

## Vital signs: improving antibiotic use among hospitalized patients.

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<https://psnet.ahrq.gov/issue/vital-signs-improving-antibiotic-use-among-hospitalized-patients>

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Antibiotics are among the most remarkable life-saving advances of modern medicine. However, when used incorrectly these medications pose serious risks for patients due to [adverse effects](#) and the potential to cause [complicated infections](#), including those resistant to multiple antibiotics. This national database study found that more than half of all patients discharged from a hospital in 2010 received antibiotics during their stay. Many of these antibiotics were deemed to be unnecessary, and there was wide variation seen in antibiotic usage across hospital wards. A model accounting for both direct and indirect effects of antibiotics predicted that decreasing hospitalized patients' exposure to broad-spectrum antibiotics by 30% would lead to a 26% reduction in [Clostridium difficile](#) infection. The CDC recommends that all hospitals implement [antibiotic stewardship](#) programs, and this article provides core elements to guide these efforts. An AHRQ WebM&M [commentary](#) describes inappropriate antibiotic usage that resulted in a patient death. Dr. Alison Holmes spoke about infection prevention and antimicrobial stewardship in a recent AHRQ WebM&M [interview](#).