

## **Emerging Health Information Technology for Children in Medicaid and SCHIP Programs**

*The Children's Partnership and The Kaiser Commission on Medicaid and the Uninsured*

### **Executive Summary**

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## EXECUTIVE SUMMARY

This *E-Health Snapshot* highlights promising state health information technology (HIT) activities carried out through Medicaid and State Children's Health Insurance Program (SCHIP), with a specific focus on those that benefit children. HIT solutions can support systemic improvements and help address persistent health challenges facing America's children. Because Medicaid and SCHIP serve more than a quarter of all American children, HIT efforts in these programs have a significant impact on children's health care.

This report finds that states are innovators, utilizing HIT in their Medicaid and SCHIP programs across the range of program functions, from outreach and enrollment, and service delivery and care management to communications with families, and broader program planning and improvement. Though many of these HIT efforts are still in their infancy and data on their impact is limited, early findings indicate improvements in access to care, care coordination, case management, and administrative efficiency.

This Snapshot is not an exhaustive summary of Medicaid and SCHIP HIT activity, but rather a sampling of efforts that offer states a range of replicable, promising approaches to improve children's health (see Appendix A: "Examples of State Medicaid and SCHIP HIT Efforts" for an overview of profiled efforts). Based on interviews with state HIT leaders and national experts, it introduces policymakers, program planners, and other key stakeholders to the variety of HIT opportunities available to improve Medicaid and SCHIP and provides a roadmap for moving ahead with new HIT tools.

### **Overview of State Medicaid and SCHIP HIT Efforts to Improve Children's Health Care**

#### ***HIT in Outreach, Enrollment, and Renewal Practices***

*There has been significant state activity around using HIT to simplify Medicaid and SCHIP application, enrollment, and renewal practices.* For example, many states provide online applications and use the Internet to convey program and eligibility information to families. See the earlier "[E-Health Snapshot: Harnessing Technology to Improve Medicaid and SCHIP Enrollment and Retention Practices](#)" for an overview of state HIT efforts to simplify Medicaid and SCHIP enrollment and renewal processes.

*There is growing state interest in using HIT to support targeted outreach to uninsured but eligible children.* Oklahoma, for example, is building an online Medicaid enrollment Web site and providing computer kiosks in community locations, such as Food Stamp offices and hospitals. South Carolina used its data system to target outreach to uninsured children using emergency rooms and found that the effort led to a 30% reduction in emergency room use by uninsured children the following year. Florida is running data checks to identify and target outreach to Food Stamp households that contain children who are not enrolled in Medicaid.

*Less pervasive but promising approaches also include using data exchange to facilitate automatic or ex parte enrollment or renewals.* Pennsylvania, for example, automatically transfers eligibility information between Medicaid, SCHIP, and adultBasic (the state's program for low-

income, uninsured adults). This transfer takes place when a person applies and also when an enrollee loses eligibility in one program but qualifies for another. The data transfer has led to a significant increase in referrals between the program agencies. Washington uses information families routinely give to update or recertify Food Stamps or cash assistance to automate Medicaid renewal, and Utah is launching a new system that will automate eligibility determinations for multiple programs, including Medicaid. Massachusetts is building the capacity to instantly certify and/or verify birth records within the state and across state lines to assist in meeting documentation requirements under the Deficit Reduction Act of 2005.

## ***Quality Improvement and HIT***

*Some states are using HIT to improve quality of care for children by facilitating communications and data sharing across agencies and providers.* Arkansas, Rhode Island, New Jersey, Hawaii, and Wisconsin all have been developing data systems that can be accessed by providers to obtain patient information such as medical histories and service utilization. In Rhode Island, one health center that incorporated the data system into its workflow had 95% of its children up-to-date on immunizations compared to the statewide average of 72%. ER clinicians in Wisconsin report that data sharing is allowing them to identify patients repeatedly using the ER and refer them for case management services. Beyond data sharing, Arkansas is also using its data system to provide higher reimbursement to physicians with higher EPSDT screening rates, and, in the first year, it experienced an 8% increase in EPSDT screenings. Similarly, Hawaii plans to use data from the system to provide feedback to providers on their EPSDT performance.

*HIT is also being utilized to improve providers' ability to evaluate children's health needs and provide appropriate and effective care.* Indiana is using a Web-supported mental health assessment tool for children and adolescents to enable providers to use more objective standards to assess needs and make treatment decisions. In its first year of operation, 30,000 children and youth were screened using the tool, and the state is factoring findings regarding levels of need for wraparound services into program and budget planning. New Mexico is developing a statewide e-prescribing program, and Utah is using Medicaid claims data to identify inappropriate medication use and design evidence-based recommendations for care.

*Some states are using HIT tools to meet the needs of specific vulnerable pediatric populations.* The state of Texas and the county of Milwaukee, Wisconsin both created electronic health records that facilitate information sharing and medical services coordination for children in foster care. The coordinated services in Milwaukee have been credited with reducing the average daily census of children in long-term residential placement by 60%—from 364 per day to fewer than 140 per day. Vermont is developing a Web-based clinical information system to manage and evaluate care for the chronically ill.

## ***Increasing Connections and Communications with Families through HIT***

*Many states are beginning to use HIT to provide services to families in new ways and help them manage their children's health.* California created a statewide telemedicine network to improve access to health care in rural areas. The network currently supports 65 telemedicine sites and was

used in nearly 2,000 patient encounters in 2006. Oregon is trying to enhance patient engagement in care by creating a robust, clinical personal health record that the family controls.

*HIT is also helping states educate families about their health.* Vermont created a community health Web resource with information about chronic disease, health maintenance, and mental health and substance abuse as well as other concerns. Planning is underway to use this resource as a means for providing disease management tools. As part of a broader HIT effort, Wyoming is reimbursing providers for educating patients about wellness, prevention, and disease management, and is distributing education and billing materials electronically to encourage providers to take on this role. Following implementation in 2007, pediatricians in Wyoming are making 65% more referrals to the state's case management and health coaching program.

### ***HIT and Program Evaluation, Improvement, and Modernization***

*Some states are using HIT to assist in program planning and undertaking significant system redesigns as a step toward modernizing their programs.* South Carolina uses data from a broad cross-agency statistical data warehouse to evaluate the impact of public services at a population level and to design program improvements. Arizona and Alabama are constructing statewide electronic health systems that will not only include electronic health records, but also build in data-driven, outcome-focused quality improvement and clinical decision support tools.

### **State Strategies for Moving Forward with HIT**

While HIT innovations have the potential for significant program improvements and long-term cost-savings, states interested in pursuing new efforts face a number of challenges. Following are some key lessons learned from state experience in moving forward with HIT efforts.

*Federal funding has been essential for states to move forward with HIT efforts.* One of the primary financing resources upon which states have relied is federal funding available through Medicaid grants (particularly the recent Medicaid Transformation Grants) and administrative matching funds. Some states also obtained funding through grants from other federal agencies (such as the Centers for Disease Control and Prevention and the Maternal and Child Health Bureau), private organizations, and through funds generated from licensing, sales, or usage fees for HIT components. States also pointed to the importance of identifying potential long-term cost-savings to help make the case for the up-front investment, and continuing to push for strategic use of HIT even in lean budgetary times.

*States can leverage available assets to further an HIT effort.* Where possible, states can build and expand on their existing systems, including Medicaid Management Information Systems (MMIS), immunization registries, and even paper-based records that can be scanned to become electronic. States can also structure their financing policies to support HIT initiatives, for example, by providing incentive payments or adequately reimbursing services such as telemedicine visits. Further, states can benefit from other states' experiences, not only by sharing ideas, but by using and sharing open source tools.

*Strong leadership at all levels of government, across agencies, and among both private and public sectors, is necessary to get Medicaid and SCHIP HIT efforts off the ground.* Profiled

states highlighted the importance of engaging key leaders and policymakers and involving all stakeholders from the early stages, including private and public sector perspectives and those that represent children's specific interests. They also pointed to the need to establish reasonable expectations with realistic timelines and to assure that staffing levels are sufficient to meet the demands of a new HIT effort. Finally, it was noted that HIT efforts can be deployed in phases as a way of rolling out an effort at a manageable speed.

*States should address the unique privacy needs of children as they design their HIT effort.*

In some cases, states may need to evaluate and modify state law to remove any outmoded or inconsistent barriers to secure data exchange. To assure privacy protections and program components meet patient needs, it is also important to involve patients, including parents, from the beginning of designing an initiative and to educate parents and other patients about the potential benefits of the HIT effort as well as their rights and protections.

## **Role of Federal Leadership and Support**

The federal government has an important role to play in facilitating state HIT efforts, as demonstrated by the tremendous boost that Medicaid Transformation Grants gave to technology innovation over the past two years. States pointed to the flexible nature of these funds as being key to supporting recent HIT innovations. Additional flexible federal funding would likely spur continued action and innovation in this area. Enhanced federal match funding is another effective way to encourage state activity—enhanced funding for MMIS systems gave many states the impetus to renovate those systems. HIT activity could also be supported by clarified federal law and guidance that helps states use funding from other federal agencies to support HIT in Medicaid and SCHIP and increased federal support for evaluation of state HIT activity. Finally, continued enforcement and clarification of patient privacy laws could help assure that states incorporate consistent privacy protection measures into their HIT efforts.

## **Role of Private Leadership and Support**

Cooperation between the private and public sectors is key to the success of state HIT efforts. Private partners include foundations, consumer advocates, providers, plans, and vendors, all of whom have skills and resources that can help move an HIT effort forward. Specifically, state experience has demonstrated that private partners can: help states fund their HIT efforts; participate in public HIT efforts as a central partner; create usable software and other products that can help Medicaid and SCHIP programs; and support evaluation of HIT innovations.

## **Conclusion**

States are utilizing a wide array of innovative HIT efforts in their Medicaid and SCHIP programs to: improve their ability to reach, enroll, and retain eligible children; improve the quality of care delivered to children through the programs; communicate with families in new ways; and evaluate and modernize their programs. Federal leadership, including funding, is key to supporting state HIT efforts, but state leaders are pursuing a range of strategies to overcome financing and other challenges in order to implement and sustain new HIT innovations.

## Appendix A: Examples of State Medicaid and SCHIP HIT Activity

State	Project Name and Web Address	HIT Functionality	Implementation Status	Population Reached	Primary Start-Up Funding Source
<b>Outreach, Enrollment, and Renewal Practices</b>					
Florida	Targeted Outreach Practice <a href="http://www.dcf.state.fl.us/ess/">http://www.dcf.state.fl.us/ess/</a>	Cross-program data matching for enrollment purposes	Launched in 2008 and performed twice	Children in Food Stamps who are not enrolled in Medicaid	State funds with federal Medicaid administrative matching funds
Massachusetts	Secure Verification of Citizenship <a href="http://mass.gov/masshealth">http://mass.gov/masshealth</a>	Automation of vital records verification	First data match done Sept. 1, 2008	Medicaid applicants	Medicaid Transformation Grant
Oklahoma	Medicaid Transformation Grant <a href="http://www.okhca.org/">http://www.okhca.org/</a>	Online enrollment, eligibility processing, and data sharing across agencies	Planned launch October 2009 (for pregnant women and children)	All persons in or applying to Medicaid, SCHIP, the state behavioral health program, and Insure Oklahoma (for uninsured adults)	Medicaid Transformation Grant
Pennsylvania	HealthCare Handshake <a href="http://www.compass.state.pa.us">http://www.compass.state.pa.us</a>	Automated eligibility referral and data exchange across agencies	Launched March 2008 in 5 counties; Launched statewide 10/13/08	All persons in or applying to Medicaid, SCHIP, and adultBASIC (for uninsured adults)	State funds with federal Medicaid and SCHIP administrative matching funds
South Carolina	Statistical Data Warehouse <a href="http://www.ors.state.sc.us/default.htm">http://www.ors.state.sc.us/default.htm</a>	Health Information Exchange, integrated data system, and statistical research database	In operation since 2004	Any person who received services from any of the agencies linked into the integrated data circle	Private foundation funding
Utah	Electronic Resource and Eligibility Product (eREP) <a href="http://www.utahclicks.org">http://www.utahclicks.org</a>	Eligibility system with data brokering system allowing for automated back-end eligibility determination	Limited launch October 2008; Full launch planned for July 2009	Families that participate in Medicaid, Head Start, SCHIP, and maternal child health programs	State funds with enhanced federal matching funds (from multiple agencies)
Washington	Renewal Practice in Medicaid <a href="http://www.dshs.wa.gov/">http://www.dshs.wa.gov/</a>	Automated renewal through cross-program data sharing	Procedure in place since 2000	All children enrolled in Medicaid and Food Stamps and/or TANF	State funds with enhanced federal Medicaid matching funds
<b>Promotion of Quality of Care</b>					
Arkansas	Medicaid Information Interchange <a href="http://www.afmc.org/amii">http://www.afmc.org/amii</a>	Medicaid claims-based electronic health record	Launched Spring 2007; Currently, over 400,000 patients are in the system	Medicaid beneficiaries enrolled in managed care	State funds with federal Medicaid administrative matching funds

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<b>Promotion of Quality of Care (Continued)</b>					
Hawaii	Medicaid Transformation Grant <a href="http://www.med-quest.us/">http://www.med-quest.us/</a>	EPSDT-focused electronic registry	Planned launch Fall 2008	Children enrolled in Medicaid	Medicaid Transformation Grant
Indiana	Indiana Behavioral Health Assessment System, Child and Adolescent Needs and Strengths tools (CANS) <a href="http://ibhas.in.gov">http://ibhas.in.gov</a>	Information collection and analysis to develop objective mental health assessment standards	Launched July 2007 statewide; Integrated with Medicaid January 2008; In the process of developing outcomes measures	Children and adolescents who are served by the public mental health system	Community Alternatives to Psychiatric Residential Treatment Facilities Demonstration Grant from CMS
New Jersey	New Jersey Electronic Medical Information for Children (NJ e-MedIC) <a href="http://www.state.nj.us/humanse rvices/health_care.html">http://www.state.nj.us/humanse rvices/health_care.html</a>	Pediatric immunization and lead registry-based clinical record system with link to eligibility data	Still in development; No launch date set	Children in Medicaid and SCHIP	Medicaid Transformation Grant
New Mexico	Medicaid Transformation Grant <a href="http://www.hsd.state.nm.us/mad/madTransformationGrants.html">http://www.hsd.state.nm.us/mad/madTransformationGrants.html</a>	E-Prescribing	No launch date set for pilots, awaiting agreement between the coalition partners	Demonstration project to benefit Medicaid and other patients of about 180 participating physicians	Medicaid Transformation Grant
Rhode Island	KIDSNET <a href="http://www.health.ri.gov/family/kidsnet/index.php">http://www.health.ri.gov/family/kidsnet/index.php</a>	Electronic child health information system	Implemented in 1997	All children in the state	Immunization funding and grant funding from the Centers for Disease Control and Prevention (CDC); State System Development Initiative from the Health Resources Admin. (HRSA)
Texas	Electronic Health Passport for Foster Care <a href="http://www.hhs.state.tx.us/medicaid/FosterCare_FAQ.shtml">http://www.hhs.state.tx.us/medicaid/FosterCare_FAQ.shtml</a>	Cross-agency electronic records system	Launched April 2008, statewide	All 30,000 foster children in the state	Medicaid Transformation Grant
Utah	Utah Pharmacotherapy Risk Management system (ePRM) <a href="http://www.health.utah.gov/medicaid/pharmacy/">http://www.health.utah.gov/medicaid/pharmacy/</a>	Predictive modeling using Medicaid data to develop evidence base for pharmacotherapy	Launched April 2007	Medicaid recipients	Medicaid Transformation Grant
Vermont	Web-based Clinical Information System (WBCIS) <a href="http://healthvermont.gov/blueprint.aspx">http://healthvermont.gov/blueprint.aspx</a>	Web-based clinical information system	WBCIS launched for pilot site use Oct. 2008	All patients in Patient Centered Medical Home practices	State funds

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Wisconsin	Wisconsin Health Information Exchange ED Linking System <a href="http://www.whie.org/edlink.html">http://www.whie.org/edlink.html</a>	Electronic health record for emergency department use	Launched March 2008. Link to Medicaid claims system planned to launch Nov. 24, 2008	Users of Milwaukee area emergency departments	Medicaid Transformation Grant
Wisconsin	Wrap Around Milwaukee <a href="http://www.county.milwaukee.gov/WraparoundMilwaukee7851.htm">http://www.county.milwaukee.gov/WraparoundMilwaukee7851.htm</a>	Web-based electronic record system linking data across agencies	Software in use since 1999	Milwaukee children and youth at risk of institutional placement	Grant funding from the Center for Mental Health Services
<b>Connections and Communications with Families</b>					
California	Rural Health Demonstration Project <a href="http://www.oshpd.ca.gov/rhpc/">http://www.oshpd.ca.gov/rhpc/</a>	Telemedicine network	Launched in 1999. Currently functioning in 65 telemedicine sites in 28 counties	Children enrolled in SCHIP, particularly those living in rural communities	State funds with enhanced federal SCHIP matching funds
Oregon	Health Record Bank of Oregon <a href="http://healthrecordbank.oregon.gov/">http://healthrecordbank.oregon.gov/</a>	Personal health record system	Still in development; No launch date set	All persons enrolled in Medicaid	Medicaid Transformation Grant
Vermont	"Diseases and Prevention" Web site <a href="http://healthvermont.gov/prevention/index.aspx">http://healthvermont.gov/prevention/index.aspx</a>	Community health education Web site and education program	Web site fully revamped 2004	Universally available	Public health preparedness and bioterrorism response funding (CDC)
Wyoming	Total Health Record <a href="http://wdh.state.wy.us/">http://wdh.state.wy.us/</a>	Electronic Health Record, with wellness/prevention and chronic disease management components	EHR launch planned for early 2009	All persons in Medicaid	State funds with federal Medicaid matching funds
<b>Program Evaluation, Improvement, and Modernization</b>					
Alabama	Together for Quality <a href="http://www.medicaid.alabama.gov/news/Transformation_home.aspx?tab=2">http://www.medicaid.alabama.gov/news/Transformation_home.aspx?tab=2</a>	Electronic health information system with interoperable patient data hub	Demonstration pilot launched July 2008	Medicaid beneficiaries	Medicaid Transformation Grant
Arizona	Medicaid Health Information Exchange <a href="http://www.ahcccs.state.az.us/eHealth/">http://www.ahcccs.state.az.us/eHealth/</a>	Incremental approach to a comprehensive statewide health information network	Launched Sept. 29, 2008	Medicaid beneficiaries and all persons with health records at participating organizations	Medicaid Transformation Grant; Private foundation funding for online application component
South Carolina	Statistical Data Warehouse <a href="http://www.ors.state.sc.us/default.htm">http://www.ors.state.sc.us/default.htm</a>	Health Information Exchange, integrated data system, and statistical research database	In operation since 2004	Any person who received services from any of the agencies linked into the integrated data circle	Private foundation funding



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