

# Medicare's Next Voyage: Encouraging Physicians To Adopt Health Information Technology

Policymakers seem to agree on the necessity of HIT in Medicare but need to commit the resources needed to effect change.

**by Sheera Rosenfeld, Cathy Bernasek, and Dan Mendelson**

**ABSTRACT:** Although there is growing consensus that health information technology (HIT) will be critical to improving health care quality and reducing costs, physicians' investments in technology remain limited. As the largest single U.S. purchaser of health care services, Medicare has the power to promote physician adoption of HIT. The Centers for Medicare and Medicaid Services should clarify its technology objectives, engage the physician community, shape the development of standards and technology certification criteria, and adopt concrete payment systems to promote adoption of meaningful technology that furthers the interests of Medicare beneficiaries.

**W**ITH FORTY-ONE MILLION BENEFICIARIES and more than \$290 billion in expenditures, Medicare is the largest single purchaser of health care services in the United States.<sup>1</sup> In this role, Medicare often serves as a leader in shaping the U.S. health care system. For example, its fee-for-service (FFS) payment methodologies for medical services are used by the majority of U.S. public and private payers. However, Medicare lags behind the private sector in other areas. For example, although Medicare recently launched a limited demonstration program in chronic disease management, many private health plans have had active disease management programs up and running for years.<sup>2</sup>

Until recently Medicare has also been passive in the area of health information technology (HIT).<sup>3</sup> With close to 700,000 physicians participating in 2004, Medicare has a unique opportunity to create an HIT incentive and financing program that will directly influence physicians' HIT uptake.<sup>4</sup> To date, Medicare has not paid physicians or institutional providers directly—beyond pilot projects—for HIT adoption. Meanwhile, private-sector health plans, delivery systems, and pro-

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*The authors are all associated with Avalere Health in Washington, DC. Sheera Rosenfeld (srosenfeld@avalerehealth.net) is manager, Health Information Technology; Cathy Bernasek is director, Strategic Initiatives; and Dan Mendelson is president.*

vider groups—including Taconic IPA, Partners HealthCare, Blue Shield of California, and First Health of Illinois—encourage HIT adoption through payment strategies such as add-on payments and reimbursement for virtual physician visits.<sup>5</sup>

Recent national-level activity—including the Bush administration's creation of the Office of the National Coordinator for HIT (ONCHIT); the president's declaration on nationwide electronic health record (EHR) adoption within ten years in his State of the Union address; HIT provisions in the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003; and the number of private-sector health care organizations investing in technology—have raised national awareness of HIT.<sup>6</sup> The rapidly growing consensus in the policy community that HIT is critical to improving patient safety and health care quality while reducing costs has also led to an increased focus on its use in Medicare.

Spurred by dialogue across the administration and Congress, the Medicare Payment Advisory Commission (MedPAC) recommendations, and private-sector activity, the Centers for Medicare and Medicaid Services (CMS) in particular has shown a mounting interest in technology add-on payments, pay-for-performance programs, and other financing strategies to encourage HIT adoption.<sup>7</sup> However, to date, Congress and the administration have not meaningfully leveraged Medicare's power to bring about progress in this area.

This analysis focuses on Medicare's capacity to develop payment or other incentive policies to promote HIT adoption and reimbursement in physicians' offices. Physicians in ambulatory settings, particularly in small and medium-size practices, face many barriers and continue to have the lowest rates of HIT adoption.<sup>8</sup> A growing body of research has highlighted the misaligned incentives and insufficient business case for physicians to adopt technology: Up-front HIT adoption costs are often borne by the physician, while resulting savings are spread among various stakeholders, disproportionately benefiting payers.<sup>9</sup> This reality, along with the critical role physicians play in the health care system, underscores the need to examine alternative incentives for physicians. The purpose of this paper is to suggest an explicit pathway through which the CMS might establish new Medicare standards around physician HIT adoption and reimbursement.

## **Promoting HIT Adoption Among Physicians Within Medicare**

Before altering the existing Medicare financing system to promote HIT adoption, the CMS would need to identify and make explicit its expectations for the technological capabilities it wants physicians to incorporate into their practices, the impact that these technologies should have on the health care system, and the time frame within which change is expected. Making Medicare-specific HIT goals clear to physicians will be an important step toward setting benchmarks for incentives and obtaining physician buy-in. To supplement ONCHIT's broader national HIT strategic plan, it would be valuable for the CMS to communicate with physicians on a tactical level regarding specific steps they must take to qualify for

government-established incentives.<sup>10</sup>

Below are four examples of the types of initiatives in which the CMS or Congress could establish new incentives within Medicare to promote HIT adoption. These options are not mutually exclusive and could be integrated into the Medicare program, perhaps in some combination.

■ **Adopt an implementation plan.** Medicare could offer physicians incentives to adopt an HIT implementation plan based on established criteria, specific technological capabilities, and uniform standards, with a concrete implementation timeline. Medicare could ask physicians to evaluate their practices for improvement opportunities in a variety of designated areas including patient safety, quality of care, and administrative efficiency; identify specific HIT that would address these issues; and present the CMS with a plan for purchasing and implementing appropriate technologies. Physicians' plans might also include details on financing the technology and attaining technical support and training, but individual practices would retain flexibility on how the technology would be deployed.

■ **Adopt a certain type of HIT.** Medicare could offer physicians incentives to adopt a certain type of HIT—for example, electronic prescribing (e-prescribing), computerized physician order entry (CPOE), or electronic health records (EHRs)—certified by Medicare as meeting specific guidelines and criteria. A Medicare certification process would likely establish common standards, features, and capabilities, thereby reducing the purchasing risk for physicians. Technology certification could also support health information exchange across a regional health information organization (RHIO).<sup>11</sup> Under this model, physicians would be given less discretion in their adoption of technology, and government would retain more control.

■ **Meet designated quality improvement outcomes.** Medicare could offer physicians incentives to meet certain quality improvement outcomes without specifying the type of technology that would be required to achieve them. This option seeks to ensure not only that technology is adopted but also that specific performance data are reported and that outcomes improve. This approach, however, may provide less clarity to the vendor community on pathways for developing technologies for the physician office setting.

■ **Adopt certified technology.** Medicare could offer physicians incentives to adopt certified technology along a mandated implementation schedule, with specific reporting, quality, and information exchange requirements. As referenced above, certification could promote a fully interoperable data system. Mandating reporting and certification standards for physicians who respond to the new incentives might be the best way to drive quality and efficiency improvements in the future.

In determining how to include one or more of the above approaches as part of a new incentive structure, the CMS might consider a number of important questions related to the overall goals of the program. For example, within what time frame will physicians be expected to implement new data capabilities or present

an implementation plan? What level of detail will be required in this plan (for example, level of monetary investment, identification of specific technology)? What criteria will be used to certify HIT, and who will run the certifying process? What information will physicians be expected to fully automate—for example, all patient records, current patient health status, prescription transactions? Will requirements vary depending on physician demographics (for example, different standards for rural versus urban physicians)? Which options will require legislative versus regulatory change? What types of technical and other implementation support will physicians require?

The concepts outlined above all have advantages and disadvantages that should be debated publicly. Before any path is chosen, Medicare would need to articulate its HIT goals and engage the physician and vendor communities in a more specific discussion of technology requirements and implementation support needs. Given the rapid evolution of IT and risk of encouraging adoption of a particular system that can quickly become obsolete, Medicare may want to focus on developing incentive structures for physicians around the program's information exchange goals, leaving sufficient flexibility as to how a physician achieves such goals.

## Setting The Bar

One of the many challenges to establishing the types of blueprints discussed above is the lack of technical and functional standards for HIT. Many of the potential model plans would require certified technologies, uniform standards, and key functionalities to support successful, interoperable, and sustainable technology in physicians' offices.

■ **Private-sector initiatives.** A number of private-sector initiatives are focused on establishing standards. The Certification Commission for HIT (CCHIT) is one important initiative; given its ongoing activities and the stakeholders involved, it is likely to be successful in articulating key HIT functionalities and requirements necessary for technology certification.<sup>12</sup> Standard-setting organizations and initiatives such as the Health Level Seven/Institute of Medicine collaboration (HL7/IOM), the National Committee on Vital and Health Statistics (NCVHS), and the Integrated Health Enterprise (IHE) are facilitating the development and integration of uniform standards and will directly influence guidelines for certified interoperable technologies.<sup>13</sup> In addition, ONCHIT, with much input from the private sector, is developing criteria and guidelines for RHIOs and has issued requests for proposals to explore the requirements necessary to support a national health information network (NHIN).<sup>14</sup> The many gaps in existing standards will continue to pose a challenge to HIT adoption—especially given the protracted pace at which the industry has progressed to date. However, each of these initiatives will be helpful in informing HIT activity within Medicare.

■ **Medicare-private-sector collaboration.** Working with existing organizations, the CMS could help facilitate progress in the development of technology cer-

tification criteria and appropriate evaluation of specific HIT products. Creating Medicare-certified HIT as part of a broader physician HIT incentive program would also support IT interoperability, connectivity with other data systems and users, and development of RHIOs, all of which serve the broader goals and strategic vision of ONCHIT and the Bush administration.

## Financing Options

Once the CMS has established concrete goals around HIT uptake in the physician office setting and addressed issues related to standard setting, its next hurdle will be to establish appropriate ways to encourage attainment of these goals. Below we discuss three discrete approaches to incentivizing HIT adoption.

■ **New Conditions of Participation.** Under the Medicare program, the CMS sets Conditions of Participation (COPs), standards that all health care providers and organizations participating in the program must meet, to protect the health and safety of beneficiaries and improve their quality of care. Although it would be a major departure from the current state of physician practice in Medicare, the CMS could issue a new COP for physicians, in which physicians must comply with specific Medicare requirements regarding HIT adoption. For example, the CMS could require submission of an HIT plan (similar to the plans required under California's S.B. 1875 legislation) or require implementation of specific HIT that has been shown to improve patient safety.<sup>15</sup> Although the CMS could issue a new COP under its current authority, the agency may find political advantages to seeking congressional approval to move forward with such an approach.

*Possible concerns.* Such an approach would undoubtedly meet with strong physician resistance because of its cost burden and changes to Medicare practices. Other concerns include identifying the size, transaction level, or geographic criteria that would apply (for example, limiting the condition to physicians in groups of five or more; and applying the condition only to physicians who exceed a certain number of daily transactions with Medicare). A new COP might be somewhat more palatable if requirements were phased in over a longer time horizon or if only a Medicare-approved HIT adoption plan was required.

*A California example.* This approach has been adopted at the state level in the context of hospital licensure. Legislation passed in California in 2000 and 2002 (S.B. 1875 and 801) required hospitals, as a condition of state licensure, to develop a plan that would greatly reduce medication-related errors and then, over the longer term, to implement the plan. The legislation required hospitals to submit their plans, in which they were encouraged to include the use of technologies shown to improve patient safety, by 1 January 2002; implementation was not required until 1 January 2005.<sup>16</sup>

■ **Differentiated payments.** An alternative approach would be to offer physicians differentiated payments, such as performance bonuses or payments through add-on codes, that reward or directly reimburse them for adopting HIT or for

achieving specific quality outcomes through the use of HIT. The outcomes-based approach to payment differentials is typically referred to as “pay-for-performance,” an approach that has recently received considerable attention from Congress, the CMS, and MedPAC.

*Private-sector examples.* The use of payment differentials as an incentive mechanism for HIT has also received a great deal of attention in the private sector. Programs such as those developed by Anthem Blue Cross Blue Shield of Maine, Bridges to Excellence, and Taconic IPA all have incorporated this approach. For example, the Taconic program offers up to one dollar per plan member per month to its physicians who use technology and meet specific performance-based measures. In 2003, physicians received annual bonuses of \$200–\$10,000, while the participating plans and employers paid out more than \$304,000 in incentive payments. They expect 2004 bonuses to exceed \$1 million.<sup>17</sup> Bridges to Excellence offers three discrete programs for physician performance incentives. Specific to HIT adoption, the program rewards physician practices up to \$50 per year per eligible patient (more than \$4 per member per month) for using HIT to improve care delivery. The program offers a maximum per physician reward of \$20,000 annually or \$50,000 over the life of the program.<sup>18</sup>

*CMS pilot program.* The CMS is planning to pilot a pay-for-performance program in its Section 649 demonstration project, as required under MMA. This project, which is still being finalized by the CMS, is modeled on the Bridges to Excellence program and will offer some form of incentive payments to participating providers who use HIT to meet specific outcomes criteria. Research shows that physicians respond to financial incentives, and they are likely to be receptive if Medicare offers additional payments.<sup>19</sup> Physicians would likely oppose a program that would result in a loss of overall revenue to them, which could be the case if Medicare shifts existing physician payments without dedicating new funds to the program. The CMS could develop a new code or create an add-on code to reimburse physicians who meet Medicare HIT guidelines. Assuming that Medicare provides more funds to pay for these expenses, an add-on code could offer physicians support in adopting HIT and achieving specified outcomes.

*Policy design issues.* Despite the increasing prevalence of this approach, the CMS would need to address many policy design issues. For example, how and when would Medicare determine broadly acceptable outcomes measures for payment? Should payment incentives be the same for small and large and rural and urban providers alike? How much would the CMS offer as additional reimbursement, and would that be sufficient incentive for physicians to adopt HIT? Would the CMS employ this strategy for a limited time? Would this approach ultimately help smaller practices get ahead, or would it disproportionately reward large, urban providers? When would the CMS (1) articulate the milestones that physicians must reach to receive these types of add-on payments and (2) be prepared to actually offer the payments?

*Fiscal problems.* Even if many of the questions discussed above can be answered, the primary disadvantage of this approach is fiscal. It may simply be unrealistic to expect that Congress would allocate additional funds for this purpose. A recent report from Connecting for Health estimated that \$21.6–\$43.2 billion over a ten-year period would be necessary as incentives for EHR adoption in small and medium-size practices.<sup>20</sup> These estimates are based on incentive payments of \$12,000–\$24,000 per physician per year or \$.50–\$1 per member per month, amounts that some researchers believe would cover the full cost of the technology investment. Although smaller incentive payments could result in increased HIT adoption, the report suggested that large-scale HIT adoption would require incentives of the same magnitude.

Even targeting only a portion of physicians in the office-based setting or providing incentives at levels much less than described by Connecting for Health, Medicare would still be faced with billions of dollars of additional physician payments over the next decade. The underlying budgetary issues associated with this approach could prevent political consensus and prevent this approach from becoming a viable option for large-scale, widespread implementation under Medicare.

■ **Cost-sharing approach.** Policymakers also could consider programs that are budget-neutral. One example of budget-neutrality would be to fund technology adoption but ensure an equal return on the federal government's investment over a ten-year period. In years 1–5, budget outlays for HIT would increase to enable the CMS to fund HIT adoption through additional reimbursement, grants, or low-interest loans for physicians who use certified HIT systems. In years 6–10, as the health system begins to achieve cost savings associated with physician HIT investments, the CMS and the federal government broadly would recoup initial outlays through savings from reduced medical errors and greater administrative efficiencies. Although proportionate reductions in physician payment could be made in the out years if necessary, cuts would likely be challenging for the CMS to execute.

As more research shows that investment in HIT pays for itself, it seems more likely that under this cost-sharing approach, Medicare and physicians' offices would accrue considerable net benefits. This approach provides financial incentives to providers and depends on savings that accrue to the payers; in this way, it takes advantage of the misaligned incentives that often serve as a barrier to HIT adoption. It assures that budget-neutrality is achieved not by savings at the provider level but rather by savings to the payer: Medicare as a whole. As the source of savings for the budget-neutral construct, the Medicare program—not individual physicians' offices—would take on the burden of calculating savings over time. A similar methodology could also be used for Medicare Advantage (MA).

*Savings estimates.* The Center for Information Technology Leadership (CITL) indicates that adopting ambulatory CPOE could result in \$44 billion in cost savings to the health care system annually, and ensuring interoperability of these systems could result in an additional \$78 billion in annual savings by reducing administra-

tive costs and unnecessary or redundant care.<sup>21</sup> The U.S. Government Accountability Office (GAO) recently indicated that the U.S. Department of Health and Human Services (HHS) is working on savings estimates and “expects them to be substantial.”<sup>22</sup> The GAO also noted that “Medicare would likely save a proportional amount from reduced utilization of services for Medicare funded office visits and from use of medications given inappropriately or unnecessarily.” These studies are part of a small but growing body of work that highlights cost savings related to HIT investments. In pursuing the budget-neutral option, the CMS would have to acknowledge limitations of some of the existing studies and accept the challenge of quantifying these savings, especially given the past resistance of the Congressional Budget Office (CBO) and the Office of Management and Budget (OMB) to score the financial benefits associated with HIT.

*Legislative interest.* As policymakers struggle to find more budget-conscious approaches to promoting HIT adoption, this cost-sharing strategy has already generated legislative interest.<sup>23</sup> Financing mechanisms that distribute the cost burden more equally across stakeholders may be the only realistic option for financing HIT in an environment of fiscal austerity.

**F**OR ANY APPROACH TO GAIN POLITICAL TRACTION, it must be sensitive to existing budgetary realities and to the political power of the major stakeholders. Given Medicare’s current financial constraints and the increasing awareness that HIT adoption could result in long-term savings, crafting a budget-neutral program of incentives—with involvement from physicians, other providers, and MA plans—seems to have the most potential at this time. It is also worth noting that financing alone will not fully address the challenges of HIT adoption. The complexities associated with technology implementation, such as the impact on work flow, will continue to be a major barrier, and any truly effective policy solution will also need to address these issues.

Although policymakers have been talking about the importance of HIT adoption for some time, Congress has been reluctant to translate this interest into enforceable Medicare policy that leverages the full power of the entitlement program, particularly in the FFS setting. Proactive budget policy in this area would hasten the adoption of technology and bring Medicare into line with the policies adopted by many leading-edge health plans.

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## NOTES

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