

A combined behavioural insights and quality improvement methodology to develop and test resources to support cross-system health and social care workers to reduce Gram-negative bloodstream infections

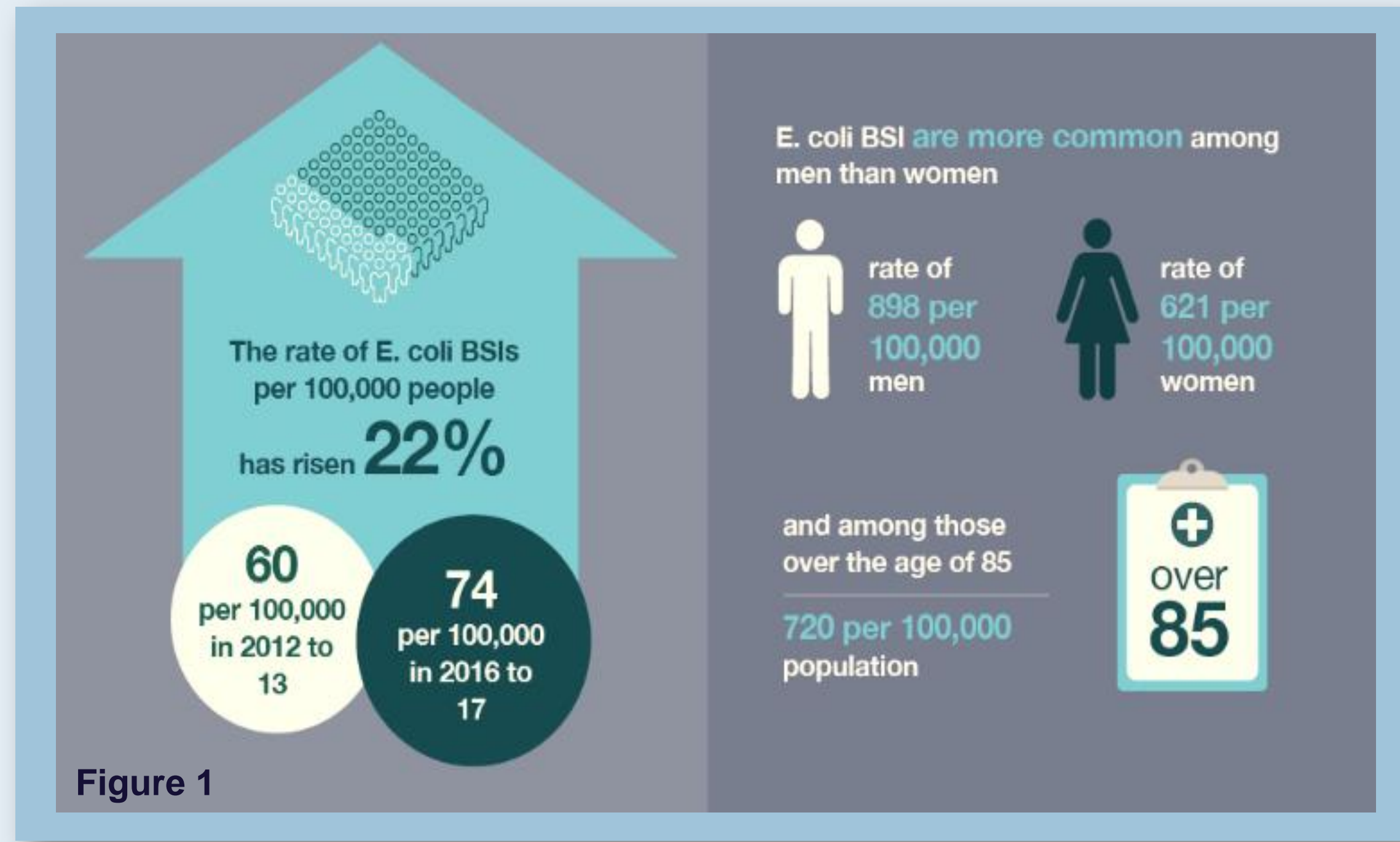
Protecting and improving the nation's health

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INTRODUCTION

Despite efforts to reduce Meticillin Resistant *Staphylococcus aureus* bloodstream infections (BSI) and *Clostridium difficile* infection, Gram-negative BSI (GNBSI) have continued to increase year on year in England (Figure 1). Public Health England (PHE) and NHS Improvement (NHSI) led the development of tools and resources to support health and social care workers to reduce these infections. The approach taken in the development of these tools and resources was unique as we used a combination of behavioural insights, quality improvement and front-line collaboration to ensure the tools and resources were designed around the needs of those who would use them.

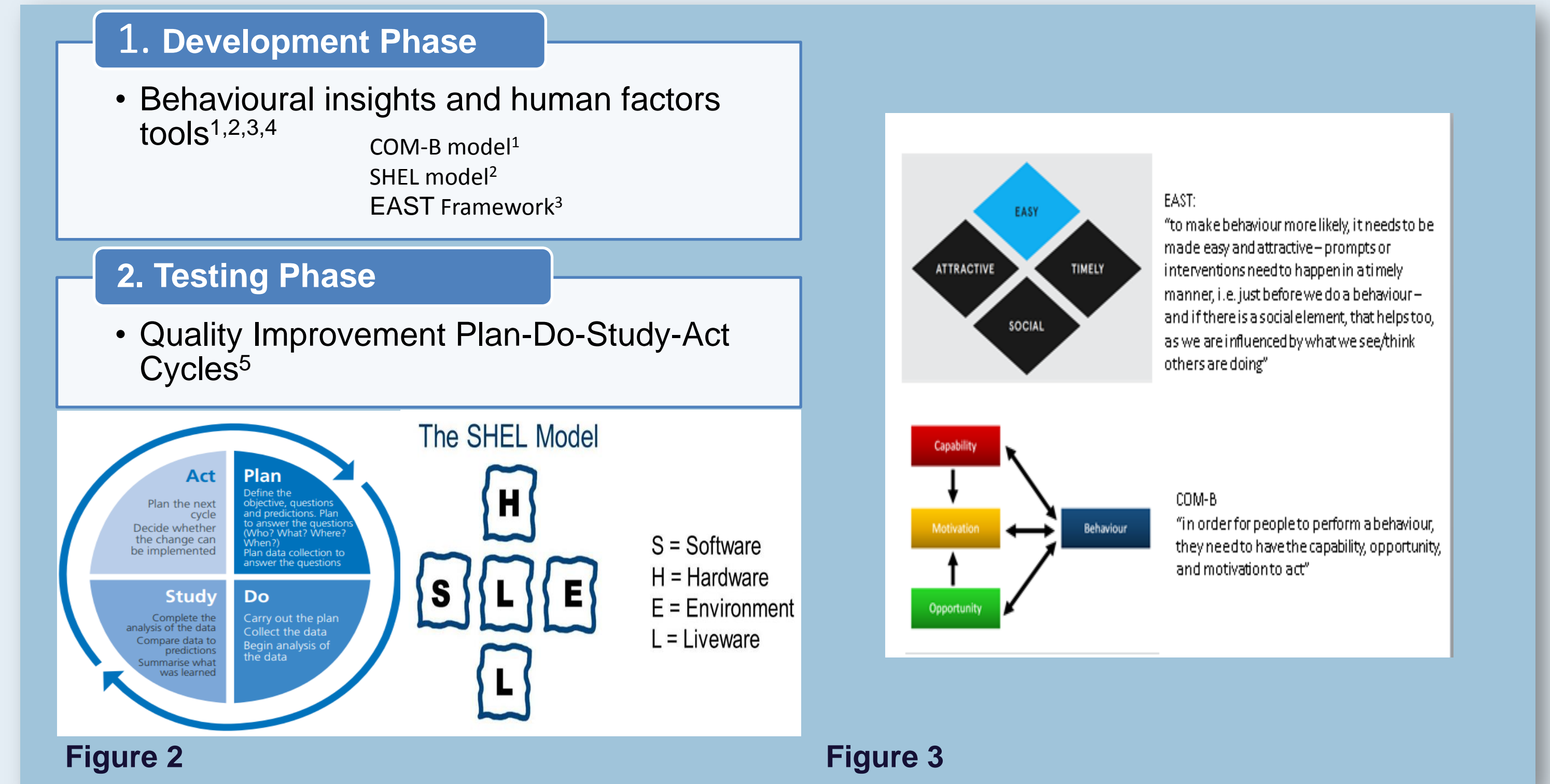


AIM

To work with commissioners and providers of healthcare to collaboratively develop resources to support whole health economies to reduce GNBSI using a combination of behavioural insights and quality improvement methods.

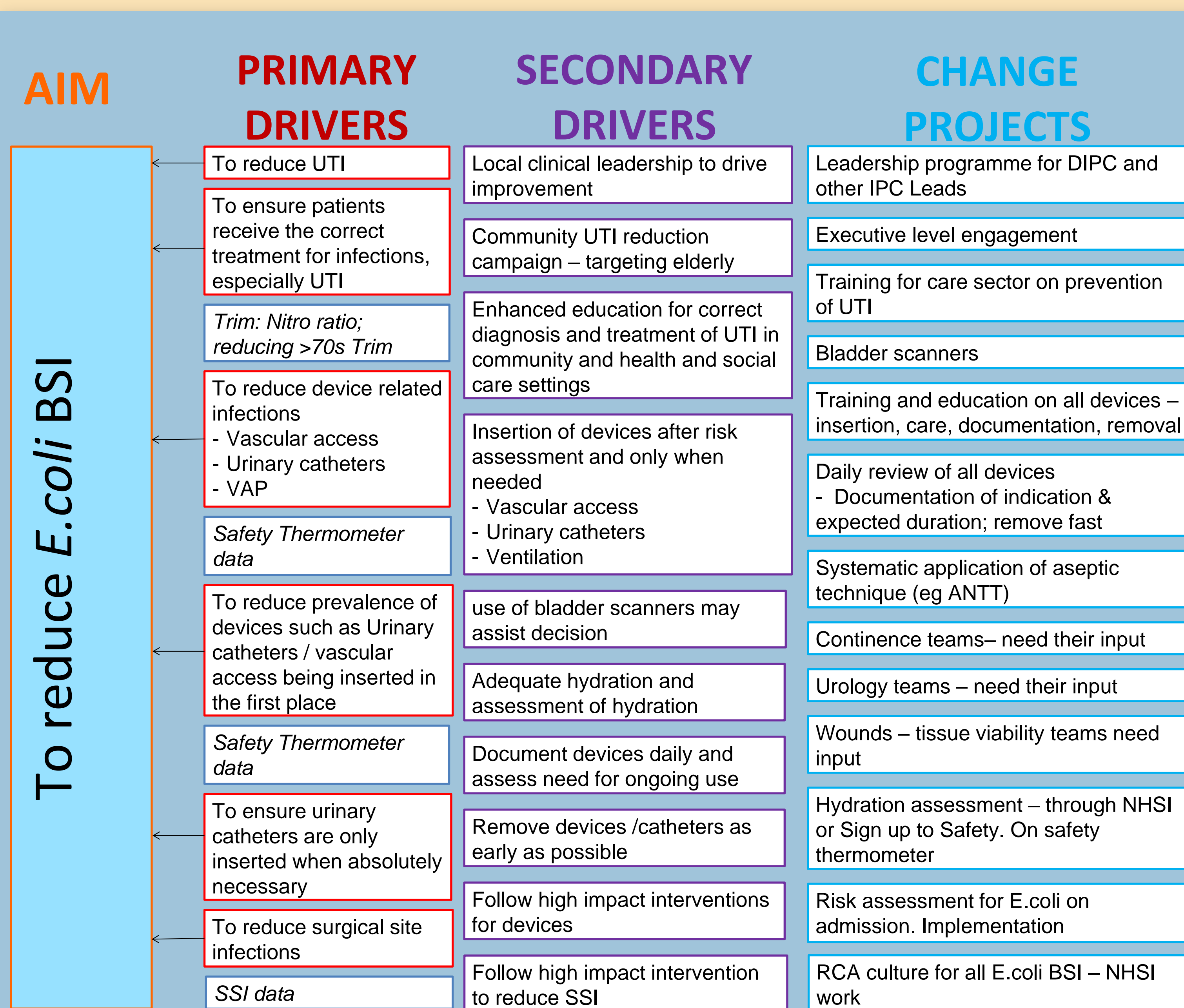
METHODS

There were two phases: 1) development and 2) testing. Both phases used a combination of behavioural insights, human factors, and quality improvement methods to engage stakeholders in co-designing resources (Figure 2 and 3).



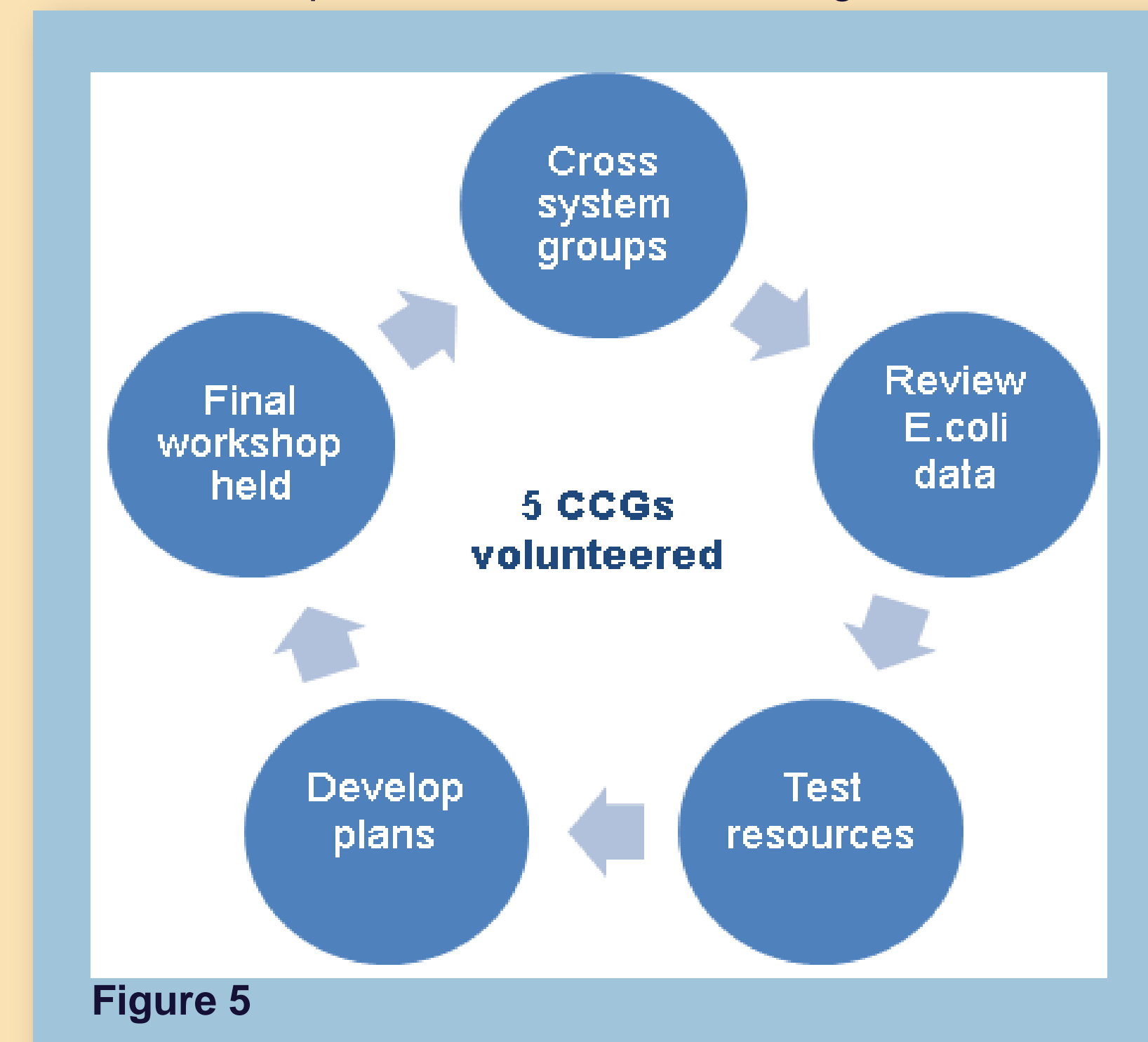
DEVELOPMENT PHASE – BEHAVIOURAL INSIGHTS

Through collaboration and feedback we co-designed resources with stakeholders. Insights from behavioural science were used to aid the co design process. Feedback from stakeholders at a final workshop session was positive and suggested that changes made were useful and acceptable to this group of potential end-users. The Driver Diagram (Figure 4) was a valuable tool to help facilitate an understanding of the underlying primary and secondary drivers in the development of GNBSI.⁶ It also identified change projects that would support efforts in tackling these issues.



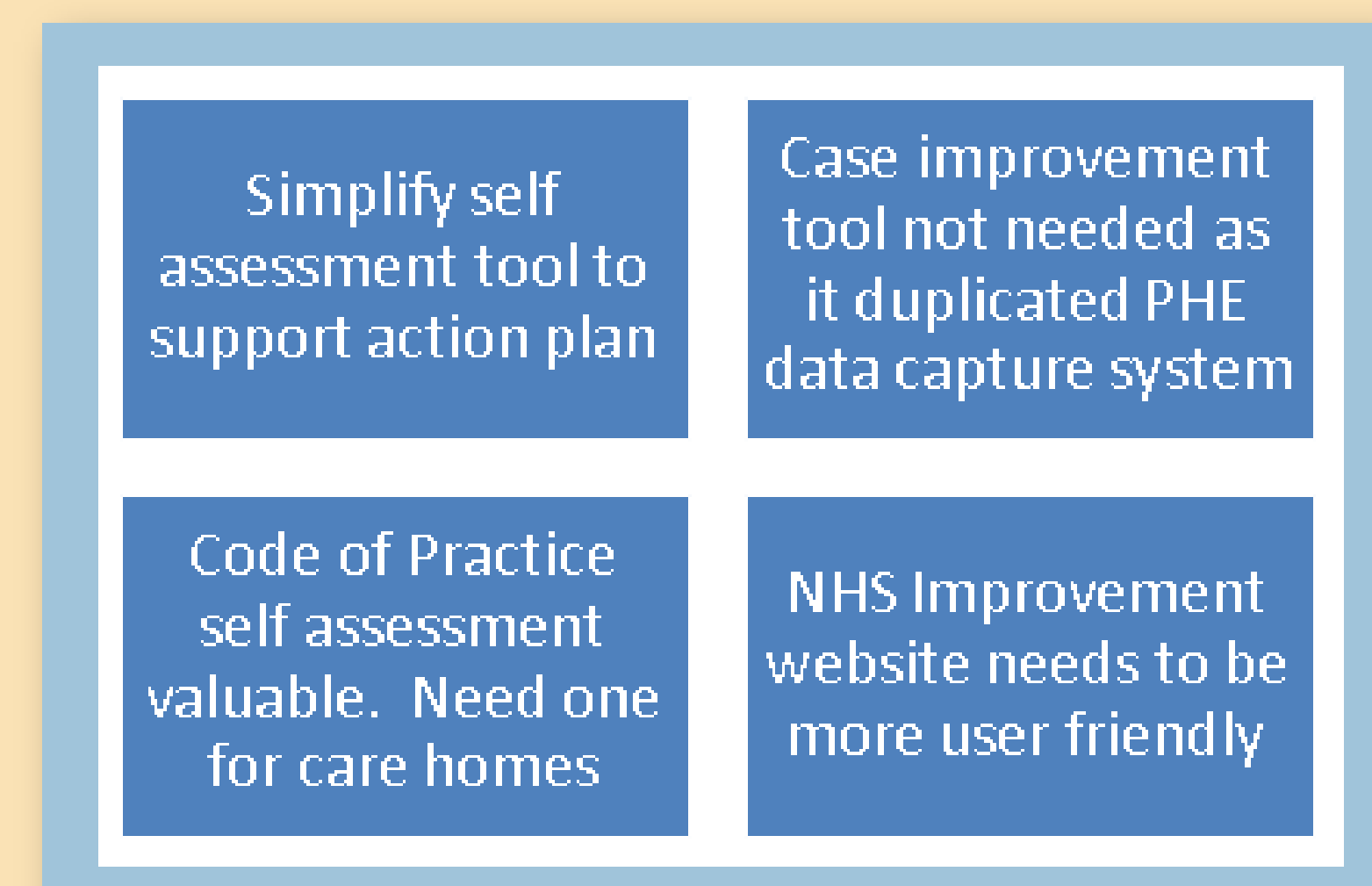
TESTING PHASE (Figure 5)

- 5 CCGs tested the tools at a local level after establishing a cross-system working group.
- PDSA cycles were used and improvements made following feedback.



RESULTS OF THE PLAN-DO-STUDY-ACT (PDSA) CYCLES

Through three cycles of feedback, modifications and improvements led to the four key changes outlined in Figure 6.



STAKEHOLDER ENGAGEMENT

Stakeholder collaboration and engagement was a key element of the development of these tools and included feedback via virtual and face to face stakeholder review.

The final redesign workshop incorporated all feedback and provided further opportunity for input.

DISCUSSION

It is important to ensure resources are co-designed with healthcare workers who will use them so that they are effective and impactful, and to avoid duplication. This was a unique project as it combined the involvement of staff working across the healthcare sector in the development stage, the use of behavioural insights and human factors methodologies to design the resources in a way that influences behaviours and quality improvement methods to test the usefulness in practice. Reducing GNBSI is complex and requires cross-system, multidisciplinary groups meeting and developing plans together at a local level in order to address these complex issues. The methods used in this project were vastly different to the traditional top-down approach. As a result the resources on the NHS Improvement website have been developed and tested by those using them and thus will improve the uptake and usefulness of the resources to support a reduction on GNBSI. The resources are published on the NHSI website and have received 21,723 views since it was launched in May 2017.

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