

The effects of interoperable information technology networks on patient safety: a realist synthesis

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Plain English summary

Effects of interoperable information technology networks

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Plain English summary

Many countries, including England, are investing money in information technology networks. The hope is that these networks will help to improve the quality and safety of patient care. Many patients are treated by professionals from different organisations, and each organisation holds its own – partial – records. In some localities in England, professionals cannot access the records held in other organisations. Increasingly, however, localities are implementing digital networks that allow them to access all of their patients' records, wherever they are held. It is not known, however, if the networks actually lead to improvements in treatment and care. We undertook a systematic literature review, using an established method called realist synthesis, to find out whether or not the networks help to improve patient safety.

We conducted literature searches for three problems that the networks might help to solve: (1) co-ordinating services for older people living at home, (2) ensuring that older people who are prescribed medicines by more than one organisation take the right ones and (3) preventing children who are considered as being at risk coming to harm. We found good evidence in all three searches that there are problems with the co-ordination of services. Similarly, we found evidence in all three searches that professionals find networks difficult to use.

Our main search finding was that there is very little evidence about the effects of interoperable networks on patient safety. This means that it is not possible to say whether the networks improve patient safety or, indeed, if they undermine it. NHS managers and professionals should be aware of the lack of evidence and take steps to monitor the effectiveness of their own local projects. There is also a need for research that establishes the cost-effectiveness of interoperable networks.

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