

Mobile Technology: Smart Tools to Increase Participation in Health Coverage

Executive Summary

Mobile technology – cell phones, smartphones, and other portable devices that provide access to the Internet – is rapidly expanding to a growing number of users and purposes, offering a new set of tools that can be tapped to facilitate increased participation in health coverage. Both immediately and as health coverage is expanded under the Patient Protection and Affordable Care Act (ACA), the task of moving tens of millions of uninsured Americans into coverage will require improved, flexible entry points. Indeed, the ACA calls for the development of consumer-friendly enrollment systems that allow individuals to apply for health coverage and subsidies, and to recertify and manage their eligibility – all online – by 2014. As cell phones, smartphones and other mobile broadband technologies are becoming more usable, affordable, and prevalent, their potential to function as outreach tools and as new means of applying for services, submitting forms, finding information, and interacting with the government can be harnessed to promote robust participation and stability in health coverage.

Diverse possibilities. Cell phones, text messaging, and smartphones each have different advantages in the health coverage context. Collectively, they can be used to facilitate multiple aspects of the eligibility and enrollment process, including applying for benefits, learning about and choosing among coverage options, receiving reminders, obtaining information about the status of an application, paying premiums, renewing eligibility, and transitioning between Medicaid, CHIP, and the Exchange when circumstances change – at times and places that work for the individual or family. Currently, Blacks and Hispanics are more likely than Whites to use their cell phones to access the Internet, and they also have higher uninsured rates.

Because cell phones with text messaging capabilities are in wide use now, including among individuals likely to be uninsured, they can be incorporated into eligibility processes immediately. Other public initiatives, such as text4baby and the Department of Homeland Security's e-Notification service, have successfully demonstrated new uses of mobile technology to benefit consumers. Over the next few years, use of smartphones for more complex functions, such as completing and submitting online forms, can be pursued as part of planning for ACA implementation. Among mobile tools, smartphones are proliferating particularly rapidly and emerging as an effective source of access to online services for populations who might otherwise lack it.

Key challenges. Still, important challenges to the use of mobile technology in this sphere remain to be addressed. In particular, current privacy and security standards are not sufficiently robust for many aspects mobile technology use in the context of assessing individuals' eligibility for health coverage programs or subsidies. Also, cost burdens on consumers will need to be minimized to ensure that the benefits and impact of these tools are shared as widely as possible. And versions of Web portals will need to be developed that are optimized for the smaller, lower-resolution screens on many mobile devices if these media are to succeed as additional points of access to health coverage.

Looking ahead. As federal and state policymakers design and plan improved eligibility processes and systems, opportunities to “mobilize” mobile technology to help more families obtain, maintain, and manage their health coverage are ripe for consideration. Policymakers can help optimize participation in health coverage today and fulfill the coverage goals embodied in the ACA by promoting the development of mobile enrollment tools that are secure, accessible, effective, and consumer-friendly.

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In 2009, the number of uninsured Americans under age 65 reached 50 million.¹ Many of the uninsured, including two-thirds of today's 7.3 million uninsured children, are eligible for Medicaid or the Children's Health Insurance Program (CHIP) but are not enrolled.² Beginning in 2014, under the Patient Protection and Affordable Care Act (ACA), millions of additional Americans will gain eligibility for Medicaid, CHIP, or subsidies for coverage offered through new health insurance Exchanges. Consumer-friendly methods for enrolling in and renewing coverage are essential to ensure that individuals and families who are eligible for coverage or subsidies benefit as intended.

Mobile technology, which is rapidly expanding to a growing number of users and purposes, offers a set of new, as yet untapped, tools that can be used to promote robust participation and stability in health coverage, both in the immediate term and as coverage is expanded under the ACA. This brief discusses the potential of mobile technology and how it can be used innovatively in this sphere, and identifies policy actions that could help convert its potential into reality. The brief is the latest in a series of materials from The Children's Partnership and The Kaiser Family Foundation's Commission on Medicaid and the Uninsured on the use of technology to facilitate enrollment and continuous participation in health coverage. For more information visit The Kaiser Family Foundation Website at <http://www.kff.org> and The Children's Partnership Website at <http://www.childrenspartnership.org>.

What is mobile technology?

"Mobile technology" refers to a growing array of handheld or portable electronic devices that can perform a variety of functions, from simple telephonic communication to sophisticated Web-based activities. Mobile technology today includes standard cell phones, much more advanced "smartphones," laptop computers, tablet computers such as iPads, and electronic readers such as Kindles, among other tools. This brief examines the potential of standard cell phones and smartphones – both of which are widely available and also broadly used by underserved – to advance coverage goals.

Mobile technology could improve access to health coverage. As local, state, and federal governments provide increasing access to information, forms, and contacts on Websites – a development known as "e-government" – mobile technology holds important potential as an outreach tool and a new means of applying for services, submitting forms and information, and interacting with government. More and more, public agencies are offering an option to apply online for health and human services programs. For example, Pennsylvania's COMPASS system and the Utah Clicks Website both provide self-service, online applications for people seeking assistance.³ In 2010, 32 states reported that they currently accept online applications for Medicaid and/or CHIP.⁴ While these e-government services have generally been designed with desktop computers in mind, the extension of these functions to handheld mobile tools such as cell phones and smartphones could significantly widen online access to coverage.

ACA requirements and technology trends increase the potential value of these tools. The ACA calls for the development of streamlined systems that enable consumers to apply for health coverage and subsidies, and to recertify and manage their eligibility – all online. Indeed, under the new law, all states must use online applications by 2014.⁵ Therefore, online applications for health coverage can be expected to proliferate rapidly in the near future. Also over the next several years, smartphones and other mobile broadband technology that provide Internet access are expected to become more affordable and prevalent. Already, cell phones with text messaging capabilities are nearly ubiquitous in

urban areas – including among subpopulations with some of the highest uninsured rates. Given this future, federal and state officials could immediately begin to develop opportunities to use mobile technology to maximize participation in Medicaid and CHIP and achieve the broader coverage goals of health reform.

What are the key trends in mobile technology use?

Cell phone use and text messaging are on the rise. Cell phone use and text messaging are now commonplace among U.S. adults and adolescents. Cell phone ownership is widespread among all racial and ethnic groups, regardless of education or income levels.⁶ In 2010, 76% of Hispanics, 79% of Blacks, and 85% of Whites owned cell phones, and rates in households below \$30,000 were similar.⁷ While teens currently make greater use of text messaging, adults are rapidly catching up: the share of adult cell phone users who text rose from 65% to 72% over a recent 9-month period; 88% of teen cell phone users text.⁸ As with cell phone use, text use is consistently high across cell phone owners, with 72% of Hispanic, 77% of Black, and 72% of White cell phone owners texting in 2010.⁹

Forty percent of adults use their cell phone to do at least one of the following: use the Internet, e-mail, or instant message.

Source: *Mobile Access 2010*, Pew Internet & American Life Project

Many who lack broadband connections at home use cell phones to access the Internet. Cell phone owners are increasingly using their phones to access the Internet, with such use rising from 25% to 38% between April 2009 and May 2010.¹⁰ Hispanics and Blacks are less likely than Whites to have broadband access at home (45% and 52%, respectively, compared to 65%); at the same time, 40% of Hispanic and 51% of Black cell phone owners use their cell phones to access the Internet, compared to 34% of White cell phone owners who access the Internet this way.¹¹ For those without home broadband, mobile connections offer a convenient, alternative means of access to the Web.

Cell phones can provide Internet access for the uninsured. The populations that rely most heavily on cell phones to access the Internet are also more likely to be uninsured – non-elderly Hispanics and Blacks are more likely to be uninsured than Whites (34%, 23%, and 14%, respectively).¹² The uninsured could gain greater access to health coverage and options for managing their coverage if consumers could use cell phones to file applications electronically and perform other coverage-related tasks.

Smartphone use is increasing, bringing enhanced functionality. Among cell phones, smartphones are emerging particularly rapidly. In addition to phone and text capabilities, smartphones provide mobile, or wireless, access to most Websites on the Internet and advanced capabilities to run software applications (“apps”) that perform specific tasks. Thus, in terms of functionality, smartphones can rival personal computers. Smartphones are also less expensive than computers and, as such, can provide a gateway to the Internet for individuals and families without access to a wired broadband connection. In fact, over the next five to ten years, smartphones are expected to become a primary means of Internet access.¹³ According to a Nielsen report, approximately 25% of U.S. cell phones are currently smartphones and this rate will exceed 50% by the end of 2011.¹⁴

What role might mobile technology play in health coverage enrollment and renewal?

Standard cell phones, text messaging, and smartphones offer different advantages. Collectively, they can be used to facilitate multiple aspects of the eligibility and enrollment process for health coverage, including applying for benefits, learning about and choosing among coverage options, paying premiums,

renewing eligibility, and transitioning between Medicaid, CHIP, and the Exchange when individual or family circumstances change.

Because standard cell phones and text messaging are in wide use now, including among populations likely to be uninsured, they can be incorporated immediately into the eligibility processes. Over the next few years, new uses of smartphones for more complex eligibility, enrollment, and retention functions can be explored in preparation for ACA implementation. The following discussion and matrix address how three different mobile device approaches – phone-in, text message, and smartphone apps – can be used to support application, enrollment, and renewal functions.

Phone-in. Many states have a toll-free number that individuals can call to access Medicaid and CHIP enrollment information and assistance on the phone. Some states, such as Connecticut, accept telephone applications, though the procedure requires the caseworker to mail the completed form to the applicant for signature in order to finalize it.¹⁵ In California, some counties have the capability to turn a 211 call (the free telephone information and service referral line) into a completed application without having to send the form to the family; the application assister fills out and submits an online application during the call.¹⁶

Potential Uses of Mobile Tools for Medicaid, CHIP, and Exchange Enrollment, Renewal, and Management			
	Phone-in	Text Message	Smartphone Apps
Application	Phone-in application is already in use in some states. It is comparable to an in-person application process, but allows the consumer to apply from a convenient location.	Text messaging is not currently suited for submitting complex applications. It does not allow information to be encrypted, and applications may be too complicated for the standard 160-character limit.	A smartphone app could be developed to allow consumers to submit an application in a manner that is comparable to the way they now apply online via desktop computer, though it would use a much smaller screen.
Renewal	Phone-in renewal is currently in use in some states. It is simpler than the mail-in renewal process.	Use of text messaging to renew coverage involves the same challenges associated with its use to apply for coverage, although less text and data would be required.	A smartphone app could be developed to permit consumers to renew coverage in a manner that is comparable to the way they now renew coverage online via desktop computer.
Insurance Premium Payment	Insurance payments could be made over the phone in the same manner that many consumers currently make utility and other bill payments.	Insurance payments could be made by text message. Users would need to set up accounts with banks and services that provide the capacity to send remittances.	Insurance payments could be made online by smartphone through a bank account or credit card app that allows users to pay bills.
Premium and Renewal Reminders	Routine voice reminders could be called in to an enrollee's phone by an automated phone messaging system.	Regular text reminders could be sent to enrollees' phones by an automated text messaging system. Such reminders offer the advantage of allowing enrollees to "reply" to complete the process.	Regular e-mail reminders could be sent by an automated e-mail messaging system. Such reminders offer the advantage of allowing enrollees to "click through" to complete the process.

More broadly, many states allow Medicaid and CHIP renewal by telephone, making the process significantly easier for individuals and families and often eliminating the need for families to provide signed forms and/or documentation.¹⁷ Alternative mechanisms like this help enrollees to maintain coverage, and more people will be able to benefit as access to cell phones continues to increase.

Text Message. Text messaging offers opportunities to improve communication with current and prospective enrollees. Text messages are cheaper than postage, concise, timely, and likely to reach their intended recipient even if there has been a change in physical address. Some recent uses of text messaging highlight its potential to benefit large numbers of Americans. For example:

- Text4baby is an effort to promote maternal and child health through text messages. Text4baby provides personalized information to expectant and new mothers based on their due date or baby's birth date. In text4baby's first 12 months of operation, about 135,000 women signed up for the service.¹⁸ More than 3.5 million messages were sent in the first six months alone.¹⁹
- The Department of Homeland Security allows applicants, petitioners, and their representatives to sign up for text messages alerting them to changes in the status of their case. In the first month of the e-Notification service, 3 million people registered to receive text message updates.²⁰

Using text messaging in a similar way, those applying for or enrolled in Medicaid, CHIP, or Exchange coverage could obtain information about the status of their application, receive reminders about additional information that is required to finalize an application, select a primary care provider, renew their benefits, or get tips about accessing services under their health plan.

Text messaging can also be used to accomplish one of the most critical tasks in maintaining health benefits: payment of premiums. Using technology that was originally developed for rural areas with limited access to banks, individuals can transfer funds from their debit or credit card by sending a simple text message that contains no sensitive personal information. This kind of text messaging capability could also be used to remind enrollees about their insurance premium due dates and allow them to make immediate payments to prevent unintentional disenrollment from coverage.

Smartphone app. As smartphones take a greater share of the cell phone market, they become an increasingly promising way for populations that might not otherwise have uninterrupted access to online services to gain access to those services. Like standard cell phones and text messaging, smartphones allow consumers to perform tasks at the time and place that work best for them. But smartphones go even further by allowing the secure transmission of data and electronic submission of an application, and permitting consumers to search the Internet, immediately find answers to their questions, and access assistance as needed. With these capabilities, smartphones can not only complement desktop computers, but for some important purposes, substitute for them.

What key challenges lie ahead?

To fully realize the potential of mobile technology tools to help individuals and families enroll in, renew, manage, and stay informed about their health coverage, a number of important issues will need to be addressed.

Privacy and data security. Current privacy and security standards for mobile technology are not sufficiently robust for many aspects of the eligibility process, which can involve the collection and exchange of very sensitive information. For example, text messages cannot be encrypted, and information shared over Wi-Fi networks may be vulnerable to security risks. Furthermore, existing health privacy and security laws, such as the requirements under the Health Insurance Portability and Accountability Act (HIPAA), may not adequately address data collected, stored, and shared by mobile apps.²¹ Such concerns must be considered carefully in determining how to deploy mobile technology in

the eligibility process while minimizing the risk of unintended uses and disclosures of personal information.

Costs to users. Since the eligibility process requires the downloading of large amounts of data, use of these services could be cost-prohibitive for some applicants, depending on their data plan. Working with developers and telecommunication service providers to minimize such cost barriers will help to maximize the impact of these tools.

Small screens. The screen on many mobile devices is small. In developing Websites and Internet portals for health benefits, federal and state agencies and their contractors should consider developing versions that are optimized for smaller, lower resolution screens. For instance, the new federal Web portal (<http://healthcare.gov>) is not optimized for small screens, though it is intended to be a key consumer resource about health insurance opportunities going forward.

Next Steps

As innovations in mobile technology continue to flower, federal and state policy leaders are in a position to encourage the appropriate integration of these innovations into enrollment processes for Medicaid, CHIP, and Exchange coverage. Following are some areas in which leadership could help usher in the benefits of mobile technology for expanding coverage.

Funding and incentives. Policymakers could propel mobile technology uses forward by providing demonstration funding to encourage the development of prototype applications and test consumer usability.²² Funding opportunities and incentives can be designed to promote the development of non-proprietary software and components, such as open source products, that can be modified as needed for deployment across states and programs. Demonstrations can be tasked with testing different approaches to guiding consumers through the application and renewal processes, including making human assistance available, as needed. Funding priority can be given to those demonstrations that advance the use of “real-time” application, renewal, and other coverage-related processes, those that minimize the amount of data and documentation required from the consumer, and those that provide the consumer with timely and clear status updates as well as clear next steps.

Standards and protocols. Policymakers can play an important role by supporting the development of clear standards and protocols that apply specifically to mobile technology tools, and that can evolve as the technology matures and as states, developers, and consumers gain experience with the tools. As a starting point, the U.S. Department of Health and Human Services (HHS) has already established standards and protocols to govern online enrollment systems, including those adopted pursuant to §1561 of ACA, and these will apply to the use of mobile technology in online eligibility and enrollment processes.²³ In addition, the following issues that are specific to these tools will need to be addressed:

- **Privacy:** All mobile technology used in the health insurance eligibility and enrollment process will need to be subject to privacy and security standards that are at least as strong as those in HIPAA. Security mechanisms are needed to protect the transmission of data via text, Wi-Fi, and other mobile communications. Then, with appropriate standards and mechanisms in place, oversight and enforcement will be needed to ensure that mobile technology is deployed properly.
- **Usability:** Requirements developed for paper and online processes, such as those relating to font sizes or signatures, may need to be modified to allow for innovative uses of hand-held mobile tools in order to enhance the consumer experience without undermining current protections.

- **Oversight:** Strong quality controls, such as pre-implementation testing protocols and post-implementation monitoring and enforcement, will be needed to ensure that the tools are reliable, accurate, and consistent.

Consumer costs. To make this technology most useful for low-income individuals and families, steps to ensure that consumers bear little to no cost when using the full range of available mobile technology tools in the eligibility process will be important. Public-private funding partnerships among insurance programs, financial institutions, and the mobile industry could help mitigate some of the costs for the consumer.

Consumer input. Consistent with ACA's goal of delivering a superior customer experience, consumer input will be valuable as devices and new applications are created and adapted for use in enrollment, renewal and other health coverage-related functions. Consumer-friendly tools that take into account health literacy and cultural competency considerations and the needs of people with disabilities can help increase the coverage impact of this technology. Pre-implementation testing will be important to make sure that these tools are usable and work for the underserved populations that stand to benefit most.

Additional spectrum. The potential value of mobile tools for coverage-related and other purposes is contingent on the underlying broadband infrastructure. Consistent with its recent National Broadband Plan, the FCC can move forward to free up additional spectrum for wireless broadband and fill in coverage gaps in rural areas. Local municipalities could then work to ensure that wireless facilities are built to enable availability to population centers, particularly those with low-income persons.²⁴

Conclusion

Cell phones and other mobile technology tools offer increasing promise to facilitate enrollment in and retention of health coverage. Potential uses include text reminders, smartphone apps that allow submission of a completed application/renewal form, and electronic payment of premiums, among others. New tools are crucial at this moment in time, to enhance enrollment and retention in existing programs, and to increase states' use of online processes as they implement health reform.

The potential of mobile technology to help individuals and families learn about, apply for, and manage their health coverage options is particularly great for those with low incomes, who are less likely to have broadband access to the Internet at home and who use mobile devices at high rates. Cell phones are already nearly ubiquitous in U.S. households across the income spectrum, and the future of such technology, especially the expected proliferation of more affordable smartphones, suggests that the opportunities offered by mobile technology will grow. With careful and creative consideration of these tools as they design and implement improved eligibility processes, federal and state policy leaders can help more individuals and families obtain and maintain health coverage, a core goal of health reform.

This brief was prepared by Lisa Han and Beth Morrow of The Children's Partnership in partnership with Julia Paradise of the Kaiser Family Foundation's Commission on Medicaid and the Uninsured.

ENDNOTES

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