EMR Prompt Improves Contact for STI Results

BY SUSAN LONDON

From the annual meeting of the Pediatric Academic Societies

VANCOUVER, B.C. — A simple prompt to obtain a confidential phone number from all teen girls tested for sexually transmitted infections in the emergency department increases the likelihood that they will be contacted in a timely manner if their results are positive, data showed.

In a study reported at the meeting, the percentage of female adolescents with positive results who were contacted within a week rose from 45% to 65% when the prompt was added to the electronic medical record (EMR).

The findings suggest that the intervention is an effective means of improv-

Major Finding: Before providers were prompted to obtain a confidential phone number, only 45% of female adolescents who were seen in the emergency department and had positive STI test results were contacted within a week, compared with 65% afterward.

Data Source: A longitudinal pre- and postintervention study involving 238 female adolescents aged 14-21 years seen in the emergency department who had positive STI test results.

Disclosures: None was reported.

ing communication of sexually transmitted infection (STI) results in this population, said lead investigator Dr. Jennifer L. Reed of the division of emergency medicine at Cincinnati Children's Hospital Medical Center. "Ultimately, we hope to develop a change packet that other institutions may use to implement a similar process."

By way of background, Dr. Reed noted that rates of STIs are exceptionally high in the medical center's emergency department (ED): Up to 25% of female adolescents tested there are positive for at least one infection, compared with 4% nationally.

Previous work in this population has shown that those who believe they have positive STI results are more likely to abstain from sexual activity and notify their partners, whereas those who are given antibiotics but believe their test results are negative do not change their behavior.

"Therefore, improving contact of patients with STIs from the pediatric emergency department may address the larger community STI epidemic," said Dr. Reed. The investigators tested a sequential, six-component intervention implemented over a 1-year period in the ED. Staff members were sent e-mail reminders to document a confidential phone number at the time of STI testing. A field was created in the EMR for such documentation, cards were distributed to adolescents encouraging

them to provide this phone number, and flyers were posted in staff and patient restrooms. Paramedics and nursing staff were educated, and finally, the EMR was modified so that it prompted providers to obtain the phone number whenever they ordered a pelvic exam setup.

The last component "is actually an order," Dr. Reed explained in a poster symposium.

"The nurses have to click off that they have completed the order," and it cannot be ignored or overridden.

In this study of female patients aged 14-21 years who tested positive for STIs, with 120 seen in the preintervention period and 118 seen in the postintervention period, implementing the initial five components did not alter rates of documentation of confidential phone numbers from the preintervention level, Dr. Reed

reported. However, adding the EMR prompt did.

The percentage of female adolescents for whom a confidential phone number was recorded increased from 24% before the EMR prompt to 61% afterward (*P* less than .01), and the percentage who were contacted within a week increased from 45% to 65% (*P* less than .01).

"Implementing a systematic change, the EMR prompt, provided the greatest im-



Family members are the primary source of pertussis in infants when the source can be identified¹

• Despite CDC^a recommendations, only 2% of adults reported receiving Tdap^b vaccine from 2005 to 2007^{2,3}

References: 1. Wendelboe AM, Njamkepo E, Bourillon A, et al. Transmission of Bordetella pertussis to young infants. Pediatr Infect Dis J. 2007;26:293-299. 2. Centers for Disease Control and Prevention (CDC) Preventing Itelanus, dipitheria, and pertussis among adults: use of Itelanus toxoid, reduced dipitheria toxoid and acellular pertussis vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP and recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MMWR: 2006;55(RR-17):1-37. 3. Euler GL, Lu P, Singleton JA. Vaccination coverage among U.S. adults National Immunization Survey – Adult; 2007. http://www.cdc.gov/vaccines/stats-surv/nis/downloads/nis-adult-summer-2007.pdf. Accessed March 5, 2010.

pact and the most sustainable results in contacting these adolescents," said Dr. Reed

If the intervention proves to be sustainable without grant funding, it can be disseminated to other institutions—provided they have sufficiently flexible EMRs, she noted.

Conversations with some of the adolescents studied have provided valuable insights about using this approach for contact and possibly more reliable ways of reaching them, according to Dr. Reed.

The majority gave their cell phone

number as their confidential number, she explained.

"We learned ... that if you leave or try to leave messages for them, they will not check their messages because it costs minutes," she said.

So it is important to actually speak with them.

In addition, early exploration of text messaging is suggesting that it may be a promising alternative in this population, possibly in part because text messages are still displayed even when a cell phone is out of minutes.

Study May Motivate Change in EDs

The most valuable thing is that the investigators describe an addition to their standard practice that made it possible to provide better care.

Some emergency departments may already be getting confidential phone numbers. Others may not have a routine way to get this information.

Showing EDs the impact of doing this will help them get their facilities to either change their electronic records or put some other practice in place such as getting the phone number at triage. This will allow them to improve the quality of their care and provide better patient outcomes.

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^a CDC = Centers for Disease Control and Prevention. ^b Tdap = Tetanus, diphtheria, and acellular pertussis. ^c CPT = Current Procedural Terminology is a registered trademark of the American Medical Association.

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