

# The Challenge of Reaching Adolescents to Promote Health Care

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THE CHALLENGE OF providing appropriate preventive health services to adolescents is one familiar to all pediatricians who care for this population. Adolescents have fewer recommended preventive health medical visits than young children and may not have regular contact with the health care system. In recent years, new adolescent vaccines have been developed and recommended to provide protection against pertussis (Tdap), meningococcal meningitis (MCV4), and human papillomavirus (HPV), increasing the need for appropriate preventive health care. In this issue of the journal,<sup>1</sup> Peter Szilagyi and colleagues describe a large randomized controlled trial designed to test two interventions to increase both immunization rates and preventive visits in a population of low-income adolescents.

Using either reminder–recall postcards or automated telephone calls in a population of over 7000 low-income adolescents, the authors were able to demonstrate increases in both receipt of immunizations and preventive visits of between 5% and 8%, at a cost of approximately \$16 to \$18 per year per adolescent. Importantly, as more children are now enrolled in managed care plans, the authors conducted their reminder–recall activities centrally through a managed care organization (MCO) in upstate New York. Their results provide evidence for the efficacy of centralized reminder–recall for both adolescent immunizations and preventive health visits.

However, this study also highlights ongoing challenges. Phone numbers in the managed care databases were lacking for 41% of subjects. Missed opportunities to vaccinate at medical visits approached 90%. Most importantly, up-to-date immunization rates for the 3 adolescent vaccines were 57% in the most successful intervention arm, and only 17% to 21% of those subjects not vaccinated with Tdap, MCV4, and HPV at study onset were up to date by study's end. How do we improve the receipt of preventive care and immunizations by adolescents?

From a practice perspective, efforts should aim to decrease missed opportunities to immunize when adolescents do present for health care. These efforts include: 1) use of an electronic immunization registry (MCOs can help with registry access and maintenance) to both document immunizations and to provide prompts at every visit, whether for well-child care or not; and 2) standing

orders that allow a medical assistant or nurse to safely immunize children without requiring a physician to actively order a vaccine. One wonders what immunization rates in this study would have been given fewer missed opportunities.

From a health systems level, though, we need a new paradigm to interface with our patients and their families. Paper and landline telephones, such as used in this study, are used less and less often by adolescents. Instead, they are fluent in texting and social media. The authors point out that there are limited data on the effectiveness of texting for health prompts in pediatrics,<sup>2,3</sup> and that physician–family communication via texting has its own challenges, such as requirements to opt in to receive text messages.<sup>4</sup> Nonetheless, there is increasing evidence in the adult literature about the potential of texting to communicate with patients.<sup>5</sup> There are also suggestions that text-capable mobile telephones are increasingly available in all sociodemographic segments of society. There are a number of practice, system, and policy solutions to move our patient communication into the 21st century.

First, practices and MCOs need to work collaboratively to maintain accurate contact information for patients and families. This contact information should not be restricted to street addresses and wired telephone lines, but should include cell phones (which were in all likelihood included in this study, though the extent could not be defined) and, with permission, e-mail addresses. One could envision a practice “friending” a patient on social media to remind them of needed preventive services, although this is a brave new world that requires much careful thought before implementation to protect both the practice and the patient. Ideally, and with parental permission, outreach efforts would target both adolescents and their parents.

Second, for health information that is considered nonsensitive, such as immunization status or the need for a physical examination (and in contrast to information about sexually transmitted infections, HIV status, substance abuse, and mental health), there should be no need for a family to opt in to give permission to receive text reminders. Rather, there should be an opt-out option should families not wish to receive texts.

Third, the issue of texting cost to families needs to be addressed, especially for families that have limited data

telephone contracts or who pay by the text. Although a typical reminder text costs only a few cents, this could be annoying to families and paradoxically make them less likely to receive care. One way to address this systematically would be to have telephone companies agree to suppress charges for health-related messages between practices or MCOs and patients. Or, as technology improves, call plans with unlimited texting may become the norm.

The article by Szilagyi et al<sup>1</sup> demonstrates that traditional paper and telephone reminder–recall activities do work modestly to increase both immunization rates and preventive care in an adolescent population, and that these activities can successfully be managed on behalf of many practices by a managed care organization. However, this study should also motivate us to explore the range of options available to communicate with our patients and their families, and to begin to develop the same evidence

base for new communication modalities that we have for more traditional forms of communication.

## REFERENCES

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