Impact of computer-aided detection prompts on the sensitivity and specificity of screening mammography
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Record Status
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Citation

Authors' objectives
The objective of this study was to determine the value of computer-aided detection (CAD) for breast cancer screening. The impact of the R2 ImageChecker (R) on the sensitivity and specificity of radiologists and film-reading radiographers was assessed in two experiments, referred to here as study 1 and study 2, and the resulting data were used in an economic evaluation.

Authors' conclusions
No significant improvement in film readers sensitivity or specificity or gain in cost-effectiveness was established in either study. This may be due to the systems low specificity, its relatively poor sensitivity for subtle cancers or the fact the prompts cannot serve as aids to decision-making. Readers may have been better able to make use of the prompts after becoming more accustomed to working with them. Prompts may have an impact in routine use that is not detectable in an experimental setting. Although the case for CAD as an element of the NHS Breast Screening Programme is not made here, further research is required. Evaluations of new CAD tools in routine use are underway and their results should be given careful attention.

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