



Healthcare
Improvement
Scotland

SHTG
Advice on health
technologies

Plain Language Summary

Technology-Enabled Theatre Scheduling Systems

SHTG Assessment | December 2023

What is our advice to NHSScotland?

There is very little published research about technology-enabled theatre scheduling systems. This makes it difficult to make evidence-based conclusions about the benefits of using the technology.

We suggest that adopting a national technology-enabled approach to theatre scheduling could standardise the planning and delivery of theatre scheduling services. A national approach would improve communication and data sharing across boards in Scotland.

What are technology-enabled theatre scheduling systems?

Planning which operations take place in theatres each day, and the support patients need before and after, is called theatre scheduling. Technology-enabled theatre scheduling systems automate this process. They have the potential to reduce the number of manual tasks done by administration staff, save on costs and improve the use of hospital theatres, thereby preventing patients waiting so long for an operation.

Why is this important?

A focus of the NHS in Scotland is to improve how services are delivered. This is especially important following the pandemic. One goal is to reduce the number of people waiting for surgery. Using digital technology could improve the planning and scheduling of surgery.

What we did

We carried out a review of the published evidence on the use of technology-enabled theatre scheduling systems.

We collected real world data on the use of the technology in NHS Lothian.

We carried out a survey to ask people, involved in theatre scheduling across Scotland, what they thought about introducing a technology-enabled theatre scheduling system in NHSScotland. We asked 77 people and 22 people responded to the survey.

What we found

There is not much published evidence about the use of technology-enabled scheduling systems in hospitals. There is no published evidence on how people find using these systems, or on the economics or costs related to these systems.

Findings from our survey highlighted that a mix of systems and processes is used across Scotland.

Ten of the respondents (45%) in our survey felt that their current system (mix of paper and electronic spreadsheets) was not working well for them. Some of the highlighted challenges of the current system included the time taken and amount of manual work required.

Most people who responded to the survey thought that a technology-enabled scheduling system would be worthwhile. The possible challenges described included technical issues, data safety, training and behaviours such as anxiety and resistance to change among staff.

Adopting a central system, which can store and share patient data has the potential to improve communication and data sharing across boards in Scotland.

What SHTG considered when developing advice for NHSScotland

SHTG noted that there were differences in the use of technology-enabled systems across Scotland. How much health boards use the technology is likely to depend on a number of factors including the size of board and the degree of IT support available.

Future work

We need to gather more evidence to:

- learn more about technology-enabled theatre scheduling systems in the UK health and social care system
- ask the views of professional experts
- work out any change in cost due to using a central digital system.

This plain language summary has been produced based on SHTG Assessment Technology-Enabled Theatre Scheduling Systems, December 2023