

Impact Case Study

Achieving Reliable Care for Safety (ARCS) at Doncaster and Bassetlaw Teaching Hospitals

In 2017 the Improvement Academy was approached by two ward sisters from with Doncaster Royal Infirmary who were interested in testing our ARCS intervention to improve the quality of care for their patients. They were facing significant challenges when discharging patients to community beds and wanted to better understand what their patients were actually waiting for and the scale of the issue. The team was so successful at adapting the tool and responding to the delays highlighted by ARCS that they were able to reduce the length of stay across the wards in their specialty by 28%.

Using a bottom-up approach, with Executive support from the Trust, the Improvement Academy supported the Trust to successfully spread ARCS across their Musculoskeletal and Frailty Care Group.



What is ARCS?

ARCS is an evidence-based intervention, based on Lean principles, developed by the Improvement Academy to support the planning and delivery of good quality, safe patient care.

Delivering safe, reliable care requires good operational management, ensuring that the patient gets *what* they need *when* they need it. This is challenging to deliver in current health systems. ‘What the patient needs’ is often dispersed across many documents and professionals’ heads.

Establishing ‘when they need it’ relies on culture. Poor reliability is accepted and delays are normalised based on the capacity of the system to deliver rather than patient need. Not all failures are known, and known failures are not always reported or challenged.

In the absence of hard evidence, teams make assumptions about what patients are waiting for, believing issues not within their gift to address. Likewise, organisations try to improve without fully understanding where the constraints lie in the system.

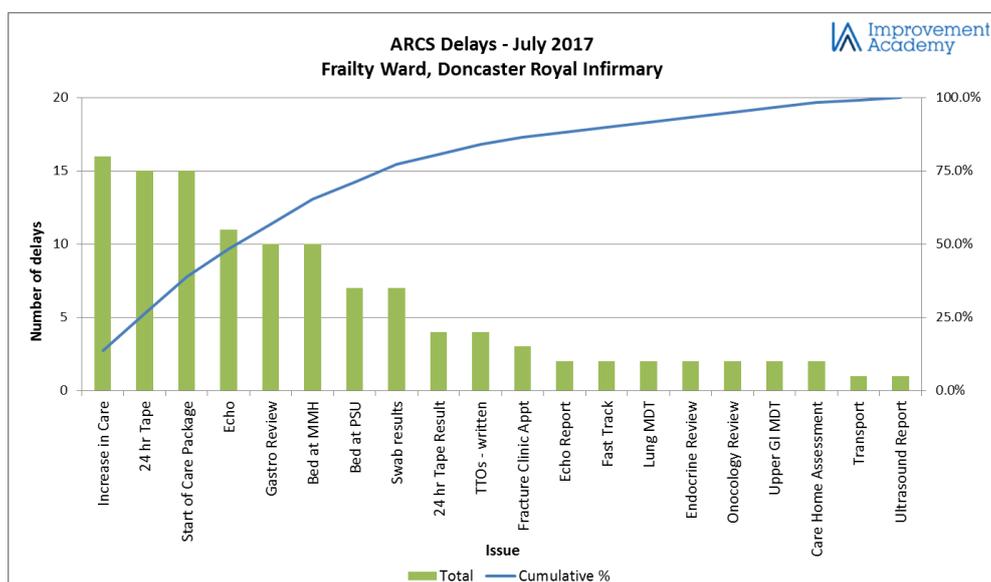
How does ARCS works to improve reliability and safety?

1. ARCS puts the patient and their needs at the heart of delivering quality care. It is an intervention, used by ward teams, to bring all aspects of the patient’s plan in one place, improving the coordination of care across the multidisciplinary team.
2. ARCS is a consistent approach which reduces variability and demonstrates that patients get what they need when they need it. When they don't, delays are highlighted earlier, contributing to a culture where delays are no longer accepted as the norm.
3. ARCS makes the invisible, visible as each and every delay is captured. The myths about where inefficiencies lie are exposed as ARCS builds a visual picture which aids sensitivity to operations at micro, meso and macro levels.
4. Ultimately, through reducing delays, patients spend less time in hospital and are less likely to come to harm through acquiring a hospital acquired infection, having a fall, or suffer deterioration associated with a hospital stay for frail, elderly patients.



Results at Doncaster and Bassetlaw Hospital Trust

ARCS was implemented and used to consistently plan the care of 2610 patients across nine wards in the Musculoskeletal and Frailty Care Group. Each delay experienced has been revealed empowering teams to address local issues.



For example, an orthopaedic team is ensuring patients' bowels are checked promptly post-surgery to avoid constipation and a frailty team is working with patients and relatives to ensure equipment is delivered in time for discharge.

In turn, the organisation is able to quantify, understand and address system wide delays. For example, at meso level, the delays data collated by ARCS was able to quantify the impact on patients of waiting for diagnostic tests and specialty reviews. At system level the data supported the organisation when engaging with their local council to highlight **430 bed days** that had been lost by patients waiting for a bed in a community run unit.

Feedback from those involved in the project

“For me, as a ward manager, this has been one of the best tools I have used. It really helps to coordinate care for our patients on the ward”

Sonja Robson, Ward Manager, Mallard Ward, Doncaster Royal Infirmary

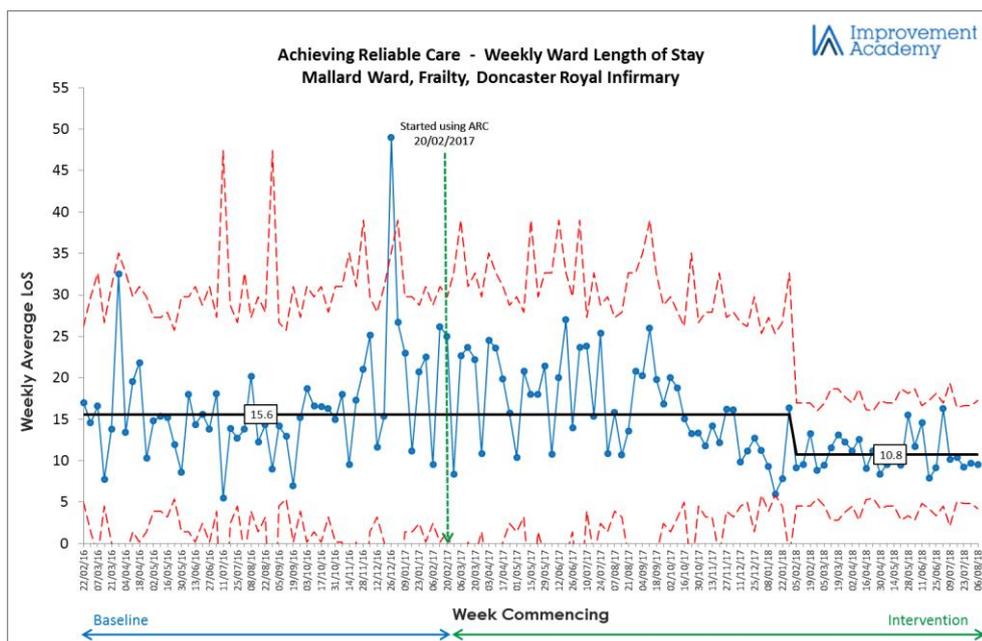
“This tool allows the senior sister and other clinical leads to ensure staff are making every day matter to the patient and that no delays in care, treatment, therapy or investigations are happening at ward level, and for continual improvement techniques to be used to resolve issues quickly.”

Petra Bryan, Head of Quality Improvement & Innovation

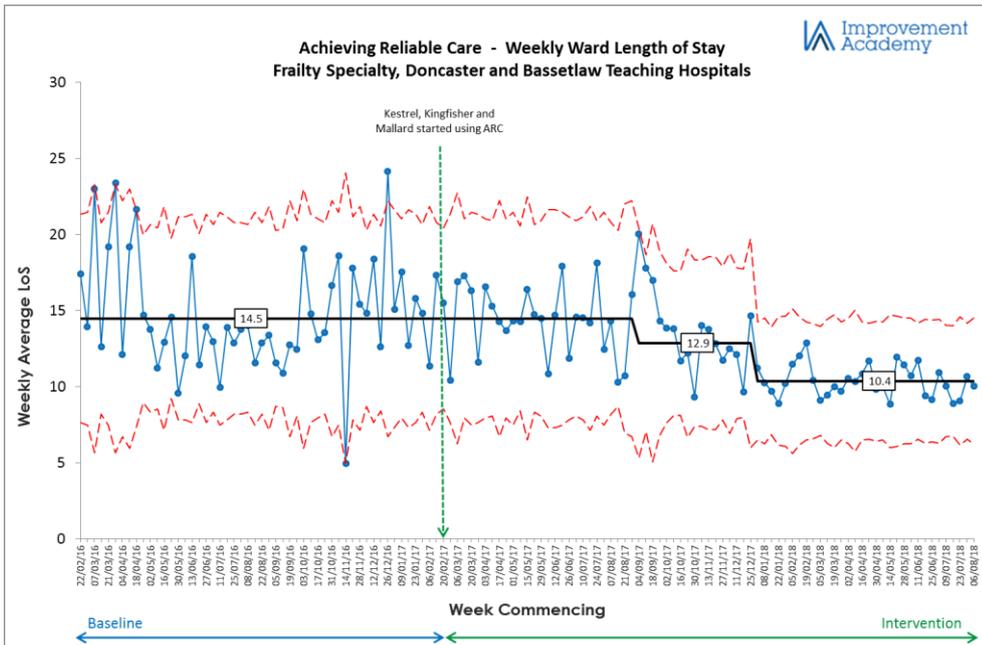
Outcomes

During the project 8 of the 9 wards that implemented ARC achieved a sustained reduction in their length of stay. Average reduction in length of stay across these wards was 24% (range 12% to 31%). This has **saved an estimated 5678 bed days** and allowed the Care Group to **treat an estimated 614 more patients** between March 2017 and August 2018.

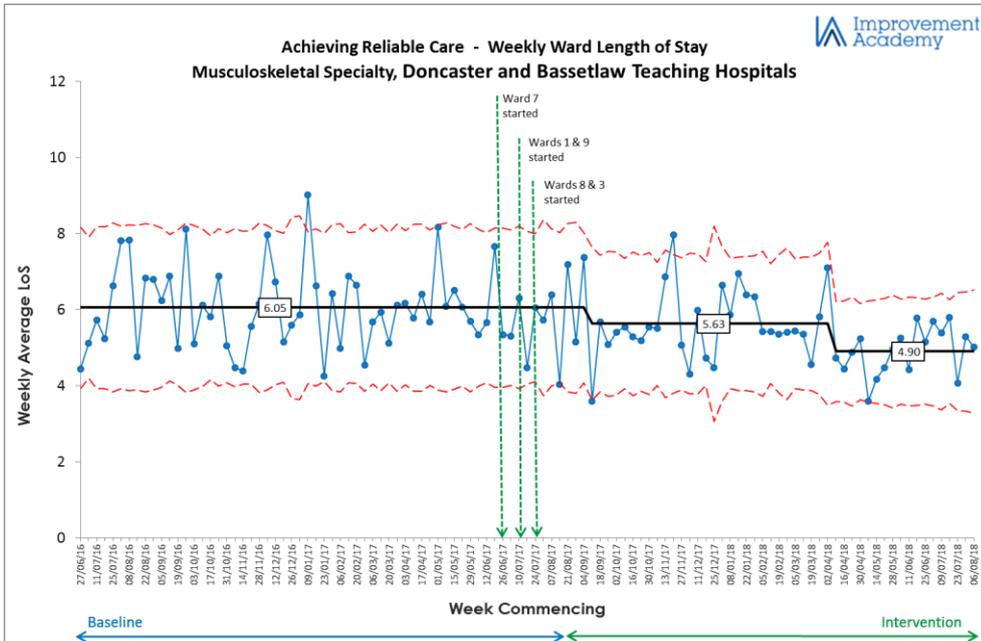
Ward based improvements are illustrated below.



A ward for dementia patients reduced length of stay by 31 % despite increasing difficulties in discharging patients to community care homes.



Across the three wards in the Frailty specialty, length of stay reduced by 28%.



ARCS was implemented across 5 of the 6 Orthopaedic wards (include an elective ward) resulting in a 19% reduction in length of stay.

Further Information

For further information please contact Liz Watson: Liz.Watson2@yhia.nhs.uk