

Bringing Information Technology Innovation to New York's Public Health Insurance Programs



OFFICERS

Howard Smith
Chairman

James R. Tallon, Jr.
President

Mary H. Schachne
Frank S. Streeter
Vice Chairmen

Derrick D. Cephas
Treasurer

David A. Gould
Sally J. Rogers
Senior Vice Presidents

Sheila M. Abrams
Phyllis Brooks
Deborah E. Halper
Kathryn Haslanger
Vice Presidents

Stephanie L. Davis
Corporate Secretary

DIRECTORS

Luis Alvarez
Jo Ivey Boufford, MD
Rev. John E. Carrington
Derrick D. Cephas
Ernest J. Collazo
J. Barclay Collins II
William M. Everts, Jr.
Livingston S. Francis
Barbara P. Gimbel
Michael R. Golding, MD
Josh N. Kuriloff
Patricia S. Levinson
Robert G. Newman, MD
Judy Pegg
Joanne M.J. Quan
Katherine Osborn Roberts
Mary H. Schachne
John C. Simons
Howard Smith
Frank S. Streeter
Most Rev. Joseph M. Sullivan
James R. Tallon, Jr.
Frederick W. Telling

United Hospital Fund

The United Hospital Fund's mission is to shape positive change in health care for the people of New York. We advance policies and support programs that promote high quality, patient-centered health care services that are accessible to all. We undertake research and policy analysis to improve the financing and delivery of care in hospitals, clinics, nursing homes, and other care settings. We raise funds and give grants to examine emerging issues and stimulate innovative programs. And we work collaboratively with civic, professional, and volunteer leaders to identify and realize opportunities for change.

HONORARY DIRECTORS

Donald M. Elliman
Douglas T. Yates
Honorary Chairmen

Herbert C. Bernard
John K. Castle
Timothy C. Forbes
Martha Farish Gerry
Rosalie B. Greenberg
Allan Weissglass

Bringing Information Technology Innovation to New York's Public Health Insurance Programs

Michael Birnbaum
Kathryn Haslanger

This report was funded in part by
a grant from the Altman Foundation

Contents

The Road to Reform	I
Administrative Costs	2
The Application Process Today	3
Clocking the Application Process	5
Potential Benefits of IT Innovation	6
Learning from Other States' Experiences	7
Enhancing IT Innovation through Policy Reform	9
Bringing IT Innovation to New York	10
Connecting Information Systems	11
Moving Promise into Practice	12

New York's public health insurance programs — Medicaid, Child Health Plus A and B (CHP A and CHP B), and Family Health Plus (FHP) — enroll more than three million low-income children and adults across the state (not including elderly and disabled Medicaid beneficiaries), including two million in New York City alone. Yet with one in four New Yorkers lacking health coverage, the city's uninsured rate remains much higher than that of the U.S. as a whole (Holahan 2004).

Despite their achievements, public health insurance programs in New York City continue to under-perform in important ways. Among the 1.8 million uninsured city residents, about 800,000 — 44 percent — are eligible for public coverage but are not enrolled.¹ Among those who enroll, a substantial share — as many as half — lose coverage after just one year, even though the majority remain eligible (Birnbaum and Holahan 2003; Hill and Westpfahl Lutzky 2003; Bachrach and Tassi 2000).

This issue brief makes the case that information technology (IT) innovation is crucial to covering more eligible New Yorkers by making our existing public health insurance programs more efficient and effective. It provides context for the current debate on simplifying the application and enrollment process; it includes estimates of the staff resources and calendar time consumed by the process; it reviews other states' experiences in using IT to streamline public coverage;

and it explores the emerging opportunity to make substantial improvements in program administration through IT innovation in New York.

The Road to Reform

The twin problems of low participation and low renewal rates have persisted for years. Efforts to tackle them have produced a range of policy changes, some of which have had a positive impact. Under a statewide policy of facilitated enrollment initiated in 2000, health plans and community-based non-profit organizations have been granted the authority to find eligible New Yorkers in their communities and help them apply for public coverage; they can also conduct, instead of community Medicaid offices, the required face-to-face interviews with applicants. Along with many health care providers, these enrollers also educate New Yorkers about how to use their public coverage, including how to access care once they are enrolled and how to manage the renewal process. In addition, they have consistently advocated for a simplified enrollment and renewal process for Medicaid and its related programs.

New York City has also taken a leadership role in improving enrollment in public insurance programs. Recent mayoral administrations have worked to help identify eligible residents and encourage them to apply

¹ The estimate of eligible but uninsured New York City residents is based on the state estimate, adjusted for the city's share of enrollment in public health insurance coverage statewide. See Holahan D, A Ely, K Haslanger, M Birnbaum, E Hubert. 2004. *Health insurance coverage in New York, 2002*. New York: United Hospital Fund.

for coverage using the resources of multiple city agencies, including the Human Resources Administration (HRA), the Department of Health and Mental Hygiene, and the Mayor's Office of Health Insurance Access.

HRA plays a central role in New York's public insurance programs. Because its jurisdiction includes Medicaid, CHP A, and FHP — it excludes only CHP B, New York's SCHIP program — HRA processes applications and eligibility determinations for more than 90 percent of city residents who enroll in public coverage. With New York City residents accounting for about two-thirds of the state's public enrollment, HRA determines eligibility for more than half of all enrollees statewide.

Over the last few years HRA has redesigned its community Medicaid offices where individuals can apply for coverage. Through its Model Office Initiative, the agency has equipped eligibility staff with new protocols and technologies to improve the offices' effectiveness and efficiency, as well as increase customer satisfaction (Eggleston 2004). Recently the Mayor asked the agency to further "simplify and streamline the administration of our health insurance programs and to use technology to improve customer access and program efficiency" (New York City Human Resources Administration [HRA] 2004).

HRA also implemented some policy reforms, designed to simplify the application process, before they were required by state law, and enacted others that were not required. These reforms allow applicants to attest to — rather than document — family asset levels, and to present one pay stub, rather than four, as proof of income, provided wages do not fluctuate from one pay period to the next. They also simplify application requirements related to proof of address, social security numbers, and immigration status, and substitute a streamlined mail-in form for the previously required in-person renewal interview (HRA 2004).

All told, these efforts have made a difference, as more New York City residents are enrolled in public coverage than at any time in the past. But they have not remedied the programs' inability to enroll and retain their target populations effectively. The number of eligible but uninsured New Yorkers has not declined significantly in recent years. Despite a landmark federal law enacted in 1996, severing Medicaid eligibility from cash assistance, which is more difficult to obtain, public insurance coverage remains elusive for many eligible New Yorkers.

Administrative Costs

The cost of administering New York's public health insurance programs is substantial. In 2001, the direct administrative costs of New York's Medicaid, CHP A, CHP B, and FHP — including federal, state, and local spending — totaled \$1.1 billion (Centers for Medicare and Medicaid Services [CMS] 2003). While New York City accounts for more than 60 percent of statewide enrollment and spending, it is impossible to estimate costs by locality, as many program functions are administered on a statewide basis. And although costs for processing applications, determining eligibility, and managing enrollment represent a core component of the public sector's role, they are not budgeted separately from other administrative functions performed by the same agencies. While a point estimate is elusive, government clearly spends hundreds of millions of dollars each year administering the application and enrollment process for public coverage in New York City.

Moreover, the direct administrative costs to government significantly understate total administrative costs because they exclude spending by private organizations participating in the application and enrollment process. Additional public funds flow to these organizations in the form of health plan premiums, provider reimbursement rates, and

facilitated enrollment contracts. One study estimated that health plans, which initiate the majority of applications in New York City, spend \$280 in administrative costs per child during the enrollment process (Fairbrother 2004). Extrapolating this estimate to the city's current enrollment of more than two million children and adults, private organizations' administrative costs related to new applications and renewals would total more than \$500 million annually.

The disconnect between the substantial resources consumed by the administration of our public health insurance programs and the consistently high numbers of eligible but uninsured New Yorkers is of critical importance. In 2001 the United Hospital Fund, with support from the Altman Foundation, began an analysis of the administrative procedures at the heart of these programs' application and enrollment processes. Our goal was to assess what might be achieved through a combination of IT innovation and further administrative simplifications. The initiative included several components: a review of the current process, an analysis of the resources required by private organizations to submit applications, an assessment of ongoing efforts by New York State and City government to introduce IT innovation, and a survey of IT innovations and simplification reforms in other states.

The Application Process Today

Volume and complexity are the hallmarks of the application process for public coverage in New York City. To sustain enrollment at

current levels — which are well below full participation — New York City's public health insurance programs must process applications or renewals for more than two million people each year. Assuming an average of two applicants per household, the system handles more than one million distinct applications annually.² This translates into some 4,000 applications per business day.

Applications enter the public health insurance system in paper form.³ Under conservative assumptions, if the average application consists of ten pages, including required documentation, the system must process 40,000 new pages of material each day. Since many applications are initially filed at health plans and community-based organizations, these must be delivered to the government agencies that determine program eligibility and health plan enrollment. With the typical application routed to more than one destination — and with many making more than one journey along the way — literally hundreds of thousands of hard-copy application pages are in transit every day throughout the city.

This massive volume would be challenging enough if applications were simple to route and quick to process, but the complexity of the application pathways is notable. In New York City, HRA makes official eligibility determinations for Medicaid, CHP A, and FHP, in compliance with the Office of Medicaid Management (OMM) in the state's Department of Health. Maximus, a private contractor and enrollment broker, assists HRA with managed care plan selection and enrollment for these beneficiaries. For CHP B, participating health plans determine eligibility, subject to audit by the New York

2 The precise number of applications totals more than one million annually due to duplications, rejections, and transitions between programs related to changes in age, income, or assets. The household is the unit of application for the majority of public health insurance applicants, and can include parents, children, and other family or household members, whether or not they are applicants themselves. Depending on family composition, some members of the same household must apply on separate applications.

3 There are two exceptions: electronic applications for Medicaid's Prenatal Care Assistance Program (PCAP) and Long-Term Care (LTC) demonstration projects are discussed later in this issue brief.

State Department of Health's Division of Planning, Policy and Resource Development.

The variety of entry points into New York's public health insurance system, while crucial to helping large numbers of eligible New Yorkers complete the enrollment process, adds to the challenge of routing and processing applications. While some applications originate at HRA's community Medicaid offices, the majority now enter the system through enrollment facilitators — health plans and community-based organizations that initiate applications and forward them to the appropriate public agency.⁴ Health care providers — mostly hospitals and clinics — also initiate applications for patients, as do scores of smaller community-based organizations serving as facilitated enroller subcontractors. Modes of transport for the resulting stacks of paper are as diverse as their starting points and destinations. They include regular and express mail, bicycle messengers, health plan marketing vans, and staff of community-based organizations, traveling by subways, buses, and taxis.

The substantive complexity of each application further increases the administrative challenge. Given requirements that differ for each program, there is often uncertainty regarding the data and documentation that are needed and, therefore, confusion about the completeness of an application and whether it is being forwarded correctly to the next stage of the process. Moreover, the eligibility rules and documentation requirements have changed frequently over the last several years, each change requiring modifications in the labor-intensive processes of routing applications and determining eligibility. The omission or miscalculation of a single detail can have a

significant impact: a clerical error in calculating family income, for example — whether made by a health plan representative or the parent of an eligible child — can cause an application to be routed initially to CHP A instead of CHP B, possibly delaying enrollment for several weeks.

Finally, in addition to processing new data, the system also needs to reprocess existing information. Changes in age, income, and asset levels of enrollees often result in changes in eligibility status that require transitions between programs, rather than the outright loss of eligibility. Transitions between CHP A and CHP B are routine, as are transitions between Medicaid and FHP.⁵ Such transitions can be more complex than initial applications, and may require communication among even more organizations and agencies. To move a single child from CHP B to CHP A, for example, might involve communication among HRA, a health plan, Maximus, and two community-based organizations (a subcontractor and its lead facilitated enrollment agency).

It is no wonder — given the complexity, uncertainty, and delays that characterize the pathways to public insurance — that a frequent result is a lack of coverage for eligible New Yorkers. IT innovation offers the opportunity to simplify and modernize those pathways. The key challenge lies in improving the capacity of the public and private IT infrastructures in ways that benefit all interested parties — state and city government, health plans, providers, facilitated enrollers, community-based organizations, and, most of all, those eligible for coverage. Achieving this will do a great deal — perhaps more than anything accomplished to date — to help complete Medicaid's transformation

⁴ Under facilitated enrollment, nearly 20 health plans — virtually all of those serving public programs — serve as New York City enrollment facilitators. The policy also provides direct funding to community-based organizations (CBOs) to complete and submit applications. Currently about ten city CBOs receive state funding as lead facilitated enrollment agencies, and these lead agencies in turn subcontract with other independent CBOs.

⁵ Transition from Medicaid to CHP A or CHP B, or from Medicaid to FHP, can be caused by an increase in enrollee income or assets; transition from CHP A or B to Medicaid or FHP can be caused by reaching the CHP age limit; transition from FHP to Medicaid can be caused by a decline in enrollee income or assets.

from a technologically inefficient forty-year-old vestige of the state's cash assistance program to an effective, streamlined modern-day health insurance benefit.

Clocking the Application Process

As part of its initiative to promote simplification and IT innovation, the United Hospital Fund commissioned The Lewin Group (Lewin) to study the application process for New York City's public health insurance programs. The analysis measured the resources used by the private organizations — health plans, providers, and community-based organizations — initiating applications, as well as the time elapsed at each stage of the application process. Lewin's estimates reflect site visits and interviews conducted between December 2002 and May 2003, and an

analysis of data from applications initiated between March 2002 and July 2003.

Completing and transmitting each application requires an average of 1.5 to 2 hours of staff time at private organizations before the application reaches a government agency for the official eligibility determination, but could take as long as 3 hours and 20 minutes, depending on the complexity of the case (The Lewin Group [Lewin] 2004), as detailed below (see "Staff Time Consumed"). One million applications, each requiring 1.5 to 2 hours, consume some two million hours of staff time annually — or about 1,000 full-time equivalent (FTE) staff positions at health plans, providers, and community-based organizations initiating applications.⁶

Once an application is initiated, it typically takes 32 to 40 days for an official determination of eligibility to be made (Lewin 2004), as detailed on page 6 (see "Time Elapsed"). While Lewin's analysis found that

Staff Time Consumed by the Application Process

- **Initial screening interviews**, the first stage of the process, in which representatives of health plans, providers, and community-based organizations explain the programs and application process: up to 30 minutes
- **Completion of the application**: for children, generally 10 to 25 minutes; for adults, generally 30 to 45 minutes; for more complex applications, typically those for large families with children and adults applying to different programs, up to 90 minutes
- **Health plan selection**, which often requires staff to explain how managed care works and to review options with applicants: up to 15 minutes
- **Photocopying**, to ensure that government agencies and health plans each have a copy of the application and all required documentation: about 10 minutes
- **Quality control**, to ensure that all application data are correct and consistent, and to verify that all required documentation is present and valid: about 20 minutes
- **Inputting information** into internal databases and tracking it over the course of the application and enrollment process: 5 to 10 minutes per application in simple databases; 15 to 25 minutes in more comprehensive systems
- **Follow-up with applicants**, although usually unnecessary: significant additional time on some applications

⁶ The estimate of one million applications per year is based on United Hospital Fund analysis of enrollment levels and retention rates in New York's public health insurance programs. A full-time equivalent staff position is estimated at 40 hours per week and 50 weeks per year, for a total of 2,000 hours annually.

Time Elapsed in the Enrollment Process

- **Completion of an application**, from initiation during the applicant's first face-to-face interview: 2 to 3 days
- **Completion of an application to submission**: 7 to 9 days, on average, although this varies by program
- **Submission of all paperwork to official determination of eligibility**: 23 to 28 days, except for CHP B*
- **Eligibility determination to notification of enrollment facilitator**: 17 to 22 days

* CHP B applications involve a different process, at this stage, than Medicaid, CHP A, and FHP applications. As of February 2004, CHP B accounted for 8 percent of public insurance enrollment among children and adults in New York City.

several additional weeks pass before initiating organizations are notified of that determination, it was not able to estimate the time it takes for applicants themselves to be notified, as this is not tracked in any official way. That additional time, which affects enrollees' ability to seek needed care, effectively extends the length of the application process.

Despite the complexity of the process, the vast majority of all submitted applications — approximately 93 percent across all programs, for both children and adults — are accepted (Lewin 2004). This is a testament to the skill and dedication of the staff, both in the public and private sector, who guide applicants through the process and determine their eligibility. Among the applications that are denied coverage, many are rejected for reasons unrelated to eligibility. The majority of CHP B rejections are related to missing paperwork or signatures or other application errors. The majority of CHP A denials stem from duplicate applications — the applicant is already enrolled or has an application pending. Duplicates also represent the largest single group, although not the majority, of rejected Medicaid applications.

Potential Benefits of IT Innovation

The potential benefits of IT innovation are substantial and could reduce both the staff resources spent processing applications and the time elapsed during the application process. The extent of these benefits would depend on the level of technology deployed and the range of stakeholders authorized to use it. Allowing private organizations to submit applications electronically, even without the capacity to link with state and city enrollment databases, would produce substantial efficiency gains compared to the current paper-based process. Allowing these organizations to screen applicants for current enrollment or a pending application, by electronically accessing enrollment information from the public sector, would produce further gains. Creation of an electronic data and document repository that allowed private organizations initiating applications to access information and documents relevant to determining eligibility would improve the system's efficiency and effectiveness even more.

Information technology has the capacity to reduce staff time spent on applications by reducing application errors and limiting duplication of effort (Lewin 2004). Common mistakes in completed applications — miscalculations of family income, transcription errors, and omitted documents, for example — can be eliminated by basic software containing math logic, consistency checks, and automatic prompts. Duplicative tasks such as repetitive data entry and photocopying can be instantly eliminated with electronic storage. Ultimately, a system that allows organizations initiating applications to check the enrollment status of an applicant, across all programs, has the potential to eliminate resource-wasting duplicate applications.

Quantifying the likely savings in staff time is difficult, due to both variations in the time required to process a single application and the broad range of IT options available, and the costs of developing and maintaining new IT tools must be counted against efficiency gains. But if IT innovation succeeded in halving the time spent just on data entry, photocopying, and quality control checks — without affecting other stages of the process, including completion of the actual application — it would still save about 30 minutes per application. Under this conservative assumption, a simple form of IT innovation would save a half-million hours of staff time each year — the work of some 250 FTEs at the health plans, providers, and community-based organizations that initiate applications.

Beyond reducing staff time, the switch from a paper-based to an electronic application could further lower administrative costs by eliminating the need for copying, cataloging, filing, storing, and transporting paper documents — an expensive consumption of labor and space. Moreover, those functions are all slow and prone to errors, compared to a system using data scanning, electronic data storage, and electronic transmission.

The clearest measure of the potential benefits of IT innovation, however, is the reduction in time elapsed during the application process. IT innovation that allowed applications to travel electronically, immediately upon completion, to the government agency responsible for determining eligibility — HRA in the vast majority of cases — would instantly eliminate the seven to nine days it now takes between completion and transmittal of new applications (Lewin 2004). Linking an electronic application directly to the systems used to determine eligibility could produce further gains by reducing selected staff responsibilities, duplication of effort, and administrative errors within the public sector.

Learning from Other States' Experiences

About one-third of states now use electronic applications for public health insurance. Eight states allow electronic applications statewide and another eight have regional pilot initiatives in parts of the state (Wysen 2003). Most of these states extend this option only for children's applications, and some with separate Medicaid and SCHIP programs restrict electronic applications to the latter. Some states are equipped to handle transmitted applications in electronic form, while others immediately print them and revert to a paper-based process.

The experiences of three of the first states to implement electronic applications — California, Georgia, and Pennsylvania — highlight the benefits of this administrative strategy and offer helpful lessons for New York. All three, like New York, have separate Medicaid and SCHIP programs and allow electronic applications for both. Pennsylvania allows electronic applications for both child and adult coverage. All three states have

demonstrated the potential for substantial efficiency gains, although electronic applications still represent the minority of all applications received.

Implemented statewide in 2002, California's electronic application for children's coverage is faster, more user-friendly, and more accurate than a paper-based application, according to another evaluation by The Lewin Group. Electronic applications halved processing time for eligibility determinations and reduced administrative errors by 40 percent (Lewin 2001). A broad range of public-sector and community-based staff who process application and eligibility determinations reported that the electronic application improved the process (Lewin 2001).

Unlike other states using electronic applications, California does not permit potential enrollees to apply independent of Certified Application Assistants (CAAs) at community-based organizations and clinics; this limits the volume of applications, especially since the state eliminated payments to these organizations for each completed application that resulted in an enrollment.⁷ Consequently, the state's original target volumes have not been reached (Center for Impact Research 2004). Only about 10 percent of applications for children's coverage — some 3,000 per month — are received electronically, but those applications probably represent a higher share of enrollees: since electronic applications are only transmitted if they are complete, a higher than average share are accepted. By contrast, a significant proportion of paper-based applications are rejected automatically because they arrive for processing incomplete.

Launched in 2001, Georgia's electronic application for children's coverage requires an

average of 24 minutes to complete (Center for Impact Research 2004). Ninety-seven percent of these applications are completed by individuals, rather than community-based organizations acting on their behalf (Wysen 2003). Electronic applications for coverage under SCHIP can be processed electronically within a day of their receipt by the state; by contrast, processing mailed applications takes an average of ten days. While applications for Medicaid coverage can be submitted electronically, they must be converted to paper upon receipt and follow the same eligibility determination process as mailed applications (Center for Impact Research 2004).

During 2003, about 2,500 applications were submitted electronically each month in Georgia, accounting for about 10 percent of all children enrolled in public coverage there. More recently, the share of applications for children's coverage received electronically has increased to about 30 percent.

The Commonwealth of Pennsylvania's Access to Social Services (COMPASS) system has allowed children to apply electronically for public health insurance since 2001 and adults to apply electronically since 2002. The COMPASS system has the advantage of allowing state eligibility staff to use data entered into the electronic application to automatically populate the state's official Medicaid eligibility database (Center for Impact Research 2004). While the state has not released official estimates of efficiency gains from electronic filing, one Medicaid official reported that these applications were clearly more readable and easier to process (Koerner 2004). Applications filed electronically represent between 4 percent and 5 percent of all applications for public health insurance; 95 percent of these were sent directly by individuals (Wysen 2003).

⁷ California paid CAAs \$50 for each accepted application until July 2003.

Enhancing IT Innovation through Policy Reform

Simplifying the application itself — both by allowing electronic signatures and limiting documentation requirements — can enhance the efficiency gains from IT innovation. California and Georgia have implemented some helpful reforms, but both states would likely realize further efficiency gains from additional policy changes. While Pennsylvania’s electronic application system includes adults as well as children, the state appears to limit its effectiveness by continuing to require receipt of paper documents to trigger an official eligibility determination (Center for Impact Research 2004).

California allows CAAs to record applicants’ signatures on electronic tablets; alternatively, applicants can fax signed declarations attesting to the accuracy of their application materials. The state has not eliminated the required documentation of income in favor of self-attestation, however, so individuals using the electronic signature option must still send documents via mail or fax. Unlike other states’ systems, California’s processing system automatically converts faxed documents into digitized data. The system then provides applicants with a fax cover sheet containing a “document control number” that will automatically couple information received via fax with the data transmitted in the electronic application.

Georgia’s use of electronic signatures is often cited as a helpful tool, but the process — which requires applicants to click on an icon indicating acceptance of the state’s terms and conditions — is used only for SCHIP applications. The state’s Medicaid program requires a signature to be submitted on paper within six months but does not prevent a child’s initial enrollment with only an electronic signature (Wysen 2003). Georgia allows self-declaration of income for both

SCHIP and children’s Medicaid applications, so there are no documentation requirements for applicants with U.S. citizenship. This policy facilitates immediate processing; however, Georgia requires premiums for SCHIP enrollees aged six and older, and these must be received to trigger coverage.

Pennsylvania recently allowed select community-based organizations that initiate applications to submit electronic signatures on behalf of potential enrollees (Koerner 2004). The state has not reduced the level of documentation required to support applications, however. Applicants still must send these documents in paper form, via mail or fax, perpetuating the possibility of lost documents, incomplete applications, and processing delays.

The experiences of California, Georgia, and Pennsylvania indicate that several key policy choices influence the number of people applying for coverage electronically and determine how much simpler and more efficient the application process will become. Those choices include the reduction of required documentation to the minimum required by federal law, allowing electronic signatures, ensuring that electronic applications do not revert to paper once received by the agencies determining eligibility, and allowing potential enrollees direct access to applications, rather than requiring enrollment facilitators or other private organizations to apply on their behalf.

Under current federal law, states have considerable flexibility to use electronic applications and the simplification reforms that enhance them, as long as there is an encryption process in place to safeguard the confidentiality of all application material (Centers for Medicare and Medicaid Services [CMS] 2001). The Centers for Medicare and Medicaid Services (CMS), the federal agency that administers Medicaid and SCHIP, has issued official guidance to states on the

simplification of applications, including the elimination of documentation requirements for income, assets, and social security numbers (CMS 2001). For states that continue to require such documentation, CMS recognizes as valid documents transmitted in electronic form to the state agency determining eligibility. CMS also considers electronic signatures valid, as long as they are executed under penalty of perjury and are recognized by state law (Svolos 2004).

Without withdrawing this guidance on simplification and IT innovation, CMS recently issued proposed regulations requiring more frequent — and more stringent — eligibility audits.⁸ This proposal may complicate state policy changes geared toward reducing documentation. Nevertheless, moving towards accepting applications and supporting documentation electronically can streamline states' administrative efforts to comply with the potentially burdensome new federal regulations under consideration.

Bringing IT Innovation to New York

The administration of New York's public health insurance programs has not kept pace with the rapid advances in technology that can facilitate substantial increases in productivity. While a number of ongoing IT initiatives launched in the public sector have the potential to make improvements to the application and enrollment process, they are unlikely to have a transformative effect on the programs' administrative capacity. Public officials at the state and city levels, as well as leaders of the largest private organizations initiating applications, have all acknowledged that converting to electronic applications is a necessity. The challenge is designing and

implementing the best way forward.

New York City's Human Resources Administration is pursuing an ambitious initiative that, if implemented broadly, would bring IT innovation to Medicaid on an unprecedented scale. HRA has retained WebMD to build an IT platform that enables the agency to receive applications and supporting documents electronically and to upload the relevant data onto the state's Welfare Management System (WMS), which supports and records official Medicaid eligibility determinations.⁹ This capacity would ultimately allow HRA to receive electronic applications from private organizations and process them without reverting to paper-based eligibility determinations.

The new IT platform — the Eligibility Data and Image Transfer System (EDITs) — aims to forge a seamless and efficient electronic link connecting WMS, HRA, and private-sector organizations that initiate Medicaid applications. The city's goals for this initiative are to “improve administrative efficiency, reduce data entry duplication, improve the quality of submitted applications, and improve eligibility decision response times” (Eggleston 2004). EDITs builds on HRA's recent experiences in piloting electronic applications for Medicaid's prenatal care assistance program (PCAP) and long-term care (LTC) coverage — the simplest and most complex Medicaid applications, respectively.

The goals of the PCAP pilot initiative were to test an electronic application system's ability to limit the number of in-person visits required by the application process, eliminate worker error, and reduce the staff time involved in processing applications. Under HRA's PCAP demonstration, participating providers electronically transmit applications directly to dedicated computer

⁸ In August 2004, CMS released the proposed rules for Payment Error Rate Measurement (PERM) in Medicaid and SCHIP. In their current form, these regulations would require states to conduct new monthly reviews of eligibility determinations, current enrollment, and claims payments, starting in 2006.

⁹ HRA's original contractor, MedEAmerica, was acquired by WebMD in 1999.

terminals at HRA, terminals that are not linked to other HRA databases or to WMS. Applications typically take one week to process; based on post-enrollment audits, the electronic application and eligibility determination achieve the correct result 98 percent of the time (United Hospital Fund 2001a). Operational for ten years,¹⁰ the PCAP demonstration processes 3,000 applications each month, compared with 1,200 per month before automation, with staff levels remaining constant (United Hospital Fund 2001a).

The PCAP demonstration's 150 percent productivity increase in processing applications is substantial, but it does not capture the full potential of IT innovation. While the PCAP demonstration has allowed HRA to receive applications electronically and process them without reverting to a paper-based process, the application's current electronic architecture is outdated. Consequently, to transfer electronic data from the application and feed it into WMS, HRA must rely on "screen-scraping" technology that is time consuming and prone to error.

HRA's long-term care demonstration project has a different goal than the PCAP demonstration, largely because the volume of new LTC Medicaid applications by elderly and disabled New Yorkers is far smaller, and the eligibility requirements far stricter. Rather than increasing the volume of applications processed or speeding up that process, the LTC demonstration aimed to reduce processing errors and the number of files made incomplete by losses of paper, and to better house application data. By taking data entry and quality control out of eligibility workers' hands and housing all application data electronically, the pilot project met these goals (United Hospital Fund 2001b). At the same time, it demonstrated that even the most complex category of Medicaid applications and

eligibility determinations can be automated successfully.

Building on the PCAP and LTC demonstrations, HRA publicly announced implementation plans for EDITS in September 2004, with deployment scheduled in phases starting in 2005. While the initial rollout will affect PCAP applicants only, it will serve as a concrete test of EDITS as a platform for processing all Medicaid applications electronically. Because the software powering EDITS — as well as the technical specifications for private organizations submitting applications — will be consistent across all groups of potential Medicaid enrollees, the successful implementation of EDITS for PCAP will represent a milestone in IT development for Medicaid in New York City.

Connecting Information Systems

Perhaps the single biggest limitation on the pursuit of IT innovation is the division among the state's public health insurance programs. While Medicaid, CHP A, and FHP are administered by the same state agency and share the same eligibility determination process and enrollment database, CHP B is a separate program. It is administered by a different agency within the state Department of Health and does not share any of the same IT infrastructure or databases. CHP B enrollees — unlike those in Medicaid, CHP A, and FHP — are not recorded in WMS.

This lack of integration has always posed challenges for the enrollment process. Children often must transfer between CHP A and CHP B — when family income varies from one year to the next, for example. Many CHP B enrollees are immediately eligible for

¹⁰ MedEAmerica built and initially maintained the PCAP application processing system; since its acquisition of MedEAmerica, WebMD has maintained the system.

Medicaid or FHP when they reach the CHP B age limit. These transfers require applications to be handled by separate agencies and separate databases, and this unnecessary complexity often results in gaps in coverage and care.

Only in early 2004 did CHP B complete a central enrollee database that can track all its beneficiaries in real time, as well as perform live eligibility checks and screen for duplicate enrollment. This database, called the Knowledge, Information, and Data System (KIDS), compiles all CHP B enrollment and payment records; it is not compatible with WMS beyond an initial eligibility screen, however. KIDS will therefore improve the identification of duplicate enrollments, both within CHP B and between CHP A and CHP B, and will reduce duplicate premium payments. But the state still does not have the capacity to electronically track and seamlessly shift enrollees across all programs when their eligibility status changes. Building an enrollment database that covers all programs — or ensuring that CHP B's enrollment database can interface seamlessly with WMS — is a vital step towards maximizing the potential impact of electronic applications.

Moving Promise into Practice

Because HRA has opted to provide specifications, or guidelines, for submitting Medicaid applications electronically — rather than building a single electronic application tool — private-sector organizations have some flexibility to design electronic applications that are compatible with both EDITS and their own internal information systems. The health plans, providers, and community-based organizations that submit applications on behalf of eligible New Yorkers thus have a unique opportunity to shape IT innovation in New York. Consequently, it is vital to

marshal the collective expertise, experience, and vision of these organizations to consider this challenge not simply from their individual perspectives, but with the goal of driving innovations that have the greatest potential impact on the Medicaid application process as a whole. Each organization acting alone to design an electronic application form would likely produce a significant improvement on the status quo, but those individual approaches would amount to a lost opportunity to reach for more sweeping and comprehensive change.

There appear to be several different ways to build and implement an electronic application tool originating in the private sector; these options vary in their complexity and ambition. In the simplest scenario, a critical mass of submitters, as measured by application volume, would participate in an effort to develop a single shared front-end application tool. Broad use of a single application tool would further increase HRA's efficiency, reduce the agency's burden for troubleshooting and providing technical assistance to submitters, and probably reduce the error rate associated with processing applications. Ideally, the shared application would allow private organizations, some of whom submit thousands of applications each month, to aggregate or "bundle" them in a way that allows multiple applications to be opened and uploaded for processing simultaneously. This would further increase administrative efficiency, once the applications reach HRA, by reducing duplication of administrative tasks associated with opening, sorting, routing, and processing the applications.

Beyond the transmission stage, an electronic application tool could contain a screening process to identify applicants already known to WMS, whose relevant data and documents are already captured in existing city and state databases. Such a screening tool could also identify several types of duplications, including unnecessary new applications by current enrollees, and multiple

live applications from new applicants. In this scenario, which would require the cooperation of HRA and the New York State Department of Health, the electronic application tool would allow submitters to learn in or close to real time which applications are duplicates. Ideally, the screening process would allow organizations to redirect applicants to other organizations that have submitted pending applications for them, enabling individuals to follow up on their own applications. Given the concerns shared by HRA and health plans, which submit the majority of applications, about the administrative costs of initiating and processing invalid duplicate applications, this screening capacity would be a significant upgrade to any electronic application tool.

Ultimately, the most ambitious and far-reaching option would be to build not only an electronic application tool but also an interactive electronic application system, including an electronic data and document repository. A system with the ability to provide feedback to organizations submitting applications — or, ultimately, to applicants themselves — could automatically deliver updates on the status of those applications. A system that collects application data and documents in one place — and allows both HRA and the private organizations submitting applications access to the same information — would improve the efficiency of future electronic applications and renewals to an even greater degree.

Ideally, submitters could access data and documents to assist applicants regardless of which organization initially contributed the information to the repository. One challenge to this vision, however, is addressing the relevant security and privacy issues. Another is ensuring that data can change hands in a manner consistent with all applicable laws

and regulations governing the confidentiality of personal information, including the most recent set of regulations authorized by the Health Insurance Portability and Accountability Act of 1996 (HIPAA).¹¹ Access to data and documents would eliminate the need for each participating health plan, provider, and community-based organization to maintain individual data and document repositories and would reduce the need for applicants to re-document existing information. Allowing HRA to receive a large number of imaged documents from a single well-maintained database could further expedite application processing by reducing errors and inconsistencies.

Bridging the gap from promise to practice, and bringing IT innovation to New York's public health insurance programs on an ambitious scale, involves significant challenges, and there is only so much New York can learn from the experience of other states. In California, Pennsylvania, and Georgia, one notable challenge has been coordination between the different agencies that administer the states' Medicaid and SCHIP programs; another has been coordination between the state, which typically takes the lead role in designing IT innovation, and local governments. In New York, HRA has taken the lead role in IT innovation for Medicaid applications within New York City, laying the groundwork for the development and use of electronic applications.

While this initiative would not include all the city's potential enrollees in public insurance programs, or any applicants in the rest of the state, it potentially allows 90 percent of New York City residents eligible for public coverage — the majority of eligible residents statewide — to apply for coverage electronically. This approach has distinct

¹¹ Federal, state, and local laws and regulations governing the possession, handling, transmission, and storage of personal information are complex and require a detailed review to assess the current limits of various electronic application systems.

advantages in terms of reaching a large number of New Yorkers efficiently, but poses challenges unlike those faced by other states. In particular, it allows the private sector to determine whether IT innovation will become a competitive endeavor between health plans, which compete for Medicaid enrollees, or a collaborative effort to simplify and streamline the application and enrollment process for all eligible New Yorkers.

Because private-sector organizations that submit applications will play the lead role in IT development in New York City, within the ground rules set by HRA in EDITS, it is crucial that they consider the technical

challenges and opportunities on a system-wide level. Promoting the broadest public interest — driving permanent and transformative change in the administration of New York's Medicaid program — requires that a critical mass of these private organizations engage in IT planning and development that goes beyond their individual needs. If that challenge can be met, IT innovation has the potential to help hundreds of thousands of eligible city residents gain Medicaid coverage, by making the Medicaid application and enrollment process more efficient and effective.

References

- Bachrach D and A Tassi. 2000. *Coverage gaps: The problem of enrollee churning in Medicaid Managed Care and Child Health Plus*. New York: Kalkines, Arky, Zall and Bernstein, LLP.
- Birnbaum M and D Holahan. 2003. *Renewing coverage in New York's Child Health Plus B program: Retention rates and enrollee experiences*. New York: United Hospital Fund.
- Center for Impact Research and Heartland Alliance's Mid-America Institute on Poverty. 2004. *Applying online: Technological innovation for income support programs in four states*. www.impactresearch.org/documents/applyingonline.pdf Accessed Nov. 22, 2004.
- Centers for Medicare and Medicaid Services. 2001. *Continuing the progress: Enrolling and retaining low-income families and children in health care coverage*. www.cms.hhs.gov/schip/outreach/progress.pdf Accessed Nov. 22, 2004.
- . 2003. Net reported Medicaid and SCHIP expenditures, FFY 2001. www.cms.hhs.gov/medicaid/mbes/sttotal.pdf Accessed Nov. 22, 2004
- Eggleston V. 2004. Testimony by New York City Human Resources Administration commissioner before the New York City Council Committee on General Welfare and Finance, May 20.
- Fairbrother G, M Dutton, D Bachrach, K Newell, P Boozang, R Cooper. 2004. Costs of enrolling children in Medicaid and SCHIP. *Health Affairs* 23(1): 237-243.
- Hill I and A Westpfahl Lutzky. 2003. *Is there a hole in the bucket? Understanding SCHIP retention*. Washington, DC: Urban Institute.
- Holahan D, A Ely, K Haslanger, M Birnbaum, E Hubert. 2004. *Health insurance coverage in New York, 2002*. New York: United Hospital Fund.

Koerner J. 2004. Telephone interview with director, COMPASS, Division of Health Services, Pennsylvania Department of Public Welfare, April 19.

The Lewin Group. 2001. *Business case analysis of Health-e-app: A web-based enrollment application for public health insurance programs*. Falls Church, VA: The Lewin Group.

———. 2004. *Electronic applications present opportunities to improve enrollment into New York's public health insurance programs*. Falls Church, VA: The Lewin Group.

New York City Human Resources Administration. 2004. *Recommendations on public health insurance reform*. New York: New York City Human Resources Administration.

Svolos M. 2004. Telephone interview with director, Division of Eligibility, Enrollment, and Outreach, Center for Medicare and Medicaid Services, April 19.

United Hospital Fund. 2001a. Interviews with staff of PCAP eligibility processing unit, Medical Assistance Program, New York City Human Resources Administration, August 7.

———. 2001b. Interviews with staff of LTC eligibility processing unit, Medical Assistance Program, New York City Human Resources Administration, August 7.

Wysen K. 2003. *Public access to online enrollment for Medicaid and SCHIP*. Oakland: California HealthCare Foundation.

Current Publications

Bioethics Mediation: A Guide to Shaping Shared Solutions

“Required reading for bioethics consultants and members of ethics committees,” says *The Lancet* (8/21/04) of this new book by Nancy Neveloff Dubler and Carol B. Liebman. The book provides the theory, practice, and reality-based tools needed to resolve the medical care disputes entangling patients, family members, physicians, and other health care professionals today.

2004 256 pages \$39.95

Enrolling in New York State’s EPIC Program: Lessons from the Field

Hundreds of thousands of elderly New Yorkers are eligible for but unenrolled in New York’s prescription drug program, finds this United Hospital Fund report, which advances proposals for improving outreach and enrollment efforts.

2004 No charge*

Estimating the Cost of Enrolling New York City’s Eligible but Uninsured Adults in Medicaid

How much would it cost to enroll the half-million New York City adults who are eligible for Medicaid but uninsured? About 40 percent less than the cost of providing a full year of coverage to the average non-disabled, non-elderly adult Medicaid enrollee, according to this new study.

2004 No charge*

Family Caregivers on the Job: Moving Beyond ADLs and IADLs

This volume captures a year’s worth of fruitful debate among experts convened from around the country to analyze the limitations of ADLs and IADLs as descriptions of just what family caregivers do, and to explore alternative tools.

2004 \$20

A Good Place to Grow Old: New York’s Model for NORC Supportive Service Programs

This report from the Fund’s Aging in Place Initiative describes a new model of care for the elderly — supportive service programs based in naturally occurring retirement communities. Exploring the programs, funding, and underlying partnerships, the report also discusses the model’s applicability to other communities throughout the country.

2004 \$20

Health Insurance Coverage Among Workers and Their Dependents in New York, 2001-2002

Solutions to the problem of New York’s uninsured must include low-income workers and their dependents. This new report, co-published with the Urban Institute, provides data on the characteristics and coverage patterns of the uninsured, as a first step toward developing specific proposals for covering them.

2004 No charge*

Health Insurance Coverage in New York, 2002

Using the most recent data, this snapshot of New York’s uninsured looks at income, employment status, age, race/ethnicity, and citizenship status, and includes data on coverage for workers and trends in public health insurance coverage in New York City.

2004 No charge*

Lessons from States with Self-Declaration of Income Policies

Based on a survey of officials in twelve states, this working paper explores one particularly promising strategy for simplifying public health insurance programs: allowing applicants to attest to their income instead of submitting documentation.

2004 No charge*

*Available online at <http://www.uhfnc.org>

For information on ordering these and other Fund publications ☎ call toll-free, (888) 291-4161, or visit the Fund’s web site at <http://www.uhfnc.org>. American Express, MasterCard, and Visa accepted. Checks, made payable to United Hospital Fund, should include postage and handling (see chart) and be mailed to:

United Hospital Fund
c/o WC
100 Newfield Avenue
Edison, NJ 08837

Shipping and handling charges	
Order amount	Charge
Up to \$40.00	\$3.50
\$40.01–\$99.99	5.00
\$100.00 and over	7.50

Copyright 2004 by the United Hospital Fund

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise (brief quotations used in magazine or newspaper reviews excepted), without the prior written permission of the publisher.

Printed in the United States of America.

ISBN 1-88127-7763

For further information, write to the Publications Program, United Hospital Fund, 350 Fifth Avenue, 23rd Floor, New York, NY 10118-2399.

Additional copies of *Bringing Information Technology Innovation to New York's Public Health Insurance Programs* may be downloaded, at no charge, from the United Hospital Fund website, www.uhfny.org, where additional information is available on the Fund's Health Insurance Studies Project and other Fund programs and initiatives.



 **United
Hospital Fund**

*Shaping New York's Health Care:
Information, Philanthropy, Policy.*

Empire State Building
350 Fifth Avenue, 23rd Floor
New York, NY 10118
(212) 494-0700
<http://www.uhfnyc.org>

ISBN 1-881277-76-3

