



Healthcare
Improvement
Scotland

SHTG
Advice on health
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Plain Language Summary

A National Radiology Information System for Scotland:
Perceived benefits and constraints to Implementation

SHTG Assessment | October 2022

What is a Radiology Information System?

A Radiology Information System (RIS) is a specialised computer software used by radiology departments to store patient information and access imaging data. A RIS is essential for the management of day-to-day operations as it is responsible for coordinating activities within the department and for tracking a patient's progress after being referred for a scan.

Why is this important?

Currently, each health board is responsible for purchasing and managing their own RIS. Depending on the supplier, each RIS can have different capabilities and functionality. This impacts on how efficiently any single department works and leads to variation in how radiology practices operate across Scotland. This variation can sometimes impact on patient outcomes and results in administrative challenges when patients are treated across multiple boards. It has been proposed that a re-organisation of the RIS landscape is needed to reduce existing levels of variation in order to improve the efficiency and sustainability of radiology services in Scotland.

What we did

We gathered the views of five Scottish experts from the radiology services community about the benefits of changing the current landscape in order to have a functionally national RIS in Scotland. We also gathered views on some of the options available to implement changes. We spoke with RIS managers at 12 health boards to understand the limitations of their RIS and gauge how satisfied they were with existing systems and processes.

We also surveyed clinical users of RIS systems (e.g. radiographers, radiologists) to assess the desirability of additional features and functionality which could potentially be attained by implementing a functionally national RIS.

What we found

We found that there was agreement amongst everyone we spoke to that the existing differences in RIS implementation at the local board level was not ideal and presented challenges to the delivery of radiology services from a national perspective. Some health boards were at a greater disadvantage than others due to the current setup and limitations of their existing RIS.

There was broad support for the concept of a functionally national RIS amongst the experts we interviewed. There were many perceived benefits in relation to achieving efficiency gains, greater standardisation, greater automation, seamless cross-boundary working and easier access to national level data. There was strong support amongst clinical users of the RIS for many potential improvements to requesting functionality, cross-site operations, reporting capabilities and communication features which could be realised.

We identified several routes to achieving a functionally national RIS, each with their own set of pros and cons, which should be considered by decision makers in future discussions.

What is our conclusion?

This assessment documents some of the views and perceptions that exist within the radiology services community regarding the potential reorganisation of the RIS landscape to achieve a functionally national RIS in Scotland.

The document highlights the main limitations of current systems and the perceived benefits associated with a national RIS, as well as the main barriers and constraints which must be addressed. It also identifies several potential routes to achieving a functionally national RIS which should be considered by decision makers.

What next?

This assessment will be shared with the Scottish Radiology Transformation Programme (SRTP) and the Imaging Executive Board (IEB) to inform future discussions with Health Board executives and the Scottish Government.

This plain language summary has been produced based on SHTG Assessment, October 2022