



Innovative Children's Health and Technology Program Summaries May 2009

Alameda County, California

www.acgov.org

Family support services, electronic records and school health programs

Alameda County, California, operates a number of innovative children's health efforts incorporating family support services, electronic records, and school-based health. One such effort is Every Child Counts, a First Five Commission program funded by tobacco taxes. Every Child Counts provides family support services, prenatal/postpartum home visiting, early childhood education, and community grants. The program administers a web-based cross-agency information system, ECChange, to facilitate case management of services. Its functionalities include wireless connectivity in hospitals to enroll newborns and families into family support programs, electronic transfer of referrals to public health nurses, and the use of mini-laptops by public health nurses to document family support services in the home. Alameda County also operates an extensive network of school-based or linked health centers. The Alameda County School Health Services Coalition provides comprehensive health and wellness services at all grade levels, including behavioral services. The school-based/-linked health centers focus on serving adolescents, while the OUR KIDS behavioral health program provides clinical case management of behavioral health services in elementary and middle schools.

Allies Against Asthma Coalition (University of Michigan School of Public Health)

http://asthma.umich.edu/

Pediatric asthma management program

Allies Against Asthma is a national program funded by the Robert Wood Johnson Foundation to provide support to community-based coalitions that implement comprehensive pediatric asthma management programs. Coalition efforts improve the accessibility and quality of medical services, education, family and community support and include environmental and policy initiatives. The primary aims of the program are: (1) to reduce hospital admissions, emergency room visits, and missed school days; (2) to enhance the quality of life of children with asthma, and; (3) to develop a sustainable strategy for asthma management in the community.

Arizona Health Care Cost Containment System

http://www.ahcccs.state.az.us/eHealth

Medicaid health information exchange

Arizona is in the process of creating a single, statewide, comprehensive, Web-based Medicaid health information network that will provide the infrastructure for all health providers, not just those serving the Medicaid population. The health information network will link existing legacy data systems through Web-based tools. The system will include an electronic health record built around data-driven, outcome-focused quality improvement and clinical decision support tools. Arizona is also working to integrate its online application with the electronic health record and move the state toward a data-driven enrollment process.

Arkansas BMI Initiative

www.achi.net

Obesity prevention program

The Arkansas Center for Health Improvement (ACHI) created and implemented a BMI screening process for all public school children in the state in 2003 - 2004. ACHI developed a system for gathering BMI assessments and delivering to parents individualized, confidential Child Health Reports, which are generated automatically from the data. The BMI Initiative has amassed the largest database on childhood obesity in the nation, providing four years of data on nearly half a million children. ACHI is currently evaluating which methods for relaying child BMI assessment information to parents and clinicians are most effective. In 2007, the state legislature passed a bill to promote the effort and strengthen the protocol followed by school and nursing staff in performing the BMI assessment.

BeWell Mobile

www.bewellmobile.com

Cell phone health management software application

BeWell software leverages the ubiquity of cell phones, wireless data networks and the Internet to collect data and help patients manage their health. BeWell Mobile incorporates self-monitoring techniques through mobile phones. Its applications advance patient engagement by way of three methods: (1) Web Portals, which combine action plans and baseline targets for patients, easy-to-ready summary reports, and snap shots of patient progress; (2) Electronic Diaries, which allow patients to use their cell phones to respond to predetermined questions and receive instant feedback and one-button access to action plans; and (3) Reminders, which allow patients to control the type and frequency of automated text message reminders, encouraging adherence to their medical regimen. BeWell Mobile has had well documented success with management of adolescent asthma management in San Mateo County, California, eliminating emergency visits for its target population.

California Center for Connected Health (CCCH)

www.connectedhealthca.org

Strategy and planning body for telehealth in California

The California Center for Connected Health (CCCH) was established in 2009 by the California Healthcare Foundation as the strategy and planning body designed to lead and coordinate the adoption of telehealth throughout California. CCCH engages in the following efforts: (1) Promote a shared vision for telehealth adoption and integration in the health care delivery system; (2) Work to ensure that California is a national model of telehealth integration; (3) Identify and promote practice patterns, policies, regulations, and statutory changes that will maximize the ability of telehealth to improve health outcomes and care delivery; (4) Manage a specialty care pilot project for UC campuses and community-based clinics to develop a sustainable model for telehealth services.

The Child and Adolescent Health Measurement Initiative (CAHMI)

www.cahmi.org

Quality measurement and improvement tools

CAHMI was established in 1997 to identify a core set of measures that answer the question of how the health system is performing on behalf of children. CAHMI has developed a number of quality measurement tools, including the Promoting Healthy Development Survey (PHDS), the first survey of parents to gauge the quality of preventive and developmental services provided to young children. The PHDS has been used by state agencies, health plans, and pediatric providers to assess, stimulate, and monitor quality improvement activities. CAHMI has developed a Web-based data resource center, providing direct access to information from the National Survey of Children's Health Care and the National Survey of Children with Special Health Care Needs. CAHMI also provides other resources, templates, and tools for using this data to stimulate positive system change and improvements.

The Center for Community Health Technology at the Children's Health Fund (CHF) www.childrenshealthfund.org

Electronic health record systems & comprehensive content/data collection set

The Center for Community Health technology has developed three generations of pediatric and family health primary care electronic health record systems (EHR), specialized electronic data-based systems targeted at the complex organizational and compliance challenges of managing sub-specialty referrals and transportation logistics, and a variety of software and health information exchange applications to support pediatric and family healthcare. The Center for Community Health has also developed a comprehensive content/data collection set for electronic EHRs. This content set, *The Comprehensive Pediatric Primary Care Electronic Health Record Content Specification*, covers data necessary for pediatric primary care encounters. This model content system organizes clinical and allied structured and unstructured data to reflect the concept of an enhanced medical home, and incorporates best practices, evidence-based medicine, evidence-informed practice, and current standards.

Cerner Corporation

www.cerner.com

Healthcare information technology corporation

Cerner Corporation is a global corporation in healthcare technology that seeks to improve quality of care across the board. It creates solutions to eliminate medical errors, improve outcomes, and increase efficiency in clinics and physician offices. Cerner invents new generations of smart medical devices that communicate with each other and to the patient's medical record. As part of its goals, Cerner engages in efforts such as backward engineering in the gaming industry to increase child access to technologies such as Nintendo, accelerometers, and mobile text messaging. Furthermore, it has been the leader in several pilot projects, which are designed around the use of technologies for physical activity and nutrition to help improve health outcomes for children.

Child Health & Development Interactive System (CHADIS)

www.chadis.com

Web-based decision support system

CHADIS is a web-based screening, diagnostic and management system that administers and analyzes pre-visit, online questionnaires completed by parents, teens or teachers and provides clinicians with instant access to valuable clinical data and resources. CHADIS aims to improve the diagnosis and management of health, emotional, and behavioral issues, helping clinicians address parents' concerns about their child's development while streamlining other routines of pediatric care. Parents complete questionnaires online and can utilize Web-based, multiple language platforms. CHADIS scores and tabulates the answers in a user-friendly electronic worksheet for the Clinician to review. Based on the screen responses, CHADIS develops provisional diagnoses and clinical decision-support management information. The system selects informational handouts and community resources specific to child and family needs from its resource database. The clinician can input additional comments and information from the patient's office visit. CHADIS stores all the data for future reference and the tracking of patient care over time.

Children and Families Commission of Orange County

www.occhildrenandfamilies.org

Health, education and development services

The Children and Families Commission of Orange County (CFCOC) is part of First 5 California, a statewide early childhood/school readiness initiative established under the California Children and Families Act of 1998 (Proposition 10) and funded through an increased tax on cigarettes and tobacco products. CFCOC relies on three main platforms for service delivery: hospitals, family resource centers, and schools. CFCOC supports organizations that provide health, education and development services to children and their families, prenatal through age five. It provides leadership, funding and support for programs working to ensure all children are healthy and ready to succeed when they enter school. All

programs advance its four primary goals: healthy children, strong families, readiness to learn, and quality services.

Children's National Medical Center – Children's IQ Network

www.childrensnational.org

Electronic record exchange program

The Children's National Medical Center is the only freestanding exclusive provider of pediatric care in the metropolitan Washington area. The Children's Integrated Quality Network (Children's IQ Network) is an effort to integrate the health care data of children within DC metropolitan region (which includes areas in Northern Virginia and Maryland). The Children's IQ Network has launched a system enabling physicians to share patient information with other independent area physicians via a secure Internet tool. The Children's IQ Network's Electronic Health Exchange community health record to provide access to patient demographics, visit histories, lab results, medications, problem lists, immunizations, growth information and encounter summaries. The records are made available to physicians affiliated with Children's National Medical Center's seven primary care clinics, its Washington, D.C., foster care program, and mobile medical vans. In addition, interfaces will be made available for other practices owned by Children's and HealthMaster, the electronic medical records system used by 172 schools in the district. E-prescribing and vaccine registry information also will be made available to schools in Washington, D.C., Maryland and Virginia.

The Children's Trust (Miami, Dade County)

www.thechildrenstrust.org

Preventive health care trust fund

In 2002, Miami-Dade County voters approved an independent special district, a dedicated funding source for children entitled "The Children's Trust." The Children's Trust was established to fund programs that offer services with the goals of implementing best practices and improving the lives of children and families in the community. Among its initiatives are numerous programs delivering services inside and outside of school. One initiative, HealthConnect, connects children and families to health insurance and services, provides support to new and teen mothers through home visitation, and supports a system of school-based health centers called "health suites". These health suites provide preventive care and are linked to supporting health clinics through an EMR system. They are currently in place in 165 schools and scheduled for expansion across 350 schools.

Clinica Sierra Vista

www.clinicasierravista.org

Comprehensive health care to vulnerable populations

Clinica Sierra Vista is a multi-dimensional, multi-disciplinary comprehensive health care organization, serving the primary medical, dental and behavioral health needs of a huge patient population in Kern, Fresno and Inyo counties in California. It serves a geographically dispersed, low-moderate fixed income, ethnically diverse, frontier-rural-urban-migrant-homeless patient population. It has grown to be one of the largest comprehensive migrant/community health center systems in the state. In addition to primary care services, Clinica Sierra Vista also provides health education, health promotion and prevention programs to thousands of patients that are not otherwise receiving care. Clinica Sierra has initiated programs to address high-risk youth and has worked exhaustively with a multitude of communities in the formation of Neighborhood Partnerships to better address the need for collaborative delivery systems dealing with children and families. It operates two mobile units providing medical and dental services to isolated homeless and to school and neighborhood partnership programs throughout the county.

Colorado Regional Health Information Organization (CORHIO)

www.corhio.org

Regional health information exchange

Formerly known as the Colorado Health Information Exchange (COHIE) Project, CORHIO is working to build Colorado's capacity for state-wide health information exchange based on a federated, web-based model. The goal is to create a low-cost and self-sustaining service, which accommodates diverse platforms, systems, needs, resources, and affiliations. Colorado's statewide exchange CORHIO will synergize with the Nationwide Health Information Network (NHIN). This federated model is neither a data repository nor a comprehensive electronic medical record. Data "lives" at its point of generation and will be shared through CORHIO's hub when needed via a secure and confidential process. CORHIO provides the mechanism to transfer and aggregate data into meaningful information for clinical decision making.

Connecticut Children's Trust Fund - Help Me Grow

www.211ct.org

Connecting families to community services for children with developmental, health, & behavioral problems Help Me Grow is a program of the Connecticut Children's Trust Fund in collaboration with United Way of Connecticut/Infoline, the Connecticut Birth to Three System, and the state's Department of Education Preschool Special Education Program. Help Me Grow is a unique program that assists families and providers in identifying developmental concerns, finding appropriate resources and helping families connect with programs and services. The program includes a statewide toll free number for accessing needed care, partnerships with community-based agencies throughout the state, and child development community liaisons that serve as a conduit between community-based services and the telephone access point. Child development community liaisons conduct regional meetings with community-based agencies to share information and brainstorm solutions. The training program is targeted at child health providers in the state of Connecticut to support the practice of developmental surveillance. Workshops on developmental surveillance are presented to childcare providers and parents. Further, questionnaires, monitoring and referrals are offered to families requesting additional participation or specialized care. Lastly, the evaluation component includes a data collection system that identifies gaps in services and barriers to obtaining appropriate services.

DPS Health

www.DPSHealth.com

Online self-management resource

DPS Health, formerly, Diabetes Prevention Source, partners with healthcare organizations to improve outcomes of clinical behavior change and patient self management support programs by leveraging clinical and coaching know-how and its proprietary technologies and protocols. Its products use technology to enable behavior change interventions in the context of therapeutic relationships. Created with the University of Pittsburgh, the Virtual Lifestyle Management (VLM) service is an evidence-based online tool to help clinicians engage overweight patients in increased physical activity and improved nutrition so they may lead healthier lives. To educate and motivate patients, VLM incorporates streaming audio lessons, interactive workbooks, activity planning, chat and email coaching. DPS Health has also collaborated with the Starlight/Starbright foundation to create GetFitGetRight, a youth oriented website that promotes weight loss for vulnerable teens.

East Kern County Integrated Technology Association

www.ekcita.org

Rural health information exchange

East Kern County Integrated Technology Association (EKCITA) is a federally funded rural health information exchange project in Tehachapi, California. EKCITA is a public/private partnership formed by the Tehachapi Valley Healthcare District, two Rural Health Clinics, and fourteen private medical practices. Kern County is the only functional HIE that is actually exchanging data in CA. All providers in the community are participating - a unique situation that reflects the fact that it is a rural community with a

small population of providers.

Eat, Exercise, and Excel (EEE)

www.ksbe.state.ks.us/EEE/EEEMenus/EEE Home.htm

Wellness program

Started by a principal of a Leavenworth Elementary school in Kansas, the Eat, Exercise, and Excel program changes some traditional school settings to improve not only students' physical health, but also their emotional and mental well-being. The program has replaced unstructured recess with supervised and structured physical exercise. It has moved lunch from the cafeteria into the classroom, which creates a quiet environment and gives teachers time to talk to children about nutrition and to build stronger relationships with the students. Vitamins are provided to a portion of students, and all are given reusable water bottles. The program has demonstrated significant improvements in academic performance, reduced discipline problems, and improved students' results on physical fitness tests.

Express Lane Eligibility

www.childrenspartnership.org/ExpressLaneEligibility

Cross-Program Enrollment

The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) gives states new tools to identify and enroll eligible children in Medicaid and CHIP. One of these new tools is Express Lane Eligibility (ELE). CHIPRA gives states the option to authorize Medicaid and CHIP agencies to borrow specific eligibility findings from other public need-based programs, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Food Stamps, or Head Start, rather than having to re-gather and re-analyze the same eligibility data. The state is authorized to borrow a finding even where the methodology used by the other program agency is not exactly the same as that used by Medicaid and CHIP. Express Lane Eligibility can be used for both initial eligibility determinations and for renewals.

George Washington University School of Public Health and Health Services – The Center for Health and Health Care in Schools

www.healthinschools.org

Resource center for school-connected health programs and services

The Center for Health and Health Care in Schools (CHHCS) is a nonpartisan resource center at the George Washington University School of Public Health and Health Services. CHHCS works to achieve better health outcomes for children and adolescents through school-connected health programs and services. The Center pursues this commitment by linking educators and health professionals to the information essential to building effective school health programs, testing new school-connected strategies to achieve better health outcomes for children, and promoting awareness of successful new directions in school-based programming. Its health programs range from those that help students adopt healthy habits to those that foster a physically and emotionally healthy school environment. School-based services include physical and mental care, dental services, screenings and referrals to community resources, and school-located services for special needs students.

Google Health

www.google.com/health

Personal health record

Google Health is a PHR for use by adults 18 and over, which was released to the general public in May 2008. The service allows a user to volunteer their health records, either manually or by logging into their accounts at partnered health services providers. By placing these records onto the Google Health system, the separate records are merged into one centralized Google Health profile. The system can only access medical information volunteered by individuals, though it is currently looking into partnerships with different health organizations and pharmacies. The product is free for consumers, and currently does not contain any advertising.

Harlem Children's Zone

http://www.hcz.org/

Anti-poverty comprehensive program

The Harlem Children's Zone[®] Project (HCZ Project) is a unique program designed to rebuild the community to enable children to stay on track through college and enter the job market. Its goal is to replace street culture with an environment in which children are surrounded by college-oriented peers and supportive adults. The HCZ project begins with The Baby College[®], a series of workshops for parents of children ages 0-3. The pipeline goes on to include best-practice programs for children of every age through college. The network includes in-school, after-school, social-service, health and community-building programs. The HCZ Project began as a one-block pilot in the 1990's, then following a 10-year business plan, it expanded to 24 blocks and then 60 blocks. The projected goal is to serve 15,000 children and 7,000 adults by 2011.

Health Care Interpreter Network

www.hcin.org

Automated healthcare interpreter network

Health Care Interpreter Network (HCIN) is a cooperative of California hospitals and health care providers sharing trained healthcare interpreters through an automated video/voice call center system. During clinic hours, HCIN provides direct access to medically trained interpreters fluent in 15 languages including American Sign Language (ASL). Interpreters appear on low-cost, high-quality interactive videoconference screens or high-quality handsets or speakerphones accessible or movable throughout hospitals and health clinics. Videoconferencing devices and all forms of telephones throughout each hospital connect within seconds to an interpreter on the HCIN system, either at their own hospital or one of their colleague hospitals. If a language is not available at any of the member hospitals or providers, HCIN provides access, at an additional cost, to contracted interpreters outside of the network.

Health Hero Network

www.healthhero.com

Remote Patient Monitoring

Health Hero Network develops and markets the Health Buddy® system for health improvement. The Health Buddy system serves as the interface between patients at home and care providers, facilitating patient education and monitoring of chronic conditions. The system includes monitoring technologies, clinical information databases, Internet-enabled decision support tools, health management programs and content development tools. Through increased communication, behavior modification, and prevention, the Health Buddy system improves quality of care. HealthBuddy has been utilized extensively by a number of provider systems, including the Veteran's Administration, for management of behavioral health and other chronic conditions.

Healthy City Project

www.healthycity.org

Online health demographic database and GIS mapping platform

Healthy City Project is an online community service and policy research tool for all of Los Angeles County. Healthy City provides unprecedented access to the largest database of community resources and localized demographic and health data on a cutting-edge GIS mapping platform. The goals of the Healthy City Project are to improve the accessibility of services to low-income, underserved families and to help develop sensible public policies based on sound data that will improve the quality of life for all communities in Los Angeles. Healthy City gives social service providers instant connection to thousands of services and resources in the region, and community leaders and policymakers access to demographic, economic, and health status of a community, as well as information to evaluate how resources are distributed to address their community's needs. Healthy City has been recognized as a national model for using online GIS mapping to strengthen regional social service sectors and to advocate for policy that benefits high-need communities.

Healthy for Life/PE4ME

www.healthyforlifeonline.org, www.pe4meonline.com

School based obesity prevention

Healthy for Life is a California-based network model linking care providers with schools to conduct outreach to families and students on obesity prevention through activities focused on physical activity and nutrition. The PE4ME Program is designed to emphasize healthy lessons for lifelong fitness and nutrition. It achieves these goals by employing innovative cardiovascular and resistance training. Information available on its website is available to any school that wants to incorporate its program into its curriculum. The initiative has recently received \$3 million from St Joseph's Health System in Orange County to extend the program from 40 to another 100 schools. An initial evaluation of students at 10 high schools found that they lost an average of 6.3 pounds during first semester in the program. It contains a web portal for students, which includes a social networking component.

Healthy Steps

www.healthysteps.org

Early childhood development

Healthy Steps for Young Children is a national initiative that focuses on the importance of the first three years of life. Healthy Steps emphasizes a close relationship between health care professionals and parents in addressing the physical, emotional, and intellectual growth and development of children from birth to age three. Each Healthy Steps team includes a Healthy Steps Specialist, who enhances the information and services available to parents. The Specialists have special training in child development and address major behavioral and developmental issues, focusing on a whole baby, whole family brand of primary care. The Healthy Steps approach is being implemented in pediatric and family practices across the country and is meeting an array of community needs while preserving its unique linkage to a team of health care professionals.

HopeLab

www.hopelab.org

Gaming and chronic diseases

HopeLab is a nonprofit organization that combines research with innovative solutions to improve the health and quality of life of young people with chronic illness. HopeLab works closely with young people with chronic illness to understand their needs and to incorporate their critical and ongoing input into product development. HopeLab works to address diseases in which there is significant unmet need among young people. For example, Re-Mission™ is a video game developed specifically for adolescents and young adults with cancer. Players pilot a nanobot named Roxxi as she travels through the bodies of fictional cancer patients destroying cancer cells, battling bacterial infections, and managing side effects associated with cancer and cancer treatment.

Indivo

www.indivohealth.org

Personally controlled health record system

Indivo is a personally controlled health record system that was developed by the Children's Hospital Informatics Program for use in Children's Hospital Boston. Children's Hospital Boston is in the process of deploying Indivo as the medical records system for all of its patients. Indivo is free and open-source and has been adopted for use by additional entities, including Wal-Mart. It allows patients to control a single, unified, complete medical record that integrates health information gathered across different sites of care over their lifetime.

Internet Sexuality Information Services (ISIS)

www.isis-inc.org

Sexual health via information communication

Internet Sexuality Information Services (ISIS), a nonprofit organization that works on developing technology and media to improve adolescent public health, specifically for the promotion of sexual health and healthy relationships and the prevention of disease transmission. Its mission is to provide leadership, innovation, educational resources, and research in online sexual health promotion. ISIS has developed and implemented a number of notable innovative technologies to improve adolescent sexual health, including the following: (1) In-spot – allows patients to send e-cards to notify their partners of diagnoses of syphilis, gonorrhea, Chlamydia and HIV, at the same time reporting positive results to the public health departments; (2) Clickable Maps – online mapping system including clinic resting referrals and public health resources; (3) Stdtest.org – online risk assessment that generates lab slip with list of CDC recommended SDT tests that can be taken to any Lab Corps facility for testing; and (4) Text Messaging Project – adolescents can sign up to receive weekly text messages with educational material about sexual and reproductive health.

Kaiser HealthConnect

www.kaiserpermanente.org

Personal health record and electronic medical record

KP HealthConnect[™] is a comprehensive health information system that, once fully implemented, will connect 8.6 million people securely to their health care teams, their personal health information, and the latest medical knowledge. Patients, doctors, nurses and other authorized health care staff will have immediate access to complete, up-to-the-minute medical records. Those will include test and lab results, prescribed drugs, allergies and interactions and medical history. Clinicians will also have immediate, real-time access to the latest medical information and guidelines that apply to a patient's diagnosis, and the fully integrated system will help eliminate unnecessary repetitions of tests and avoid drug interactions and allergic reactions. Ultimately, KP HealthConnect will help members and Kaiser Permanente professionals communicate with greater ease and convenience.

Kids Get Care (Seattle King County)

http://www.kingcounty.gov/healthServices/health/child/kgc.aspx

Integrated preventive health care program focused on linkage to services

Kids Get Care (KGC) is an integrated preventive health care program currently being used by the Childrens Health Initiative (CHI) and funded by two HRSA Health Community Access Program Grants. The goal of KGC is to ensure that children, regardless of insurance status, receive early integrated preventive physical, oral, mental and developmental health services. Kids Get Care promotes integration and coordination of care with a focus on an individual, child-centered service delivery system. The program also serves pregnant women and women with young children.

Medically Vulnerable Infant Program (MVIP)

http://cchealth.org/services/vulnerable infant/

Home visiting program for babies at-risk of developmental problems

The Medically Vulnerable Infant Program (MVIP) provides early intervention services for babies from birth to age three who are at risk for developmental problems because of medical conditions or complications surrounding the pregnancy or birth. The program provides home support for families and needed intervention to foster optimal developmental outcomes for each child. The goal of MVIP is to promote optimal health and developmental outcomes by supporting the parents and/or caregivers in understanding and caring for the special needs of their medically vulnerable child.

Metro Health System BMI Study

www.metrohealth.org

EMR pediatric BMI study

MetroHealth System is a public health provider with one of the nation's largest urban-based network of community health centers focused on reducing health disparities through comprehensive care to vulnerable populations. MetroHealth System, in collaboration with Case Western Reserve University School of Medicine, conducted a study using electronic medical records (EMRs) to review recorded pediatric BMI measurements. The results of the study indicated that only one-third of children that are overweight or obese are properly diagnosed. It further indicated that failures to diagnose children that have just crossed into an unhealthy weight category prevent early intervention that would otherwise prevent life-long health issues through adulthood. The study emphasized the benefits of EMR use in identifying problems of inaccurate diagnoses, increasing potential for early intervention and addressing viable solutions to childhood obesity.

MiVIA

www.mivia.org

Personal health record

MiVIA is an online personal health record system built originally to meet the needs of migrant workers. In addition to being a PHR, it also provides clients with links to local resources and health information. Over the years, the MiVIA platform has been modified to design products for other specific populations of people without insurance, with chronic medical conditions, and who access care from many different providers or locations. MiVIA is increasingly being used by clinics, mobile medical units, rural hospitals and practices as an electronic medical record.

Modified Checklist for Autism in Toddlers (M-HAT)

www.firstsigns.org

Screening tool

The Modified Checklist for Autism in Toddlers (M-CHAT) is validated for screening toddlers between 16 and 30 months of age, to assess risk for autism spectrum disorders (ASD). The M-CHAT can be administered and scored as part of a well-child check-up, and also can be used by specialists or other professionals to assess risk for ASD. To address the high false positive rate, researchers developed a structured follow-up interview. M-CHAT is available for free download for clinical, research, and educational purposes and can be incorporated into electronic systems like CHADIS.

National Center for Health Marketing, Centers for Disease Control and Prevention

www.cdc.gov/HealthMarketing/ehm/interactive.html

Social marketing tools

The National Center for Health Marketing, at the Centers for Disease Control and Prevention, was established to improve public health through innovative health marketing programs and products. Its Division of eHealth Marketing aims to deploy evidence-based, interactive media strategies to engage users in making better decisions to improve health and safety. Some of their projects include Whyville, a virtual world designed to help "tweens" (ages 8 to 12) learn more about science. Whyville includes three influenza games, a vaccination interactive project, and other games that model healthy behavior. In addition, they have a Personal Public Service Announcement (PPSA) that delivers HIV education on a personal device (such as cell phone, etc.) in video with audio form. The CDC partnered with other organizations and cell phone companies to produce and deploy this product.

New Mexico Certified Peer Specialist Program

www.nmcpr.state.nm.us/nmac/parts/title08/08.315.0006.htm

Peer Networks

The New Mexico Certified Peer Specialist Program is an innovative program designed to provide comprehensive community support services to children, adolescents, and families going through mental health or substance abuse recovery. Certified Peer Specialist are current or former consumers of mental health or substance abuse services, and have had at least one year of mental health or substance abuse recovery. Certified Puer Specialists for the Community Support Worker position covered in the Comprehensive Community Support Services model for qualified provider organizations.

New Mexico Maternal and Child Health Interdisciplinary Leadership Training Program (LEND program)

http://cdd.unm.edu/nmlend/

Training and support for graduate students and professionals

The goal of the New Mexico Maternal and Child Health Interdisciplinary Leadership Training Program is to provide interdisciplinary and disciplinary leadership training for graduate students and community professionals to improve systems of care that promote the prevention of disabilities and assure access to services for children with neurodevelopmental and related disabilities and their families. This is accomplished through interdisciplinary advanced clinical and leadership training of graduate students in the core disciplines, continuing education, technical assistance and consultation for community professionals. Trainees gain competencies in interdisciplinary clinical care, family needs and preferences, and the public health system. The program is within the Center for Development and Disability, University of New Mexico School of Medicine.

Northern Sierra Rural Health Network

www.nsrhn.org

Telehealth and telemedicine network

The Northern Sierra Rural Health Network (NSRHN) is a nonprofit corporation dedicated to promoting the health and well-being of residents in rural Northern California. It achieves those goals through comprehensive health care planning, integrated health care delivery systems, educational activities, and charitable programs and services that expand access to care for all residents regardless of their ability to pay. Its members include clinics, hospitals and other health care providers in Shasta, Modoc, Lassen, Plumas, Sierra, Nevada, Trinity, Siskiyou and Tehama Counties. As a telehealth and telemedicine network, NSRHN links rural providers with each other and to specialists in urban areas.

Nurse Family Partnership

www.nursefamilypartnership.org

Evidence-based family wellness program

Nurse Family Partnership is an evidence-based, nurse home visiting program that aims to improve the health, well-being and self-sufficiency of low-income, first-time parents and their children. Each mother they serve is partnered with a registered nurse early in her pregnancy and receives ongoing nurse home visits that continue through her child's second birthday. Controlled studies show that the program significantly reduces child abuse and neglect, emergency room visits for accidents and poisoning, convictions of mother and arrests of the child, as well as behavioral and intellectual problems of the child. Nurse Family Partnership implementing agencies enter data from each visit into the national web-based Clinical Information System. This data is monitored to ensure that the program is being implemented with fidelity to the model as tested in the original randomized, controlled trials, so that comparable results are achieved.

One-e-App

www.oneeapp.org

Online application system

One-e-App (OEA) is an online application system for connecting families with a range of publicly funded health and social service programs. The application contains a "one-stop approach" designed to improve efficiency, cost-effectiveness, and user-friendliness of the application process for families seeking health coverage. It uses an interactive, interview approach to simplify data collection and entry and provides real-time selection procedures for selecting a provider, health plan, and submission of applications for final eligibility determination. Its primary users include certified application assistants, eligibility workers, caseworkers and administrators in social services offices, community clinics, and hospitals. OEA operates out of four states: California, Arizona, Indiana, and Maryland. The Center to Promote HealthCare Access provides strategic leadership on OEA governance and adoption, technical support for planning and implementation, and software development, enhancement and maintenance.

Online Advocate

www.onlineadvocate.org

Online screening and referral

The Online Advocate is a tool designed to screen individuals and families for health-related social problems, determine the areas in which they need and desire help, and then allow them to choose specific referrals to nearby agencies that offer services relevant to the problems identified. The survey evaluates 7 areas of health-related social problems and resources for individuals and families: access to medical and dental health care, housing, food security, income security, violence, safety equipment, and substance abuse. The system calculates and evaluates response data, generating a display of problem areas and strengths. The Advocate then identifies, by way of geo-coding and mapping, nearby agencies that offer relevant services. Agency referrals may also be obtained from the central database of hundreds of agencies. Follow-up screening can further determine the efficacy of interventions made. The Advocate has been developed entirely on open-source applications, platforms, and software.

Open Door Community Health Centers

www.opendoorhealth.com

Rural community tele-health center network

Open Door Community Health Centers is a rural community health center network based out of Arcata, California and ten satellite sites throughout Northwest California. It provides healthcare and services to at least one out of every three people living in isolated rural areas. In very remote areas, Open Door serves as the sole healthcare provider for a vast majority of the population. It seeks to bridge the gap between quality health care and those communities. In doing so, Open Door clinics utilize various HIT technologies such as telemedicine and electronic medical records. Open Door developed The Telehealth and Visiting Specialist Center, which serves as a hub from which other specialty services are provided to its satellite centers and all across California. The Center provides a vast array of services including psychiatry, pediatrics, obstetrics-gynecology, pulmonology, orthopedics, and ophthalmology. It also includes a school-based health center, which includes a single exam room space with high-tech telemedicine equipment tied to a rural community. Childcare is provided to members of the community during the school day, while equipment is made available to others after school hours.

Patients Like Me

www.patientslikeme.com

Social networking sites for diseases

PatientsLikeMe is a privately funded company committed to providing a better, more effective way to capture valuable results and share them with patients, healthcare professionals, and industry organizations that are trying to treat the disease. It is a community of patients, doctors, and organizations that inspires, informs, and empowers individuals. The site provides patients with access to the tools, information, and experiences that they need to take control of their disease. To make this happen, there is a platform for collecting and sharing real world, outcome-based patient data and the company is

establishing data-sharing partnerships with doctors, pharmaceutical and medical device companies, research organizations, and non-profits.

Pediatric Health Information System

www.chca.com

Pediatric Health Information System (PHIS) is a comparative data program at Child Health Corporation of America (CHCA). CHCA is an organization that is owned by 44 children's hospitals. It collects data submitted by hospitals about inpatient and non-inpatient care, patients, treatments, procedures, billing, and more. Through PHIS, participating hospitals have direct access to data through a Web-based reporting tool, in an open-sharing environment. Hospitals use the data for research and evaluation of measures such as quality control and quality improvement. Last year, over 450 products were generated from this data, from high-level overviews to detailed evaluation of clinical data.

Pennsylvania COMPASS

www.compass.state.pa.us

Online application system

Pennsylvania COMPASS (Commonwealth of Pennsylvania Application for Social Services) is an online application system that allows state residents to seek health coverage and other public benefits at the same time as well as renew coverage. The system can be used at home and is primarily accessed in that manner. It is set up along the lines of the TurboTax model, asking only the questions that are relevant to the applicant based on the programs they select. And, it allows for a seamless transition between health programs, providing an automatic transfer of the eligibility information between Medicaid, SCHIP, and adultBASIC (the state's program for low-income, uninsured adults) as relevant.

Promotoras

www.visionycompromiso.org

Culturally competent health care services

Promotoras are community health workers, working through informal social networks to increase the health and well being of communities throughout the U.S. Promotoras are primarily Spanish speaking men and women who are trained to provide accurate, culturally appropriate health information, conduct street outreach, and engage in community outreach efforts. Evidence indicates that promotoras are effective at increasing access to health services, promoting behavior change, and providing social support and culturally competent, cost-effective care. California's promotora network organization is called Visión y Compromiso and partners with local health and nonprofit organizations that integrate the promotoras model into their organizations.

Rhode Island KIDSNET

www.health.ri.gov/family/kidsnet/index.php

Electronic child health information system

KIDSNET is a confidential, computerized child health information system used by Rhode Island. It serves families, pediatric providers, and public health programs like the Immunization Program and Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Its purpose is to ensure children's health by ensuring regular health screening and preventive care. The KIDSNET system integrates data from ten databases (including the newborn developmental risk screening program database, WIC, vital records) and allows authorized users serving children (e.g., doctors, school nurses) to access the data that is relevant to the care they are providing, either at an individual or aggregate level. A linkage between KIDSNET and the Medicaid database is currently underway.

Second Life

www.secondlife.com

Virtual world

Second Life is a virtual world with a resident population of millions of real people from around the world. Each person is represented by an avatar that represents their chosen digital persona. Residents can explore, meet other residents, socialize, participate in individual and group activities, and create and trade virtual property and services with one another, or travel throughout the world, which residents refer to as the grid. Participants can talk and use text chat for free. There are a number of support groups in Second Life dealing with health, disease and special needs topics. For example, the Autism Support Group is a place for those with autism and their families and friends to congregate. While Second Life is only for people over 18 years, there is a limited version of Teen Second Life for ages 13 through 17.

Sierra Health Foundation & Wind Youth Services Center

www.sierrahealth.org, www.windyouth.org

Electronic record systems for emancipated foster care children

Sierra Health Foundation promotes health and quality of life for the people of Northern California (26 counties). Among the projects it funds is a pivotal pilot for the development of electronic record systems (ERS) by WIND Youth Services Center in Sacramento, a homeless youth shelter that serves emancipated foster care children or those that are in the process of emancipation. In this ERS, youths are given the power to determine what information is entered into their electronic record, who is authorized to view the information, and what portion of the record those authorized can view. The youths receive training about the ERS, including how it may be used, what information is appropriate to include, and how to access and allow others to access their record. The intention of the program is to protect the privacy of youths and empower them with control over their health information.

SingleStop USA

www.singlestopusa.org

Online enrollment assistance

SingleStop USA is a non-profit organization that revolutionized the use of standardized applications to bridge the information gap separating low-income families from untapped and inaccessible public benefits, tax credits and other essential services. Its sites are located in underserved neighborhoods throughout New York, New Jersey, New Mexico, and California. Its software program uses a computerized benefits calculator similar to Turbo Tax to determine a family's eligibility for public benefits and tax credits. Experienced counselors assist applicants in learning about the services they qualify for, how to apply for them, and whether claiming one benefit may adversely affect another. The standardized set of programs include eligibility criteria for a wide range of services including health insurance, nutrition, federal and state subsidies for childcare, housing assistance, welfare-to-work initiatives and tax credits. The computer programs assist primarily with eligibility determinations, and most applications are ultimately submitted on paper. SingleStop USA plans to deliver \$2 billion in benefits to up to a million households nationwide by the year 2012.

Starlight/Starbright Foundation

www.starlight.org

Interactive gaming and social networking programs

Starlight/Starbright Foundation, a nonprofit organization chaired by Steven Spielberg based out of Los Angeles, California, utilizes interactive games and social networking programs to help children selfmanage and cope with illness such as asthma, sick cell anemia, cystic fibrosis, and diabetes. The games are designed like any modern gaming system - to capture the attention of children who will want to play the games with friends, and in the process of doing so will learn about disease management. Each game is integrated into an online social networking programs are used as effective tools for improving the health and health care of children, as evidence obtained demonstrates improved self-efficacy and enhanced knowledge and adherence to disease management.

Strengthening Families

www.strengtheningfamiliesprogram.org

Evidence-based parenting and family-strengthening program

Strengthening Families Program (SFP) is a nationally and internationally recognized parenting and familystrengthening program for high-risk families. SFP is an evidence-based family skills training program found to significantly reduce problem behaviors, delinquency, and alcohol and drug abuse in children and to improve social competencies and school performance. Child maltreatment also decreases as parents strengthen bonds with their children and learn more effective parenting skills. Both culturally adapted versions and the core version of SFP have been found effective with African-American, Hispanic, Asian, Pacific Islander, and First Nations families. The original version was developed for high-risk families with children ages 6-11, and subsequent versions for low-risk families with pre- and early teens ages 10-14 and high-risk families with children ages 3-5 and 12-16. SFP has been rated as an exemplary, evidencebased program and approved for implementation with federal and state funds.

Summit Health Institute for Research & Education (SHIRE)

www.shire-inc.org

Elimination of health disparities

Summit Health Institute for Research & Education (SHIRE, Inc.) is a nonprofit organization dedicated to pursuing the elimination of health status disparities among racial and ethnic groups and the achievement of the goal of 100% access for all U.S. residents. SHIRE strives to eliminate disparities in healthcare delivery and health status outcomes through aggressive advocacy and outreach. SHIRE identifies inequities, proposes solutions, and galvanizes grassroots groups to address access to health care and quality of care issues among the underserved, particularly communities of color. In its pursuit of advocating for the underserved, SHIRE leads the National HIT Collaborative for the Underserved. SHIRE has also completed a 9-month pre-planning process funded by the Maryland Health Care Commission to develop and implement a statewide Health Information Exchange network. The National Health IT Collaborative for the Underserved was established in 2008 with the goal of leveraging advances in Health IT to reduce and ultimately eliminate health disparities experienced by medically underserved areas and populations.

Sure Start (United Kingdom)

http://www.surestart.gov.uk/

Early childhood place-based program

Sure Start is the UK government's program to deliver the best start in life for every child by bringing together early education, childcare, health and family support. The Early Years, Extended Schools and Special Needs Group, within the Department for Children, Schools and Families, is responsible for delivering Sure Start. Sure Start covers a wide range of programs both universal and those targeted on particular local areas or disadvantaged groups within the UK. Examples of Sure Start's programs include Children's Centers to provide families with high-quality integrated services, early education programs, and childcare for children aged between 3-14.

Texas Tech F. Marie Hall Institute for Rural and Community Health

www.ttuhsc.edu/telemedicine

Rural telehealth

The Texas Tech University Health Sciences Center (TTUHSC) Institute for Rural and Community Health (Institute) works in the areas of health care workforce development, enhanced access with technology such as telemedicine, and rural research. The Center is actively involved in the daily practice of telemedicine with numerous clinics, as well as ongoing telemedicine research and training projects. The Institute serves as the primary liaison with communities across 108 counties in the service area. It develops and coordinates a wide range of rural health and community projects, which include assisting with the creation and implementation of rural health policies, focusing on health education and health workforce development, sponsoring and conducting research and policy analysis, and improving the

health of communities through innovative research, health education, and health care service delivery programs.

Trilogy Integrated Resources

www.trilogyir.com

Data exchange and collaboration across providers and agencies

Trilogy Integrated Resources LLC is a company dedicated to improving information and communication in the health and social service fields at the community level. Trilogy works with state and county governments and other local human service entities to establish one-stop information places, centered on highly interactive, community-based Web sites and tools for information storage. Trilogy's efforts in creating these "virtual communities" ultimately focus on two things: 1) equipping consumers and their families with access to comprehensive information, advocacy and other resources to empower them to make informed decisions regarding their care; and 2) enabling the service delivery community - public and private - to better deal with the problems of fragmentation through the use of effective tools.

University of California, Davis Medical Center, Telehealth Program

www.ucdmc.ucdavis.edu/cht/programs/telemedicine

Telemedicine-supported services

Established in 1996, the UC Davis Telehealth Program began seeking technological solutions to improving health care in rural communities. UC Davis partners with many community hospitals and clinics throughout Northern California to provide residents and their physicians with access to specialized medical care and education through the use of telecommunications technology. Using high-speed data lines linked to video units at the UC Davis Medical Center and outlying California hospitals and clinics, physicians and patients can have live interactive consultations with specialists by videoconference. Connections for trauma consultation exist in four inpatient wards and nine emergency rooms of rural hospitals. Through these connections, UC Davis specialists help doctors on the scene stabilize and treat their pediatric patient. UC Davis also uses telemedicine to support other specific programs, including a childhood obesity program, a Child and Adolescent Abuse Resource and Evaluation Center, and a school-based health center in Plumas County, CA.

University of California, Irvine Neonatal Intensive Care Unit Program <u>www.ics.uci.edu</u>

Mobile technologies for assisted exercise with newborn premature infants

This project examines the role that novel mobile and ubiquitous computing technologies can play in record-keeping in support of at home exercise interventions to help premature infants gain weight in the months after leaving the NICU. It addresses three major challenges. First, technological interventions must be developed that support better record keeping and associated visualization and hypothesis testing to allow caregivers to understand the impacts of their pharmaceutical and behavioral interventions. Second, these interventions must be understood in the short-term to support testing of clinical efficacy and also over the lifetime of these patients whose chronic conditions can span several decades. Third, the focus of these technologies must be not only on capturing and allowing access to appropriate data, but also in accomplishing these goals while easing the extensive burden on families. An initial prototype system makes use of the MyExperience platform from the University of Washington on Windows SmartPhones to support logging and communication between clinicians and researchers. This software is available in both English and Spanish to support the growing and diverse population in Southern California.

University of North Carolina Text Messaging Study

www.unc.edu

Text Messaging Study for Management of Obesity and Healthy Behavior

The University of North Carolina conducted a study testing the use of text messaging for the management of obesity and healthy behavior for children ages 5-13. The purpose of the study was to determine adherence to the self-monitoring text-messaging program (as opposed to weight loss or weight control) over an 8-week period. The study determined greater adherence and lower drop-out rates with text messaging as compared to traditional paper-diary record keeping. The results indicated a 28% drop-out rate in the text messaging group as compared to a 61% drop-out rate in the paper-diary condition. With regard to self-monitoring, the adherence rate in the text messaging group was 43%, as compared to 19% by the paper-diary condition group.

University of Rochester Medical Center - Health-E-Access

www.urmc.rochester.edu

Pediatric telemedicine program

Health-e-Access is a Rochester based telemedicine program that provides interactive, Internet-based health care "visits" to diagnose and treat routine childhood symptoms in 19 urban and suburban schools and childcare centers. The project reports indicate that telemedicine, as applied to children in five Rochester child-care centers, reduced the number of child-care days these children missed due to illness by 63% when compared to a control group without telemedicine and adjusting for other variables. Survey results showed that at the child-care centers 91% of the telemedicine visits allowed parents to stay at work, and that 94% of the child illnesses handled by telemedicine would have otherwise resulted in a visit to a doctor's office or emergency room. Project researchers concluded that telemedicine visits appear to be replacing about half of the participating children's expected visits to doctors' offices, including expensive visits to hospital emergency departments.

Utah Clicks

www.utahclicks.org

Online application system

Utah Clicks was established with the purpose of making it easier for families of young children to access public services and to facilitate service coordination of those services. The system has created a single program application for multiple services -- including Medicaid, Health Start, SCHIP, and maternal child health programs -- and a fully automated application process. Facilitating the eligibility determination is a back-end data-brokering system that allows for the organization and use of information held by other government agencies.

West Virginia Medicaid Redesign

www.wvdhhr.org/bms/oAdministration/Medicaid Redesign/MedRedesign main.asp

Medicaid transformation

West Virginia is using its Medicaid Transformation Grant to build an electronically enhanced personal health management plan for chronically ill Medicaid beneficiaries. The program, called Mountain Health Choices, is intended to provide Medicaid beneficiaries with the information and tools necessary for them to manage their chronic conditions. Each member in this initiative is screened by their physician and given a personal health management plan that sets goals tailored to their condition, as well as their educational and social background, or, in the case of children, that of their parents. The care plan will be linked to an electronic system that tracks the patient's success in meeting those goals, sends reminders, and offers an opportunity to communicate with providers. Ultimately, this "Medicaid Redesign" is intended to persuade beneficiaries to take greater personal responsibility for their care by granting enhanced benefits for active participants and more limited benefits for the rest. To date, only 7% of families have signed the "personal responsibility" agreement for their children, leaving them with reduced benefits.

To access additional background, forecast, and policy materials, please go to <u>www.childrenspartnership.org/HITInnovationForChildren</u>

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