This *State Health Policy Briefing* highlights the state of Oklahoma, which recently implemented an electronic enrollment system for newborn children in its hospitals. By replacing a paper-based enrollment process with an electronic system, Oklahoma has been able to improve efficiency and program analysis, streamline billing, facilitate the establishment of medical homes, and reduce administrative costs. The lessons learned through the development and implementation of its electronic newborn enrollment system have proved valuable as the state looks toward planning to enroll the large number of newly eligible beneficiaries as a result of federal health reform.

Electronic Enrollment of Newborns into Medicaid: Insights from Oklahoma

BY CHRIS CANTRELL

In March 2010, President Obama signed the Patient Protection and Affordable Care Act into law, expanding Medicaid coverage to a large new pool of previously ineligible Americans during the next decade.[1] As a result of this historic legislation, individuals up to 133 percent of the federal poverty level (regardless of categorical relationship) will be eligible for Medicaid. This dramatic expansion of coverage will create new administrative challenges for states as they begin to grapple with a large influx of Medicaid enrollees in an environment of shrinking staffs and significant budget shortfalls.

The disadvantages of paper-based enrollment systems have led many states to shift some of their program's administrative functions to electronic systems. Current paper-based enrollment systems are convoluted and expensive, and divert time and money to tasks that could be handled by a computer-based electronic system. Furthermore, paper-based systems do not allow for feedback and real-time analysis, crippling states' ability to nimbly assess their programs. Recognizing the inefficiencies of paper-based enrollment processes, some states have implemented electronic systems designed to use limited resources while expediting enrollment for eligible individuals. Through the use of electronic enrollment systems, states have an opportunity to improve

efficiency and program analysis, streamline billing, facilitate the establishment of medical homes, and reduce administrative costs.

The process for enrolling newborns into Medicaid is particularly ripe for improvement. By using health information technology, states can reduce the processing time for newborn Medicaid registration to seconds. Since federal law requires that a baby born to a woman who is enrolled in Medicaid be deemed eligible and automatically enrolled, much of the delay in the newborn registration process is unnecessary if a mother is identified as a Medicaid beneficiary.[2] Electronic enrollment systems remove the delay in newborn registration, which is largely due to the logistics of filling out documents and faxing paperwork.

This issue brief will highlight the state of Oklahoma, which is a leader in utilizing health information technology and has recently implemented an electronic enrollment system for newborn children in its hospitals. The state has achieved success with its electronic newborn enrollment system and gained valuable experience that can be translated to other areas of the health care system. The lessons learned through the development and implementation of its electronic newborn enrollment system have proved valuable as the state looks toward planning to enroll the large number of newly eligible beneficiaries as a result of federal health reform. In addition, state officials who are concerned with rising administrative costs may see electronic enrollment systems as a potential cost-savings mechanism.

SPOTLIGHT: OKLAHOMA HEALTH CARE AUTHORITY[3]

The Oklahoma Health Care Authority, which oversees SoonerCare, the state's Medicaid program, implemented an electronic newborn enrollment process for its hospitals in 2008. The implementation was a migration from the paper-based registration to an entirely electronic registration. **Figure 1** depicts an overview of the differences in process between the two registration methods used by the Authority before and after implementation of the electronic system.

PROGRAM DEVELOPMENT

The electronic enrollment system was developed as a result of a collaboration between the Oklahoma Health Care Authority, the Oklahoma Department of Human Services, and Electronic Data Systems (EDS).[4] The Authority convened focus groups through the development phase of the project to work out glitches and improve the design of the application interface. The focus groups were composed of selected staff from hospitals in Oklahoma who would be using the software application after implementation. EDS created a framework for the application, which was then tested at several hospitals to gain feedback. The testing phase not only allowed for troubleshooting technical glitches, but also gave a limited number of providers hands-on experience with the new system. The entire development phase amounted to two years worth of work, spread over the span of four years to allow adequate time for both the Authority and the Oklahoma Department of Human Services (DHS) to modify their systems to accommodate the new process.

FIGURE 1: OVERVIEW OF OKLAHOMA'S NEWBORN ENROLLMENT PROCESS, BEFORE & AFTER

	Oklahoma's Paper-Based Process	Oklahoma's Electronic Process
Recording of Newborn's Information	Hospital records limited information about newborn on a paper registration form, which is sent via fax to the Department of Human Services.	Hospitals enter newborn's information into an electronic software interface.
Assignment of Medicaid ID Number	Medicaid ID card mailed home after paper form has been received and entered into the system.	Medicaid ID issued at the hospital in real-time, with a permanent card mailed home in about a week.
Billing of Hospital Services	Services provided to newborn in the hospital are not billable until the newborn is added to the case.	Services provided to the newborn in the hospital are immediately billable under the newborn's Medicaid ID.
Primary Care Provider Selection	Newborn's mother is mailed a paper form to select a primary care provider.	Newborn's mother selects a primary care provider while still in the hospital.
Average Processing Time	14-21 Days	3.5 Days

Rollout of the new system at the state's hospitals occurred gradually so that issues could be addressed in the system as they arose. Implementation initially started with four pilot hospitals in April 2008, but was then expanded to all hospitals in the state several months later.[5] The Authority worked with the top hospitals in the state to develop a training program to educate providers on the new system. Currently, 60 of the state's 80 hospitals have implemented the new system.[6] Since the initiative began, more than 21,000 babies have been enrolled into SoonerCare through this process, with 2,000 newborns being enrolled each month. The implementation of the electronic newborn enrollment system has been positively received by both providers and consumers throughout the state.

IMPROVED EFFICIENCY & PROGRAM ANALYSIS

Since implementing the new system, Oklahoma has been able to drastically improve the efficiency of its enrollment services for newborns. Before the new system, hospitals had to fax paper registration forms for newborns, delaying enrollment and the assignment of a Medicaid ID number to the child. There was also more room for error with the paper-based registration, increasing the probability of delays in registration. The new electronic system removes the need to physically fax paperwork to the Department of Human Services and reduces the chance for errors at the same time. The electronic system also extracts the newborn's hospital birth records so that verification of citizenship is easier when the registration is processed. As a result of this increased efficiency, the average processing time for newborn babies has been reduced from 14-21 days to 3.5 days.

Another issue the Authority addressed in its development of the electronic enrollment system was that paper-based systems do not allow for real-time analysis and feedback. Since electronic systems possess capabilities for tracking the status of eligibility requests, the Authority integrated those features into its program.

IMMEDIATE BILLING OF SERVICES

The new electronic system has also greatly improved the process for billing services for newborns. Under the paper-based system, services could not be immediately billed for the child at the hospital because the child lacked a Medicaid ID number. Due to the lag in processing time, it could sometimes take several weeks before a child received a Medicaid ID number. Consequently, hospitals had to go back and

look at the services the child used to make sure that they were eventually billed properly after the child had obtained a Medicaid ID number. Also, hospitals had to keep checking eligibility to see if the child had been added. Without the real-time response that the electronic system provides, hospitals might wonder if the Oklahoma DHS had ever received the paper forms.

When a child is born now, the child is assigned a temporary Medicaid ID number and a temporary ID card, which allows for the immediate billing of services. The child's permanent ID card is usually mailed within a week. Hospital staff are now able to bill for services provided to newborns while they're still in the hospital, saving time for administrative staff and removing the need to retroactively bill for services.

FACILITATING ESTABLISHMENT OF MEDICAL HOMES

Another important aspect of the electronic system implemented by Oklahoma is the ability for the mother to choose a primary care provider for the infant while still in the hospital. Before, the Authority would mail a paper form to mothers, prompting them to select a primary care provider. The Authority would assign a primary care provider automatically in the event that the mother did not select one within 45 days.[7] In the old system 25 percent of infants were auto-assigned a primary care provider each year.[8]

The new electronic system presented an elegant solution to this problem, which allows mothers to select a primary care provider for their child before checking out of the hospital. The system's primary care provider search function only displays providers who have room for new Medicaid patients. This helps ensure that the child will be matched with a provider who can actually see them. As a result, mothers are able to establish a medical home for their child much faster than was previously possible. The system is also able to join the mother to the newborn's case file, which helps with outreach and follow-up to make sure the mother and child are getting the services they need.

REDUCED ADMINISTRATIVE COSTS

With respect to cost savings, the electronic application has a two-pronged effect. The elimination of paper-based forms alone saves the state the expense of using large quantities of paper. In addition, staff time spent filling out and faxing applications is also reduced for both the hospital and the Oklahoma DHS. Thanks to the electronic enrollment system, hospital staff can now complete a newborn's registration in

less than five minutes. Since hospitals are also able to immediately bill for services provided to newborns under a temporary Medicaid ID number, they save the time they would have spent retroactively processing these claims.

Taken together, these two effects result in a significant reduction in the administrative costs associated with enrolling newborns into Medicaid and billing for services provided to them. One study estimates that providers see a 50 to 75 percent reduction in transaction costs as a result of utilizing an electronic claims system.[9]

In Broader Context

In a state like Oklahoma, where Medicaid covers more than half of all births in the state, the electronic newborn enrollment system has the potential to make a tremendous impact.[10] By integrating health information technology into its newborn enrollment process, the state has been able to increase the efficiency and functionality of its Medicaid program. The development of the electronic newborn enrollment system also exposed the state to the larger world of real-time web services, opening the door for future enhancements across other areas within Oklahoma's healthcare system.[11]

With the creation of new federal funding streams, states now have more incentives than ever to adopt this sort of health information technology. In February 2009, President Obama signed into law the American Recovery and Reinvestment Act (ARRA), allocating nearly $20 billion to new investments in health information technology.[12] These investments provide states with the opportunity to improve and develop the technology infrastructure surrounding their health care systems. While health reform establishes a higher level of income for Medicaid coverage in many states, funding opportunities like those in ARRA provide the funding incentives for investment in technology to make enrolling those populations faster and easier.

Endnotes

1 *Patient Protection and Affordable Care Act*, Public Law 111-148, U.S. Statute at Large (2010).

2 42 USC §1396a(4)

3 Interview with Richard Evans, Derek Lisa, and Janet Scott of the Oklahoma Health Care Authority.

4 Electronic Data Systems (EDS) is a fiscal agent of the Hewlett Packard Company, which provides the technology behind the newborn enrollment systems for several states. EDS is now known as HP Enterprise Services.

5 Kim Archer, "Online plan cuts Medicaid sign-up time," *Tulsa World (OK)*, Aug. 22, 2008.

6 20 of the hospitals in Oklahoma do not serve infants, although they have access to the electronic enrollment system in the event of emergency births.

7 Prior to the electronic system, the Authority also had no way of identifying which female was the mother of the child, in the event there was more than one female of childbearing age on the case file.

8 Hewlett Packard, "Automation Improves Care Delivery," Driving Breakthrough Quality in Health and Life Sciences: A Special Supplement to Transforming Your Enterprise Magazine, Spring 2009.

9 UnitedHealth, *Coverage for Consumers, Savings for States: Options for Modernizing Medicaid*, (Minnetonka, MN: UnitedHealth Center for Health Reform & Modernization, April 2010).

10 Kim Archer, "Online plan cuts Medicaid sign-up time"

11 Other states have implemented similar programs, such as Wisconsin, Georgia, and Louisiana.

12 Kaiser Commission on Medicaid and the Uninsured, *American Recovery and Reinvestment Act (ARRA): Medicaid and Health Care Provisions*, (Washington, D.C.: The Henry J. Kaiser Family Foundation, March 2009).

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