

## **Impact of a computerized clinical decision support system on reducing inappropriate antimicrobial use: a randomized controlled trial.**

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McGregor JC, Weekes E, Forrest GN, et al. Impact of a computerized clinical decision support system on reducing inappropriate antimicrobial use: a randomized controlled trial. *J Am Med Inform Assoc.* 2006;13(4):378-84.

<https://psnet.ahrq.gov/issue/impact-computerized-clinical-decision-support-system-reducing-inappropriate-antimicrobial-use>

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[Clinical decision support systems](#) (CDSS) are being increasingly incorporated into electronic medical record systems. In this quasi-randomized study conducted at an academic medical center, the CDSS combined laboratory and pharmacy data to provide guidance on appropriate antimicrobial therapy to the hospital's antibiotic management team. The antibiotic management team made significantly more interventions on patients randomized to the intervention arm, resulting in cost savings for the hospital. The CDSS was also more efficient, saving the team nearly 1 hour per day. A prior [systematic review](#) revealed that CDSS have been broadly effective at changing provider behavior, but their effect on patient outcomes remains to be determined.