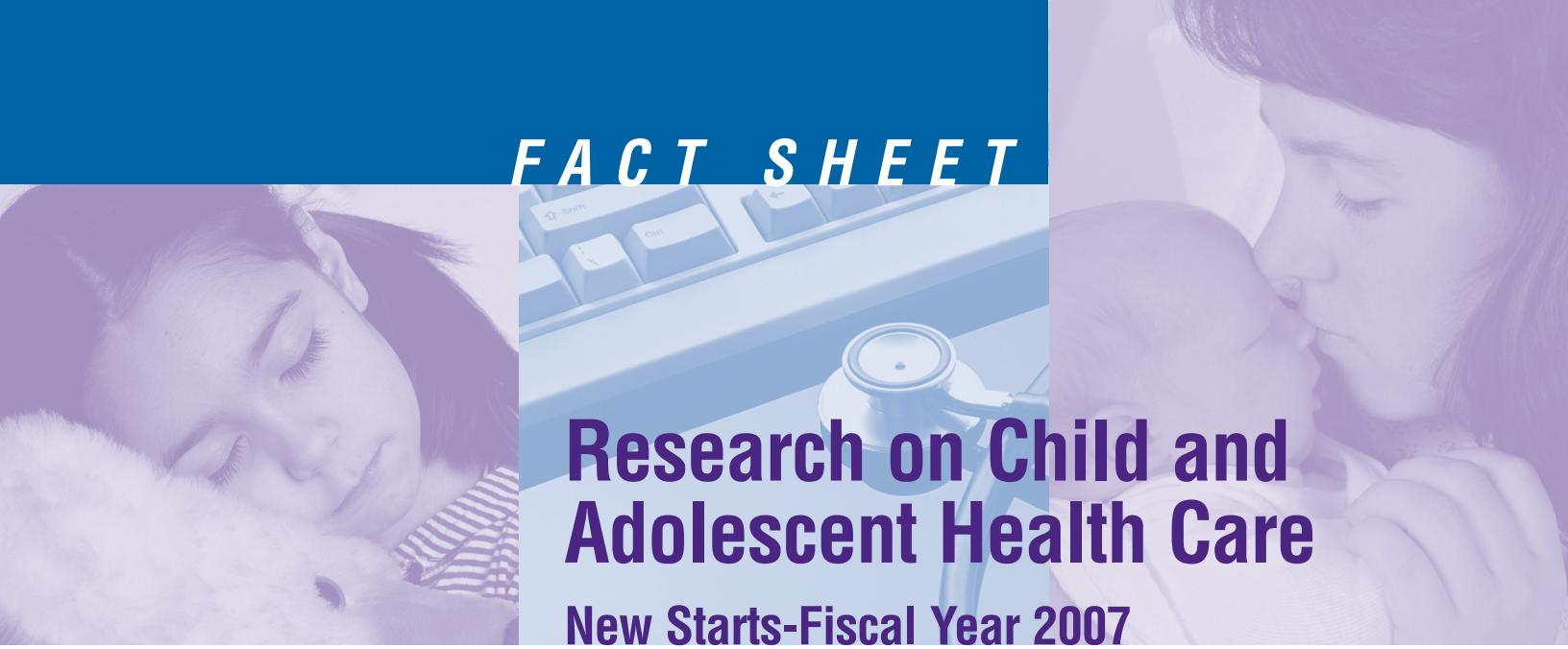


FACT SHEET

Research on Child and Adolescent Health Care

New Starts-Fiscal Year 2007

Agency for Healthcare Research and Quality

The mission of AHRQ is to improve the quality, safety, efficiency, and effectiveness of health care by:

- Using evidence to improve health care.
- Improving health care outcomes through research.
- Transforming research into practice.

Introduction

The mission of the Agency for Healthcare Research and Quality is to improve the safety, quality, efficiency, and effectiveness of health care for all Americans. Children are one of AHRQ's designated priority populations. To help achieve the Agency's mission for children, AHRQ supports extramural research grants and contracts, research training, conference grants, and intramural activities.

This fact sheet provides information on extramural activities initiated in fiscal year 2007. Projects that include children or children's health care issues but do not focus exclusively on children are marked with an asterisk (*).

AHRQ committed to investing $14.2 million for these projects in FY 2007 and a total of $37.8 million over the entire term of these multi-year projects.

Please note that guidelines for one or more of these programs may have changed since the projects described in this fact sheet were funded in fiscal year 2007. For current information on programs, funding priorities, and other aspects of the funding process, please visit the "Funding Opportunities" section of the AHRQ Web site at www.ahrq.gov.

Research Grants and Cooperative Agreements

Large Research Grants (R01)

Evaluation of Telemedicine for Children with Special Health Care Needs (CSHCN). Principal Investigator: Kenneth McConnochie, MD, University of Rochester, Rochester, NY. Grant No. R01 HS16871; project period July 1, 2007-June 30, 2010. This project will (1) establish personal computer- and Web-based telehealth networks to address acute care needs of CSHCN in Rochester, NY and Akron, OH; (2) assess the economic impact of this network on key stakeholders; and

(3) determine the incremental costs and technical, clinical, and organizational requirements for system modifications that will be critical in addressing chronic problems in CSHCN. Minority (Hispanic/Latino, Asian, and African American) children and young adults, ages 6 weeks to 21 years, will be included in this study.

Capitation Adjustment for Children with Special Health Care Needs. Principal Investigator: Hao Yu, PhD, RAND Corporation, Santa Monica, CA. Grant No. R01 HS16742; project period September 30, 2007-September 29, 2009. This study addresses the need to set adequate capitation rates for children, especially CSHCN, by developing risk-adjustment models. CSHCN are particularly vulnerable in the current health insurance marketplace.

Health Services Research Demonstration and Dissemination Grants (R18)

Pharmaceutical Safety Tracking (PhaST): Managing Medications for Patient Safety. Principal Investigator: William Gardner, PhD, Children's Research Institute, Columbus, OH. Grant No. R18 HS17258; project period September 4, 2007-August 31, 2008. PhaST is a health information system that will assist clinician management of medications in ambulatory settings, specifically pediatric use of antidepressants. PhaST is an automated system for monitoring medication adherence, side effects, and patient symptoms. It will benefit outpatients taking drugs that have recognized side-effect risks, even when those drugs are correctly prescribed. The use of psychoactive medications in children and adolescents has greatly increased the public health relevance of medication-related adverse events, including suicidal ideation and manic activation. PhaST will be compared with usual care on measures of patient and provider satisfaction, patient outcomes, and measures of the quality of medication management, such as the rate of patient medication nonadherence.

STEPStools: Developing Web Services for Safe Pediatric Dosing. Principal Investigator: Kevin B. Johnson, MD, Vanderbilt University Medical Center, Nashville, TN. Grant No. R18 HS17216; project period September 30, 2007-August 31, 2010. This research will enable shared decisionmaking and patient-clinician communication, personal health records, and integration of patient information across transitions in care, as well as patient self-management of chronic conditions. The quality of every decision made in health care facilities is critically dependent on the availability of accessible, accurate, relevant, and current patient care information. This study will strategically measure and assess a design for culturally sensitive patient-centered care through accessibility to information technology (IT) support systems.

Harnessing Health IT to Prevent Medication-Induced Birth Defects. Principal Investigator: Eleanor B. Schwarz, MD, University of Pittsburgh Medical College, Pittsburgh, PA. Grant No. R18 HS17093; project period September 7, 2007-August 31, 2010. Each year, 150,000 infants (1-3 percent of all U.S. births) are born with some form of physical or mental birth defect. Clinicians rarely counsel women about contraception when prescribing medications that increase the risk of birth defects. This research will evaluate

how physicians may be able to use computers to help them discuss the prevention of medication-related birth defects with their female patients. The project will provide information on how health IT can be used to prevent medication-induced birth defects throughout the country.

Improving Otitis Media Care with EHR-Based Clinical Decision Support and Feedback. Principal Investigator: Christopher Forrest, MD, PhD, Children's Hospital of Philadelphia, Philadelphia, PA. Grant No. R18 HS17042; project period September 12, 2007-February 28, 2010. Researchers will use the Children's Hospital of Philadelphia's (CHOP's) electronic health record (EHR) to integrate care across time and to supply physicians with the knowledge they need to treat a patient at the point of care. The full intervention comprises four parts: (1) a method for linking all services a patient receives from any physician into clinically logical clusters called episodes of care; (2) clinical decision support for medications and referrals to specialists that are based on the best available scientific evidence; (3) feedback to physicians on past performance of otitis media (OM) care; and (4) physician training on how to use the tools. Twenty-eight primary care practices will be randomly assigned to usual care, full intervention, or full intervention without feedback. The three main aims are to: develop and pilot test the OM health IT intervention; examine the overall effects of the intervention and the contribution of physician feedback on quality; and assess the effects of the intervention on the secondary outcomes of resource use and clinician adoption of the technology.

***Medication Monitoring for Vulnerable Populations via IT**. Principal Investigator: Christopher Lehmann, MD, Johns Hopkins University, Baltimore, MD. Grant No. R18 HS17018; project period September 21, 2007-August 31, 2009. The goal of this project is to demonstrate the ability of health information technologies, including EHRs, to provide quality and safety measures for the vulnerable populations served by an urban community health center. The project includes a practice-based demonstration involving the linking of EHRs, laboratory data, and claims data to generate useful quality and safety measures and evaluate the utility of the measures.

Enabling Patient-Centered Care through Health IT Grants (R18)

Conversational IT for Better, Safer Pediatric Primary Care. Principal Investigator: William Adams, MD, Boston Medical Center, Boston, MA. Grant No. R18 HS17248; project period September 1, 2007-August 31, 2010. The goal of this project is to improve preventive care in pediatric primary care settings by focusing on medication management. It involves development and evaluation of an integrated patient-centered health information system (the Personal Health Partner) that will use fully automated, interactive conversations to gather personal health data and counsel parents before scheduled visits, exchange that data with the child's primary care clinician via the electronic health record, and offer personalized followup assessment and counseling after visits. By linking parents in their homes to their primary care providers, the researchers expect to inform and activate parents, provide much richer data to drive decision support at the point of care, and provide ongoing support for long-term behavior change following primary care visits.

***Impact of a Wellness Portal on the Delivery of Patient-Centered Prospective Care**. Principal Investigator: James Mold, MD, MPH, University of Oklahoma Health Sciences Center, Oklahoma City, OK. Grant No. R18 HS17188; project period July 1, 2007-June 30, 2010. The aims of this study are to (1) develop, field test, and further refine an Internet-based wellness portal—the Preventive Services Reminder System (PSRS)—for patients in primary care settings to facilitate patient-centered, preventive care; (2) determine the impact of the wellness portal on the process of patient-centered preventive care by examining the experiences of patients and providers with care and individualization of recommended services; and (3) develop and describe model wellness portal/PSRS practices, produce a video of these model practices and disseminate it to clinicians, and distribute the knowledge derived from the project through publications and presentations. This study will include women, the elderly, children, and minorities (Hispanic).

Enabling Quality Measurement Through Health IT Grants (R18)

Surveillance for Adverse Drug Events in Ambulatory Pediatrics. Principal Investigator: Peter Kilbridge, MD, Washington University, St. Louis, MO. Grant No. R18 HS17010; project period July 1, 2007-June 30, 2009. The aims of this project are to (1) implement an automated surveillance system for measuring the incidence of adverse drug events (ADEs) occurring in the

outpatient setting (including the emergency department (ED) in pediatric patients with specific chronic diseases that involve ED care or admission to the St. Louis Children's Hospital; (2) use the automated surveillance system for measuring the incidence of ADEs occurring in these patient populations during the transition in care from the outpatient to inpatient setting, e.g., originating during the admissions process; (3) use the automated surveillance system for measuring the incidence of ADEs in the target pediatric populations within 4 weeks of discharge from the hospital; and (4) evaluate the performance of the event detection system as employed in aims 1, 2, and 3. This study will include African American pediatric patients in the sickle cell disease population and cystic fibrosis and cancer patients in all racial and ethnic groups.

***Massachusetts Quality E-Measure Validation Study**. Principal Investigator: Eric Schneider, MD, MSc, Harvard University, Boston, MA. Grant No. R18 HS17048; project period September 1, 2007-August 31, 2009. The aims of this project are to (1) recruit a cohort of adult ambulatory patients from three communities that are piloting community-wide implementation of structured EHRs to compare a quality measurement method based on data from a structured EHR to a hybrid method involving a combination of aggregated claims data and medical records review; and (2) use secondary data sets on adult and pediatric patients in the same three communities to compare a measurement method based on structured EHR data to a claims-only method based on a novel database that aggregates claims data from commercial health plans and Medicare. This study will include both male and female patients and racial and ethnic minorities (Hispanic/Latino, African-American, and Asian).

***Automating Assessment of Asthma Care Quality**. Principal Investigator: Brian Hazlehurst, PhD, Kaiser Foundation Research Institute, Oakland, CA. Grant No. R18 HS17022; project period November 1, 2007-October 31, 2009. The aims of this project are to (1) refine asthma care quality measures from the RAND Quality Assessment Tools study for use as a quality measure set to evaluate ambulatory asthma care performance; (2) develop and validate an automated (generalizable and scalable) method for applying the measures identified, using comprehensive electronic medical record (EMR) data; (3) apply the method to assess ambulatory asthma care quality in two distinct health plans representing diverse patient populations and care practices; and (4) evaluate the association between these automated measures of adherence to recommended asthma care processes and measures of clinical outcomes. This study will include asthma patients older than age 5, including minority patients.

Centers for Education and Research on Therapeutics (CERTs) Program Awards (U18)

Pursuing Perfection in Pediatric Therapeutics. Principal Investigator: Carole Lannon, MD, MPH, Children's Hospital Medical Center, Cincinnati, OH. Grant No. U18 HS16957; project period August 1, 2007-July 31, 2011. This project involves four studies to improve outcomes for children by optimizing the use of therapeutics, pharmacogenomics and personalized medicine, patient safety, and quality improvement methodology. The studies will: (1) examine the impact of pharmacogenetic testing on the treatment of children taking risperidone; (2) decrease harm from adverse drug events using high-reliability methods; (3) improve outcomes for children with chronic illness through collaborative networks in subspecialty care by working initially with the Pediatric Inflammatory Bowel Disease Network to improve medication management; and (4) pilot and disseminate resources that facilitate the use of optimal therapeutics by working with the American Academy of Pediatrics. Minority children (infants to 18 years of age) will be included in these studies.

***The Vanderbilt Center for Education and Research on Therapeutics**. Principal Investigator: Wayne Ray, PhD, Vanderbilt University, Nashville, TN. Grant No. U18 HS16974; project period October 1, 2007-September 30, 2011. This project involves eight new studies to promote optimal pharmacotherapy in Medicaid and Veterans' Health Administration (VHA) populations and reduce the occurrence of medication-related gastropathy. Four studies will investigate the effects of frequently used drugs in priority populations (fetus, children, chronically ill) and study priority diseases (cardiovascular, gastrointestinal). Three educational programs will focus on improving the use of therapy to prevent stroke/sepsis in children with sickle cell disease, gastroprotection in high-risk nonsteroidal anti-inflammatory drug (NSAID) users in the VHA, and gastroprotection in high-risk Medicaid NSAID users. The one policy evaluation study will examine the effect of Medicaid disenrollment of patients with serious mental illness to

inform future insurance coverage policies for this vulnerable population. Women, minorities, and children (African Americans) will be included in this study.

*__HMO Research Network CERT III__. Principal Investigator: Richard Platt, MD, Harvard Pilgrim Health Care, Boston, MA. Grant No. U18 HS16955; September 30, 2007-September 29, 2011. This project involves four new studies to enhance the collective ability of the HMO Research Network and other collaborating health plans to advance therapeutics knowledge by leveraging unique data sources within a very large, generalizable population. This study also entails development and implementation of new multi-faceted methods for disseminating and promoting best therapeutic practices. The third project will focus on children: "Antipsychotic Medication Use in Children and Risk of Diabetes Mellitus." The aims of this study are to (1) describe the characteristics of children receiving atypical antipsychotic medications, including demographics, specific indications of antipsychotic therapy, preexisting diabetes mellitus, prior glucose monitoring, and relevant comorbidities and medications; (2) assess and compare the incidence of diabetes mellitus among children receiving and not receiving atypical antipsychotic medications; and (3) determine whether the incidence of diabetes mellitus varies among children receiving different atypical antipsychotic medications.

*__Center for Education and Research on Therapeutics and the University of Pennsylvania__. Principal Investigator: Brian Strom, MD, MPh, University of Pennsylvania, Philadelphia, PA. Grant No. U18 HS16946; project period September 1, 2007-August 31, 2011. This project involves research to improve the underlying evidence base for decisions about the use and effects of anti-infective drugs, as well as the implementation and evaluation of interventions aimed at improving the use of anti-infectives in outpatient and inpatient settings, locally, regionally, and nationally. New features of the PennCERT include an increased focus on pediatrics, with new faculty and a major emphasis planned at the Children's Hospital of Philadelphia.

Research Infrastructure Development Awards (P20)

Ambulatory Care Patient Safety Proactive Risk Assessment Grants

*__Oral Chemotherapy Safety in Ambulatory Oncology: A Proactive Risk Assessment__. Principal Investigator: Saul Weingart, MD, PhD, Dana-Farber Cancer Institute, Boston, MA. Grant No. P20 HS17123; project period September 1, 2007-August 31, 2009. A failure modes and effects analysis will be conducted for five oral chemotherapy agents, and an improvement plan will be developed to address the hazards associated with these classes of medications used by adult and pediatric outpatients at New England's largest cancer center. The results of this study will be integrated into an improvement plan that includes a portfolio of interventions to address high-priority failure modes.

__Risk Assessment of Pediatric Emergency Transfers__. Principal Investigator: Jane Holl, MD, Institute for Healthcare Studies, Chicago, IL. Grant No. P20 HS17125; project period July 1, 2007-June 30, 2008. This study has four goals. The first goal is to use failure modes and effects analysis to conduct a set of proactive risk assessments of communication, documentation, and transfer processes involving pediatric patients between referring EDs from six hospitals with pediatric inpatient services that make up the Pediatric Patient Safety Consortium in the Chicago area. The second goal is to condense the results of these analyses into a single set of specific communication, documentation, coordination, and systemic risk factors in emergency transfers. The third goal is to create a standardized process and tools to address communication, documentation, and coordination during transfers. The fourth goal is to develop a toolkit and disseminate it to a sample of EDs in the hospitals receiving inpatient pediatric referrals to elicit feedback about its generalizability and potential for implementation. The study population will include up to 70 clinicians, including minority clinicians.

__Crossing an Invisible Quality Chasm: From the NICU to Ambulatory Care__. Virginia Moyer, MD, MPH, Baylor College of Medicine, Houston, TX. Grant No. P20 HS17122; project period July 1, 2007-June 30, 2008. This project includes a prospective risk assessment using Health Care Failure Modes and Effect Analysis™ (HFMEA) to identify potential high-impact error points and their origins in the care transition from the neonatal intensive care unit (NICU) and intermediate care nurseries to ambulatory followup. The researchers will use a combination of methods, including focused case reviews and questionnaires to conduct a retrospective risk assessment and identify errors to corroborate and add to the findings from HFMEA. Women, minorities, and parent/caregivers of infants being discharged from nurseries will be included in this study.

LEARN (Leveraging Existing Assessments of Risk Now) for Pediatric Patient Safety. Donna Woods, EdM, PhD, Northwestern University, Chicago, IL. Grant No. P20 HS17114; project period September 1, 2007-August 31, 2009. The aims of this project are to: (1) adapt the U.S. Department of Energy risk assessment methodology and criteria for analysis of multiple existing risk assessments for use in health care; (2) apply the adapted methods and criteria to existing risk assessments about emergency medical care systems and processes; (3) identify significant generic risks and contributors to risk related to children's emergency medical care; and (4) disseminate results through the National Association of Children's Hospitals and Related Institutions and other mechanisms, including information about the identified generic risks, risk contributors, and potential safety interventions for children's emergency care and a toolkit of the adapted methods and criteria for analysis of existing risk assessments.

Small Research Grants (R03)

Developing an Integrated Engineering-Based Model to Reduce Infections in ICUs. Principal Investigator: Christina Mastrangelo, PhD, University of Washington, Seattle, WA. Grant No. R03 HS15732; project period March 1, 2007-May 31, 2008. The goal of this project is to develop an engineering-based, systems-level methodology that models the likelihood of infection transmission within pediatric intensive care units (PICUs). The aims of this study include: (1) characterizing the current system in PICUs; (2) creating a systems model of PICUs; (3) developing a cognitive model to be incorporated into the systems model; (4) using risk analysis to develop a 'risk of infection' measure; and (5) evaluating alternatives to reduce the risk of infection transmission in the PICU. The study population will reflect the composition of pediatric PICUs.

Effect of a Restrictive Formulary on Low-Income Children. Principal Investigator: Julie Urmie, PhD, University of Iowa City, IA. Grant No. R03 HS15605; project period May 1, 2007-October 31, 2008. The aims of this project are to (1) determine the effect of the Iowa State Children's Health Insurance Program's (SCHIP) restrictive prescription drug formulary on children with depression by comparing antidepressant utilization and health outcomes during the year before and 1-1/2 years after the restrictive formulary was implemented on July 1, 2002; and (2) control for historical trends in depression treatment by comparing antidepressant utilization and health outcomes between Iowa's SCHIP population, a comparison group of privately insured children, and a comparison group of children in the Iowa Medicaid program during the year before and 1-1/2 years after the restrictive formulary was implemented. This study will use retrospective claims data, so the minority composition is predetermined based on the minority composition of the children enrolled in the three study groups.

The Impact of the FDA Antidepressant Black Box Warning on Psychiatric Practice. Principal Investigator: Hua Chen, University of Houston, Houston, TX. Grant No. R03 HS16802; project period March 1, 2007-June 30, 2008. The goal of this study is to investigate the impact of the U.S. Food and Drug Administration's antidepressant black box warning on the quality of psychiatric practice. This project will examine and compare the use of psychotherapy, psychotropic medications, and antidepressant followup care among Medicaid enrollees 6 to 18 years of age before and after FDA published the Public Health Advisory on antidepressants in March 2004.

Emergency Department Overcrowding and Quality of Acute Asthma Care for Children. Principal Investigator: Marion Sills, MD, MPH, University of Colorado at Denver and Health Sciences Center, Denver, CO. Grant No. R03 HS16418; project period June 1, 2007-May 31, 2009. This study will examine the association between ED overcrowding and quality of care in a pediatric population (ages 2-18 years), using asthma as the disease model. The aims of the project are to model the association between ED overcrowding and several process and outcome measures of pediatric acute asthma care quality and test for mediation by process measures and moderation by patient and provider characteristics within the overcrowding/quality model.

Overweight in Children: A New View Using the Population Attributable Fraction (PAF). Principal Investigator: Deborah Rosenberg, PhD, MPH, University of Illinois at Chicago, Chicago, IL. Grant No. R03 HS16899; project period July 1, 2007-June 30, 2009. This project will use data for Illinois and Florida from the 2003 National Survey of Children's Health to (1) extend and refine methods for estimating multi-factorial PAFs by assessing various numerical alternatives; (2) apply the PAF methods to child overweight, illustrating the way in which PAFs can be used to identify a set

of risk factors that, if addressed, would have the greatest impact on reducing an outcome in the population; and (3) disseminate the methods, including guidelines, programming code, and other documentation, to practitioners engaged in priority-setting and program development.

***Using MEPS Data to Inform Public-Plan Consumerism**. Principal Investigator: Matthew Davis, MD, University of Michigan, Ann Arbor, MI. Grant No. R03 HS16544; project period July 1, 2007-June 30, 2008. This study will (1) identify the socioeconomic and demographic characteristics and health care utilization of children and adults enrolled in Medicaid whose expenditure patterns in the Medical Expenditure Panel Survey (MEPS) indicate that they would have a lower likelihood of exceeding their health opportunity account (HOA) allocations than other beneficiaries; (2) use the 2-year longitudinal panel format of the MEPS to follow individuals on Medicaid over time, in order to model the risk of exceeding the HOA allocations for hypothetical cohorts of beneficiaries with the characteristics identified in step 1; and (3) estimate the net fiscal impact of HOA initiatives for Medicaid programs for the models of hypothetical cohorts in step 2. Women, minorities, and children will be included in this study.

***The Impact of the Pneumococcal Conjugate Vaccine on Pneumonia Hospitalizations**. Principal Investigator: Carlos Grijalva, MD, MPH, Vanderbilt University, Nashville, TN. Grant No. R03 HS16784; project period March 1, 2007-February 28, 2008. The Nationwide Inpatient Sample (NIS) database sponsored by AHRQ will be used in this study to: (1) examine changes in pneumonia hospitalization trends for adults and children after the introduction of pneumococcal conjugate vaccines in selected NIS participating States, after accounting for the activity of respiratory winter viruses; (2) examine changes in pneumonia hospitalization trends after the introduction of pneumococcal conjugate vaccines in the United States using NIS national estimates and accounting for the activity of respiratory winter viruses; and (3) develop a reproducible methodology to monitor trends and evaluate interventions on this outcome as available information is updated.

DVT Prevention in Pediatric and Adolescent Trauma Patients: Safety and Costs. Principal Investigator: Sarah H. O'Brien, MD, MSc, Children's Research Institute, Columbus, OH. Grant No. R03 HS17344; project period September 30, 2007-September 29, 2009. This study will identify which, if any, young trauma patients with multiple injuries may truly benefit from receiving deep venous thrombosis (DVT) prophylaxis strategies that have become the standard of care for adults. The results will be used to create child- and adolescent-specific treatment guidelines, thereby allowing clinicians to maximize patient safety and minimize costs when considering thromboprophylaxis with low-molecular-weight heparin (LMWH) for a young trauma patient.

Pediatric Medication Safety. Principal Investigator: David G. Bundy, MD, Johns Hopkins University, Baltimore, MD. Grant No. R03 HS16774; September 30, 2007-September 29, 2008. This study will advance the knowledge of pediatric medication errors by identifying which medications and which children are associated with

high harm and near harm medication errors among high health care burden pediatric conditions and will systematically explore the causes of such errors. The products of this study will be directly useful in developing targeted solutions and policies to prevent harm to children from medication errors.

Research Training and Education

Minority Research Infrastructure Support Program (R24)

***Expansion of Rural Health Care Research Infrastructure Through the ECHO Model**. Principal Investigator: Sanjeev Arora, MD, University of New Mexico, Albuquerque, NM. Grant No. R24 HS16510; project period September 21, 2007-August 31, 2010. The goal of this project is to train primary care providers from underserved areas, such as rural communities, to develop knowledge and skill in "best practice" care for complex health conditions and to improve clinical outcomes for patients with such conditions. One component of this project will focus on overweight in children and adolescents.

Dissertation Awards (R36)

Encouraging Eligible Children's Participation in Public Health Insurance: The Role of National Awareness Campaigns. Principal Investigator: Jeanette Ziegenfuss, University of Minnesota, Minneapolis, MN. Grant No. R36 HS16565; project period June 1, 2007-May 31, 2008. The aims of this dissertation award are to (1) document the change in children's enrollment in public health insurance between 1996-2005, including the time span since the passage of SCHIP in 1997; (2) estimate the relative contribution of each of the two national awareness campaigns in the enrollment levels of public health insurance for children while controlling for State variation in programs and the demographic composition of those who are potentially eligible; (3) estimate the relative effectiveness of these campaigns for subgroups of SCHIP and Medicaid-eligible children, including age of child and parent, race/ethnicity, household income, etc; and (4) provide recommendations for future data collection with respect to all public insurance education and outreach to enable future research to estimate the total impact of these techniques in encouraging enrollment.

The Effects of Maternal Labor Supply on Child Health. Principal Investigator: Melinda Sandler Morrill, University of Maryland, College Park, MD. Grant No. R36 HS17375; project period September 4, 2007-June 3, 2008. This research will provide an estimate of the causal effect of maternal labor supply on the health of school-age children. It will contribute to the understanding of the public health burden of children's poor health that may result from increasing the supply of maternal labor. Policies that are aimed at mitigating the strain on working mothers and helping women combine work and family life can be informed by quantitative research such as this study on the impact on children of maternal labor.

Conference Grants (R13)

International Meeting on Indigenous Child Health (April 20-22, 2007, Montreal, Ontario, Canada). Principal Investigator: Sunnah Kim, MS, RN, American Academy of Pediatrics, Elk Grove Village, IL. Grant No. R13 HS16753; project period December 1, 2006-November 30, 2007. This conference will focus on innovative clinical care models and community-based public health approaches for children and youth in First Nations, Inuit, Métis, American Indian, and Alaska Native communities. The conference objectives are to: (1) demonstrate increased awareness of the unique situations and changing health needs of children in indigenous populations; (2) examine knowledge and experiences of those working in child health about the provision of culturally effective care in indigenous communities; (3) describe scholarly and community participatory research findings about the health and health care of indigenous populations; (4) increase collaboration and exchange information among child health workers and trainees about the health of indigenous children in rural and urban communities; and (5) exhibit strengthened collaborative partnerships with indigenous health organizations around issues related to child health.

Evidence Standards for Child Health Promotion (Spring 2007). Principal Investigator: Robert Sege, MD, PhD, Tufts-New England Medical Center, Boston, MA. Grant No. R13 HS16760; project period January 1, 2007-December 31, 2007. This conference will bring together stakeholders to discuss a new set of evidence standards for child health promotion that will guide future research, policy, and practice in health care for U.S. children. Discussions will focus on (1) the scientific basis for the use of evidence in recommending child heath promotion in clinical settings; (2) the attitudes, opinions, beliefs, and needs of a variety of stakeholders regarding child health promotion in clinical settings; (3) proposed methods for evaluating the

evidence supporting child health promotion in clinical settings; and (4) implementation of the strategies developed during this conference, including dissemination of conference results, to a broad group of interested professionals from a variety of related disciplines.

EBP Leadership Summit: Improving Health Outcomes for High-Risk Children and Teens (2007, Phoenix, AZ). Principal Investigator: Bernadette Melnyk, PhD, RN, Arizona State University, Tempe, AZ. Grant No. R13 HS16758; project period February 21, 2007-August 31, 2007. This summit of evidence-based practice (EBP) experts/nurse researchers from 10 children's hospitals throughout the United States will develop a strategic action plan to launch a national EBP research network to improve the care and outcomes of high-risk children and adolescents. The conference goals are to (1) identify priorities and action strategies to accelerate the translation of research findings into clinical practice in children's hospitals throughout the nation; (2) identify high priorities for research to guide clinical practice in areas where evidence does not currently exist (based on a review of existing evidence); and (3) disseminate the outcomes and action strategies from the summit in a pediatric nursing journal.

2007 Child Health Services Research Meeting (June 2, 2007, Orlando, FL). Principal Investigator: Jennifer Muldoon, MS, AcademyHealth, Washington, DC. Grant No. R13 HS16887; project period April 1, 2007-October 21, 2007. This conference will provide a forum for the child health services research community to achieve the following objectives: (1) disseminate the results of child health services research; (2) inform policy and clinical decisionmaking on child health services; (3) build researchers' skills with new methods and data sources for child health services research; (4) create networking opportunities for those interested in child health services; and (5) nurture the professional development of students and early careerists interested in child health services research.

6th Annual Forum for Improving Children's Health Care – Purging Harm from Children (March 19-21, 2007, San Francisco, CA). Principal Investigator: Charlie Homer, MD, MPH, National Initiative for Children's Healthcare Quality, Cambridge, MA. Grant No. R13 HS16879; project period March 7, 2007-December 31, 2007. This forum will play a critical role in initiating and accelerating improvement in the quality of children's health care. The objectives of this meeting include (1) building goodwill for improvement by highlighting successful evidence-based models and interventions; (2) disseminating strategies for implementing valid findings of health services research; (3) inspiring collaboration and information sharing among provider organizations and stakeholders; and (4) mobilizing efforts to provide better health care for children.

Contracts

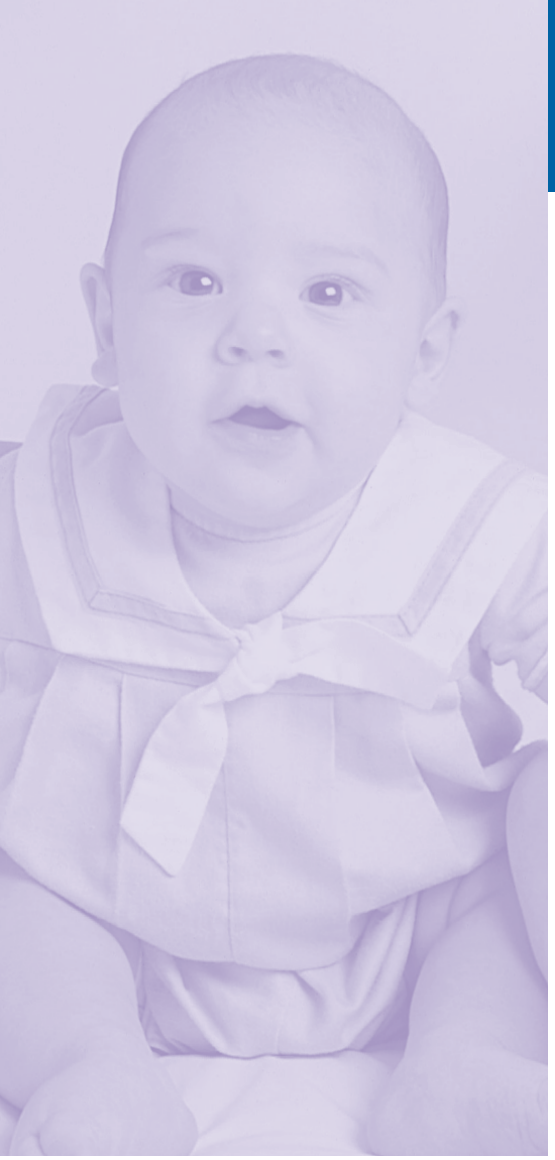
Evidence-based Practice Center (EPC) Child-Focused Activities

Under AHRQ's Evidence-based Practice Center (EPC) program, 5-year contracts are awarded to institutions to serve as EPCs. The EPCs review all relevant scientific literature on clinical, behavioral, and organizational topics and health care financing issues to produce evidence reports and technology assessments. These reports are used for informing and developing coverage decisions, quality measures, educational materials and tools, guidelines, and research agendas. AHRQ launched the EPC program in 1997; currently, there are 14 EPCs in the United States and Canada.

Nearly 200 EPC reports have been produced since the program's inception. Go to www.ahrq.gov/clinic/epcindex.htm for a list of available reports organized by clinical categories and topics. The reports described here focus on child health topics.

Diabetes Education and Medical Nutrition Therapy Education for Families with Children Who Have Type 1 Diabetes Mellitus. Principal Investigator: Robert Couch, University of Alberta Evidence-based Practice Center. Contract No. 290-02-0023; project period November 6, 2006-December 5, 2007. This EPC report focuses on the effectiveness of education relating to diabetes and to medical nutrition therapy on the daily management of diabetes and on the improvement of metabolic control and values of glycosylated hemoglobin (HbA1c). Available at www.ahrq.gov/clinic/tp/diabedtp.htm; accessed February 19, 2009.

***Hydroxyurea Treatment of Sickle Cell Disease**. Principal Investigator: Jodi B. Segal, MD, MPH, Johns Hopkins Evidence-based Practice Center. Contract No. 290-02-0018; project period February 23, 2007-February 22, 2008. Sickle cell disease causes damage to most organs including the spleen, kidneys, and liver. Damage to the spleen makes sickle cell disease patients, especially young children, easily overwhelmed by certain bacterial infections. Droxia, the prescription form



of hydroxyurea, was approved by the FDA in 1998 and is now available for adult patients with sickle cell anemia. This task order will investigate specifically the efficacy and effectiveness of hydroxyurea for patients with sickle cell disease. In addition, it will systematically study if hydroxyurea treatment has short- and/or long-term harms for patients. Also studied will be barriers to the following: (1) therapies that increase hemoglobin F (the form of hemoglobin that exists in the fetus and small infants); (2) well-established therapies for disease-management; and (3) the use of bone marrow transplantation. Available at www.ahrq.gov/clinic/tp/hydscdtp.htm; accessed February 19, 2009.

*__Adverse Maternal & Child Health Outcomes Associated with Maternal Weight Gain__. Principal Investigator: Meera Viswanathan, PhD, RTI-UNC Evidence-based Practice Center. Contract No. 290-02-0016; project period January 15, 2007-February 14, 2008. This Task Order will result in a report on evidence about whether total weight gain or rate of weight gain are causal factors in infant and/or maternal health outcomes. Available at www.ahrq.gov/clinic/tp/admattp.htm; accessed February 19, 2009.

*__Elective Induction of Labor__. Principal Investigator: Vandana Sundaram, MPH (Stanford) and Aaron Caughey, MD, PhD (UCSF), Stanford University-University of California at San Francisco Evidence-based Practice Center. Contract No. 290-02-0017; project period March 1, 2007-March 31, 2008. This Task Order provides for an investigation of the following: (1) maternal risks related to elective induction vs. expectant management of labor and elective induction vs. elective cesarean section; (2) fetal/neonatal risks of elective induction vs. expectant management and elective induction vs. elective cesarean section. Researchers also will examine the evidence to determine whether certain physical conditions or patient characteristics (e.g., parity, cervical dilation, or previous pregnancy outcome) are predictive of a successful induction of labor.

__Effectiveness of Weight Reduction Programs in Children__. Principal Investigator: Evelyn Whitlock, MD, MPH, Oregon Health Sciences University. Contract No. 290-02-0024-8; project period May 1, 2007-August 31, 2008. This task order provides for an investigation of the effectiveness of weight reduction programs that promote behavioral change for treatment of overweight or obese children for short-term, long-term, and sustained weight loss. Other goals are to determine the safety of drug and surgical therapies for treatment of overweight or obese children and to assess the safety of weight reduction programs to promote behavioral change for treatment of overweight or obese children. Available at www.ahrq.gov/clinic/tp/chwghttp.htm; accessed February 19, 2009.

Developing Evidence to Inform Decisions about Effectiveness: The DEcIDE Network of Research Centers

The DEcIDE Network, which comprises 13 institutions, is a collaborative research and practice-based program. It assists AHRQ and other Federal agencies with implementation of Section 1013 of the Medicare Modernization Act of 2003 (MMA). Network members hold task order contracts; FY 2007 task orders are described here.

***A Multi-Center, Observational Cohort Study to Assess the Cardiovascular Risks of Medications Prescribed for Attention Deficit Hyperactivity Disorder (ADHD)**. Principal Investigator: William Cooper, MD, MPH, Vanderbilt University DEcIDE Center. Contract No. 290-05-0042; project period September 1, 2007-August 31, 2009. The purpose of this task order is the estimation of the cardiovascular risks associated with medications used to treat ADHD in both adults and children. The study cohorts will be constructed by combining enrollees of some HMOs across the country and the Tennessee Medicaid program that have been exposed to ADHD drugs. The Medicaid sample includes a substantial number of lower income and racial/ethnic minority children.

Effect of Angiotensin-Converting Enzyme Inhibitor (ACEI) Prescription Drug Use in Pregnancy. Richard Platt, MD, Harvard Pilgrim Health Care; HMO Research Network (HMORN) DEcIDE Center. Contract No. 290-05-0033; project period June 1, 2007-June 1, 2009. This project involves a population-based cohort study to examine the association of congenital anomalies with maternal use of ACE Inhibitors (ACEIs) during the first trimester of pregnancy. The study is more representative of the U.S. population than previous studies in this area, including all racial and ethnic groups without addressing any specific income or racial/ethnic group.

Accelerating Change and Transforming Organizations and Network (ACTION) Program: Field Partnerships for Applied Research

AHRQ's Accelerating Change and Transforming Organizations and Network (ACTION) program is a 5-year implementation model of field-based research that fosters public-private collaboration in rapid-cycle, applied studies. The purpose of the ACTION program is to promote innovation in health care delivery by accelerating the development, implementation, dissemination and uptake of demand-driven and evidence-based products, tools, strategies and findings. ACTION includes 15 large partnerships, each including a number of collaborating institutions with demonstrated capacities to "turn research into practice" for proven interventions targeting those who manage, deliver, or receive health care services.

Implementing Evidence-Based Quality Improvement Strategies to Improve Asthma Care for Children: A Practical Model to Transform Childhood Asthma Care. Principal Investigator: James W. Stout, MD, MPH, University of Washington, Seattle, WA. Contract No. 290-06-0022-2, with Health Research & Educational Trust; project period July 16, 2007-February 16, 2009. In response to an ACTION program call for the implementation and evaluation of evidence-based quality improvement strategies in childhood asthma, the contractor, Health Research & Educational Trust (HRET), and the University of Washington will work with primary care providers in New York State to facilitate online and phone-based training in use of spirometry as part of a comprehensive asthma diagnosis, severity assessment, and treatment plan (Phase I), and the use of asthma action plans and other related evidence-based management strategies (Phase II). Practices in Phase I will be randomly assigned to one of two matched waves of implementation. If effective, as measured by increased use of spirometry and action plans following Phase II, findings will be disseminated through HRET, the New York Asthma Learning Network, the National Initiative for Children's Healthcare Quality, journal publications, and other venues.

Academic Pediatric Association Young Investigator Awards

- Stephen Pont, MD; University of Texas Medical Branch: Health Care Encounters Due to Diarrheal Illness in Children.
- Sheela Sathyanarayana, MD; University of Washington: Is ambient air pollutant exposure associated with preterm and small for gestational age birth in the Puget Sound air basin?
- Srilakshmi Gnansekaran, MD, MPH; Massachusetts General Hospital: Child Health Policy and Asthma Outcomes: A Multi-Level Analysis.

Other Contracts

Knowledge Transfer to Improve Followup and Care for Infants with Early Hearing Loss—Expert Meeting. B.L. Seamon Corporation, Greenbelt, MD. Contract No. 290-07-10046; project period May 17, 2007-March 30, 2008. This project provided logistical and technical support for an expert meeting to bring together experts in knowledge transfer and quality improvement in order to develop strategies for reducing gaps in followup for early childhood hearing loss. Meeting participants heard about current and past efforts to close the gaps and were asked to develop recommendations for building on past and current successes.

Technical Assistance for HIT (Health Information Technology) and HIE (Health Information Exchange) in Medicaid and SCHIP. Principal Investigator: Linda Dimitropolis, Research Triangle Institute, Research Triangle Park, NC. Contract No. 290-07-10079; project period September 28, 2007-September 27, 2010. RTI has received the first task order to establish and implement the first rounds of technical assistance. This is a 3-year, $3 million task order to gather, synthesize, and disseminate information about the challenges and solutions State Medicaid and SCHIP agencies are currently experiencing as they attempt to implement and/or expand health IT and participate in HIE to improve the quality, safety, efficiency, and effectiveness of care; provide one-on-one consultative and technical assistance services that help address these challenges in selected Medicaid and SCHIP programs; and develop educational and dissemination programs, tools, and information resources that provide useful information about health IT and HIE participation to all Medicaid and SCHIP programs and their stakeholder organizations.

Technical Assistance for HIT (Health Information Technology) and HIE (Health Information Exchange) in Medicaid and SCHIP. Daniel S. Gaylin, National Opinion Research Center (NORC), Washington, DC. Contract No. 290-07-10039; project period September 28, 2007-September 27, 2010. The second of two task orders was awarded to NORC to provide technical assistance for health IT and HIE related to Medicaid and SCHIP.

Improving Quality Through Health IT: Testing the Feasibility and Assessing the Impact of Using the Existing Health IT Infrastructure for Better Care Delivery. Principal Investigator: Allen Hsiao, MD, Yale New Haven Health Services Corp. Contract No. 290-06-00015; project period September 28, 2007-September 30, 2009. This project involves the implementation and evaluation of a secure messaging system called ClinicalMessenger as a communication mechanism for pediatric patients and their parents and providers at the Yale New Haven Children's Hospital Respiratory Medicine Clinic. Variables will include provider-time spent and qualitative satisfaction by the patients and clinicians.

Pediatric Quality Improvement Research. Principal Investigator: Jeanne Van Cleave, MD, Massachusetts General Hospital for Children, Boston, MA. Requisition No. 07R000192; project period September 30, 2007-August 30, 2008. This professional services contract provides for a review of the challenges and opportunities for pediatric quality improvement research methods and designs.

Other AHRQ Activities that Address Children's Issues

U.S. Preventive Services Task Force. The U.S. Preventive Services Task Force, which is supported by AHRQ, makes recommendations regarding adoption of clinical preventive services based on rigorous evidence reviews. More information on the Task Force can be found at http://www.ahrq.gov/clinic/uspstfix.htm.

Federal Interagency Forum on Child and Family Statistics. AHRQ helps to support this Forum which produces annual reports on the well-being of children. The Web site for this activity is www.childstats.gov.

Publications. Publications based on AHRQ-supported extramural and intramural work on children's issues are listed, on an ongoing basis, at http://www.ahrq.gov/child/childpubs.htm.

More Information

For additional information on AHRQ's child health activities, please contact:

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