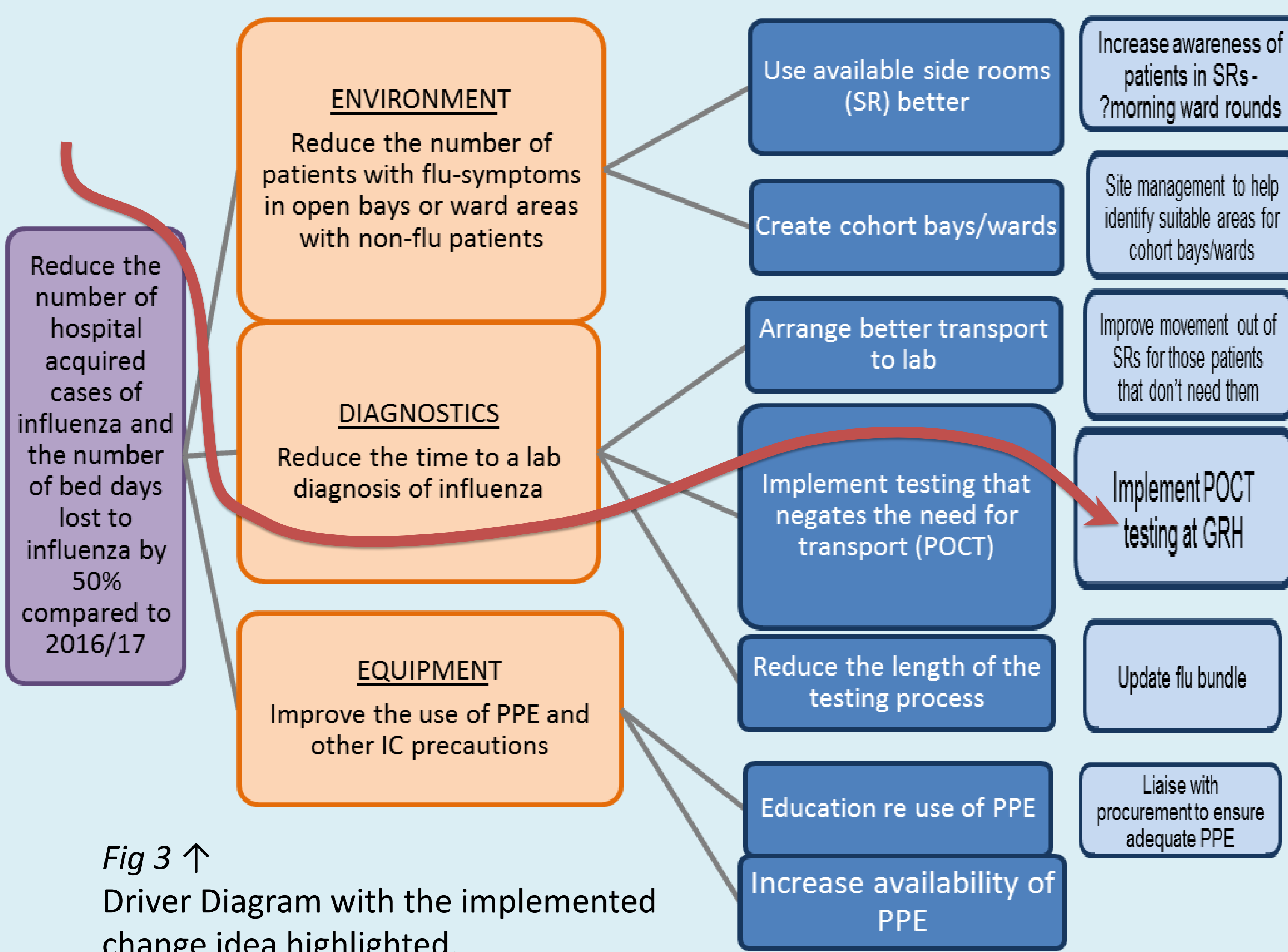
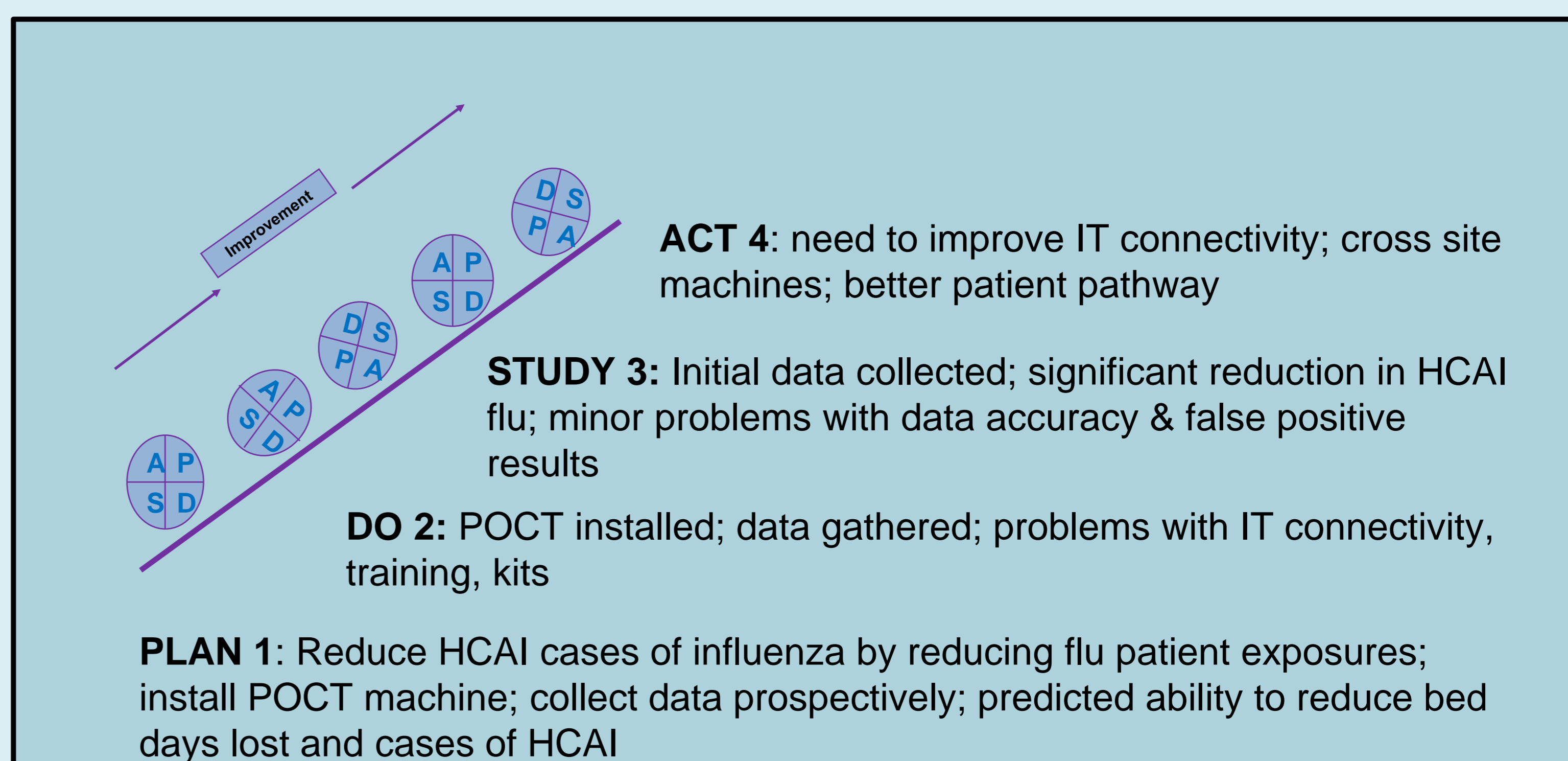
## THE QI TEAM (LEAD – Dr John Boyes)

**Pathology** – Jeff Keast (ChemPath), Jon Lewis (Micro), Gillian Graham (IT support), other CMMs  
**Medicine** – Dr Jeff Meecham-Jones (Resp), Dr Emma Wylie & Chris Custard (Unscheduled Care), ANPs – Lou, Sarah, Jemma, Kate  
**Infection Control** – all the ICNs (and Sue of course!), Dr Rob Jackson  
**Procurement** – Lee Robertson  
**Cepheid** – Alison Tilley & Eric Michel



← Fig 1 Stakeholder diagram: The people and depts. with a vested interest in the project showing estimated interest versus power to enable project to succeed. (Background image: GeneXpert POCT machine © Cepheid)

Fig 2 → PDSA cycle showing overarching approach of the pilot study at GRH.



## RESULTS:

1. Flu diagnosed ≥5days into admission at GRH 2017/18 = 74/543 = **13.9%**  
Total reduction in cases of HCAI influenza = **63.5%** (target 50%)
2. Bed days lost at GRH 2017/18 = 5  
Total reduction in bed days lost due to influenza = **97.2%** (target 50%)

## OTHER BENEFITS:

- Conservative savings of **£228,188.00** for the Trust
- **196** patients prevented from acquiring influenza whilst in hospital
- **12** potential deaths from influenza prevented

1. <https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis>
2. Elaine Ross, Martin Connor, Adele Foster 'No sitting ducks' presentation. The impact of point of care PCR testing on admission to hospital. NHS Dumfries and Galloway
3. Reducing HCAI – what the commissioner needs to know. Sarah Mantle NHEngland presentation ppt. March 2015
4. Progress report on the UK 5 year AMR strategy: 2016. Department of Health and Social Care. November 2017. <https://www.gov.uk/government/publications/progress-report-on-the-uk-5-year-amr-strategy-2016>