

## Clinician-Patient E-mail Communication: Challenges for Reimbursement

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I inadvertently entered the world of electronic communication with patients in my former practice when a staff member suggested putting some of my business cards in the exam rooms. I was not aware that she had used the version with my e-mail address on them until I started receiving unsolicited e-mail from patients. Most of the patients who proactively chose to communicate with me via e-mail did so appropriately—they asked general questions, needed prescription refills, and/or had non-urgent problems. I removed the business cards before the volume of users got “out-of-hand,” and the experiment came to a natural end when I left the practice for a job at Blue Cross and Blue Shield of North Carolina as Medical Director for the State Health Plan.

### Why Should Electronic Consultations Be Reimbursed?

The core question regarding the issue of electronic clinician-patient communication that both patients and insurers should answer is, “Why should I start paying for something I used to get for free?” Electronic clinician-patient communication offers a number of advantages. For the patient, the advantages might be enhanced convenience (e.g., avoiding a long wait on the telephone, multiple phone transfers, uncertainty as to whether the prescription was called into the pharmacy, and/or making unnecessary trips to the clinician). I certainly would be willing to pay a fee for the convenience, and I suspect I am not unique in this regard.

A different set of reasons might prompt insurers to consider reimbursing clinicians for this service. Payers are more likely to value innovations that reduce healthcare costs, improve the quality of care for members with chronic disease (regardless of whether or not costs are reduced or stable), and improve member satisfaction for the service offered.

### Technology Links Patients, Providers, Payers, and Pharmacies

Research has found that many patients value these services and are willing to pay at least a nominal amount of money for their availability.<sup>1,2</sup> Thus far, at least one study explores the value proposition for electronic clinician-patient communication services from the insurers perspective.<sup>3</sup> This study involves a product called RelayHealth<sup>®</sup> and was conducted by Stanford University and the University of California–Berkeley.

RelayHealth<sup>®</sup> is a secure, Web-based, Health Insurance Portability and Accountability Act (HIPAA)-ready platform that can facilitate electronic clinician-patient interaction. RelayHealth<sup>®</sup> includes an algorithm-driven clinical interview process called a webVisit<sup>®</sup>, which facilitates electronic communication between patients, healthcare professionals, payers, and

pharmacies. Through this type of program, patients can consult their clinicians with specific questions or requests, and clinicians can respond with the assistance of medically-reviewed, guideline-based content and can even attach patient education materials from an online library. Other patient-oriented features include prescription renewal, appointment scheduling, obtaining lab results or referrals, and access to self-care information. Possibilities for

clinicians include: a program that coordinates referrals, triages patient messages, broadcasts preventive reminders, and sends appointment reminders and lab results. The program is also able to determine the patient’s insurance status and can submit claims to participating insurers.

Stanford University and the University of California–Berkeley performed a pilot study with RelayHealth<sup>®</sup>, Blue Shield of California, ConnectiCare, and several large self-insured employers affiliated with Pacific Business Group on Health (using Aetna as a third party administrator).<sup>3</sup> The pilot was designed to answer the following questions:

*“Why should I start paying for something I used to get for free?”*

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- What is the impact of the availability of RelayHealth® webVisit® services on healthcare utilization and costs?
- How do patients respond to the opportunity to communicate with their clinicians online in this manner?
- How do clinicians respond to the opportunity to deliver non-urgent care online using these tools?

The program was conducted between April 2001 and May 2002. Physicians were reimbursed \$25 per webVisit® (other communication was not reimbursed), and the patients had copayments of \$0-\$10 per webVisit® consultation. Two hundred eighty-two physicians and 3,688 patients agreed to participate in the study. A control group matched for baseline demographic characteristics, including access to the Internet, was selected. Analysis of available claims information found that office visit costs decreased by \$1.92 per patient per month, and total medical costs decreased by \$3.69 per patient per month. The cost of reimbursement for webVisits® averaged \$0.31 per member per month, and the return on investment was greater than five-to-one for the insurers. Patients and physicians were very satisfied with the program, and most (75%) agreed to continue using the service after the pilot program ended. Physicians indicated that reimbursement was critical in motivating them to use the program.

Based on the findings of this program, Blue Shield of California expanded the program to all of their Preferred Provider Organization (PPO) and Health Maintenance Organization (HMO) physicians. The medical director of the University of California–Davis Health System, a participant in the pilot program, indicated that in-person clinical productivity per day and per visit went up significantly. He postulated that this was likely due to the movement of non-urgent medical issues to the webVisit® format, which frees time for more acute office visits. Also in response to these findings, Blue Cross and Blue Shield of Massachusetts announced a similar pilot program using RelayHealth® in March, 2003.<sup>4</sup> The American Medical Association (AMA) and the American College of Physicians have issued position papers urging the Center for Medicare and Medicaid Services (CMS) to begin reimbursing physicians for these types of services for Medicare patients as well.<sup>5</sup>

In their position paper on the issue of reimbursement for e-visits, the American College of Physicians listed examples of reimbursable and non-reimbursable e-mail services.<sup>5</sup> Non-reimbursable e-mail services typically require no more than two minutes of physician time and could often be delegated to non-physician staff after instruction. Examples include reporting normal test results, e-mail with other clinicians in reference to patients, and renewing prescriptions (services that are typically not reimbursed today). Reimbursable services involve such things as a new diagnosis with treatment that does not involve a subsequent office visit, follow-up of chronic diseases that involve changes in medication, treating relapses of previously diagnosed conditions that require significant physician judgment, reporting lab tests that require changes in management, extended family counseling, review of computer-transmitted patient medical data, and answering questions about preventive health or general

health questions. Without the electronic format, such services would typically involve a face-to-face visit, and thus are reimbursable today.

General recommendations for the appropriate use of electronic communication with patients are available from the AMA,<sup>6</sup> and other organizations. These include the following (not a comprehensive list):

- Develop a patient-clinician agreement for informed consent in using e-mail; specify appropriate use of e-mail versus phone or office consultation; ensure security mechanisms are in place; and have hold-harmless understandings for technical failure of the system.
- Install general security measures (e.g., password-protected screen savers, rules against sharing e-mail addresses with family members or outside third parties, etc.). Many recommend encrypting messages and using authentication or password protection methods for clinicians and patients.
- Use e-mail to communicate with established patients only.
- Include copies of all messages in the patient chart.
- Establish turn-around time expectations; provide coverage when the primary clinician is out of the office; provide guidelines on the length of messages and what constitutes appropriate content; use auto-reply features to assure that messages are received; use the patient's identification numbers in the body of e-mail messages; have standard block text at the end of the e-mail regarding unintentional disclosure, and signature, phone and address of the sender, etc.

Several vendors offer products that meet such requirements. Examples include Medem's iHealthRecord™, which is free to clinicians who do not charge their patients for the service, HealthyEmail®, and MyDocOnline™.<sup>7</sup>

## Summary

Clinicians are rapidly gaining experience with online clinician-patient consultation, and more tools are becoming available to support these efforts. In addition, we now have evidence that using electronic communication is cost-effective to payers and appealing to patients and providers. At present, there appear to be few barriers to the adoption of these solutions for practices that use other online services. Security concerns can easily be overcome by using programs described in this commentary. Larger and longer studies that evaluate the benefits and cost savings in more detail may help convince other payers and providers of the utility of the Web-based programs. More studies are needed to understand the effect of clinician-patient electronic communication on the costs of caring for chronic illness. When these solutions also include support tools, such as electronic prescribing, which could improve patient safety and quality of care, they should be encouraged.

In their article entitled, "Electrons in Flight—Email between Doctors and Patients,"<sup>8</sup> Delbanco and Sands postulate that the future of e-communication in medicine will be integrated with a patient-controlled health record and will include secure

synchronous and asynchronous communication, video conferencing and messaging, instant transcription into the written record, full-patient access to the record, translation into different languages, connectivity to multiple data sources, incorporation of multi-media educational materials. It will also allow data from home-based diagnostic technology to be sent to clinicians. “Electronic communication will move medicine inexorably toward such transparency, enabling doctors and patients to share knowledge, responsibility, and decision-making more equally. We need to explore rapidly how this change will affect the quality of care for patients and the quality of life for doctors.”

The widespread dependence on Internet-based electronic communication to support a variety of commercial, educational, and entertainment needs and interests offers us an opportunity to develop innovative approaches to some long-standing problems—assuring the accessibility of clinicians to their patients and the effectiveness and timeliness of communication between them. It is exciting that we now have well-documented examples of how these new technologies can be used to enhance the quality of primary care practice in both large and small practice organizations. **NCMedJ**

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