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## Simple Digital Messaging System Can Help Patients Prevent SSIs

A New *Journal of the American College of Surgeons* [study](#) reports on a simple digital messaging system that significantly increases patient compliance with a preadmission showering protocol, an important component of surgical site infection prevention.

The use of electronic reminders such as text messages, e-mails or voicemails is highly effective at getting surgical patients to adhere to a preadmission antiseptic showering using chlorhexidine gluconate (CHG) regimen known to help reduce risk of surgical site infections (SSIs).

Electronic alerts were sent as voicemails, text messages or e-mails, with text messages being the most popular method (80 percent) among volunteers. Volunteers were randomized to either taking two (Group A) or three showers (Group B). Group A1 and group B1 was prompted to shower by an electronic alert reminder, while Groups A2 and B2 did not receive an electronic prompt.

The participants were instructed to return to the laboratory within three hours after their last shower to have their skin-surface concentrations of CHG analyzed at five separate sites on their bodies. Researchers measured compliance by looking at skin-surface concentrations of CHG in all 80 individuals who were assigned to take the antiseptic showers.

The analysis showed that CHG skin-surface concentrations were significantly higher in groups A1 and B1 (patients who received alerts) compared with groups A2 and B2 (patients who did not get reminders). In a comparative analysis between groups A1 and A2, there was a 66 percent reduction in the composite mean concentration of CHG on the skin surface in patients who were not alerted to shower (group A2) compared with those who received electronic reminders (group A1).

Furthermore, in the groups that showered three times, there was a 67 percent reduction in the composite mean skin-surface concentration of CHG in patients who were not alerted before showering (group B2) compared with those who received electronic alerts (group B1).

The study concludes that the patients who did not receive digital communications reminding them to shower were significantly less compliant with preadmission orders compared with those who received the electronic reminders. These study findings have great ramifications not only for this preadmission strategy and its potential impact on SSI risk reduction, but also for other preadmission orders.

Ultimately, the researchers are striving to develop a standardized process wherein surgical patients take preadmission showers in a methodical way, resulting in an overall improvement in outcomes. Moving forward, additional research is needed to determine if electronic alert reminders and better compliance translate into lower SSI rates.

## **Save the Date**

Please note: While the information below is a list of planned programs for 2014, at this time not all programs can be accessed online for registration.

Sept. 18 Adverse Drug Events

Sept. 22 Annual Leadership Summit

Sept. 29 Geriatric Emergency Department Guidelines

[Click here to register.](#)

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