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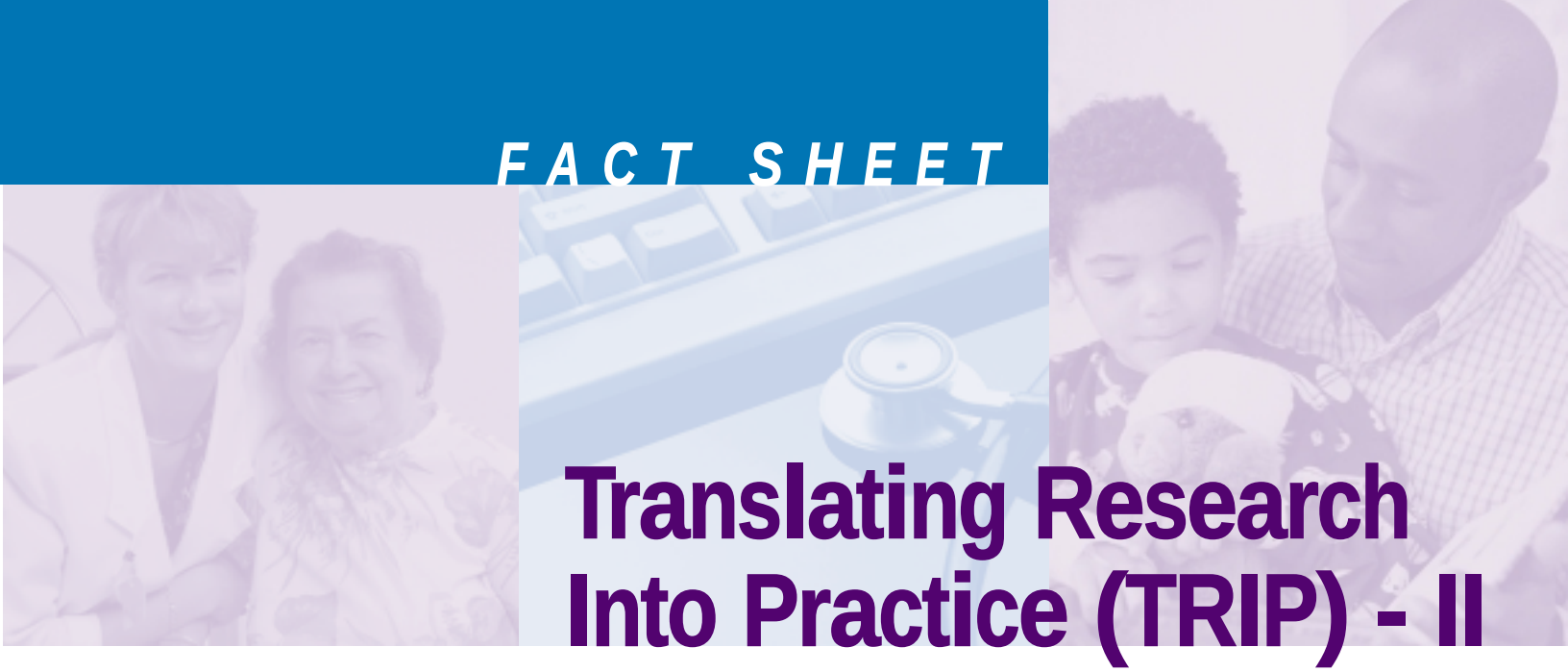

Translating Research Into Practice (TRIP) - II

Agency for Healthcare Research and Quality • 2101 East Jefferson Street • Rockville, MD 20852

www.ahrq.gov

AHRQ is the lead agency charged with supporting research designed to improve the quality of health care, reduce its cost, address patient safety and medical errors, and broaden access to essential services. AHRQ sponsors and conducts research that provides evidence-based information on health care outcomes; quality; and cost, use, and access. The information helps health care decisionmakers—patients and clinicians, health system leaders, and policymakers—make more informed decisions and improve the quality of health care services.

U.S. Department of Health and Human Services
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In September 2000, the Agency for Healthcare Research and Quality (AHRQ) funded 13 new projects to evaluate different strategies for translating research findings into clinical practice. The aim of these 3-year cooperative agreements is to identify sustainable and reproducible strategies to:

- help accelerate the impact of health services research on direct patient care and
- improve the outcomes, quality, effectiveness, efficiency, and/or cost effectiveness of care through partnerships between health care organizations and researchers.

The new projects join 14 others funded in 1999 as part of a major initiative by AHRQ to close the gap between knowledge and practice—between what we know and what we do—to ensure continuing improvements in the quality of the Nation's health care.

Background

It may take as long as one or two decades for original research to be put into routine clinical practice. Thus, the translation of research findings into sustainable improvements in clinical practice and patient outcomes remains a substantial obstacle to improving the quality of health care. What has been learned in the research setting often is not implemented into daily clinical practice. A 1998 review of published studies on the quality of care received by Americans, for example, found that only about 3 of 5 patients with chronic conditions received recommended care.[1] Moreover, many of the examples of success in translating research into practice have involved inpatient care or settings in which most providers practice in close proximity. The list of "best practices" that involve dispersed outpatient settings—the predominant mode of clinical practice today—is much more limited.

This translational hurdle exists despite a wide range of strategies for implementing research in practice—provider reminder systems, local opinion leaders, computer decision support systems, financial incentives, and others. It appears that some strategies work best in certain contexts but success may be influenced by the care setting, the patient, organizational factors, and the desired behavior change. A 1999 systematic review of the literature found that, while some health care interventions were effective under some circumstances, none was effective under all circumstances.[2] Also, few studies have addressed

TRIP-II focuses on the implementation techniques and the organizational and clinical factors associated with translating research into applied settings.

whether a strategy that is successful in one clinical setting will also be successful in another setting.

The TRIP Initiative

In fiscal year 1999, AHRQ (then the Agency for Health Care Policy and Research) published its first Translating Research Into Practice (TRIP) initiative. The purpose of TRIP-I was to generate new knowledge about approaches that promote the utilization of rigorously derived evidence to improve patient care. The Agency's goal was to enhance the use of research findings, tools, and scientific information that would work in diverse practice settings, among diverse populations, and under diverse payment systems. The 14 studies supported under TRIP-I address a variety of health care problems, primarily through randomized controlled trials. These studies, which represent important prototypes of what is possible under ideal circumstances, generally require an elaborate strategy for superimposing data collection on the demands of routine practice.

Building on earlier initiatives, TRIP-II is aimed at applying and assessing strategies and methods that were developed in idealized practice settings or that are in current use but have not been previously or rigorously evaluated. Furthermore, increased demands for accountability in health care, including reporting of clinical performance using standardized quality measures, have created a sense of urgency regarding improvement within health care organizations. With this as a basis, TRIP-II focuses on implementation techniques and factors—such as organizational and clinical characteristics—associated with successfully translating research findings into diverse applied settings.

Special Areas of Interest to TRIP-II

Two areas of particular importance to TRIP-II are improving the health care of minority populations and using information technology to translate research findings into health care improvements and health policy.

Reducing disparities in health care. TRIP-II joins a number of AHRQ initiatives addressing conditions—such as diabetes and cardiovascular disease—that disproportionately affect minority populations. Past research has identified important clinical areas in which gaps in health care exist. Eliminating disparities requires enhanced efforts at preventing disease, promoting health, and delivering appropriate care. Several TRIP-II projects are evaluating how implementation methods and tools affect the health outcomes of minority populations in several clinical areas.

Using information technology. The potential for technology to translate research findings into sustainable health care improvements has long been recognized. Technology may be utilized to accelerate the implementation of research throughout organizations more rapidly than would occur if translation strategies depended on individuals or personal interactions. A number of TRIP-II projects will evaluate how computer-based interventions improve quality of care for minority as well as nonminority populations.

(See "Projects," below, for a complete list of TRIP-I and TRIP-II studies now underway.)

Collaborative Strategies

Research partnerships. A key to TRIP-II is the presence of partnerships between researchers and health care

organizations such as integrated service delivery systems, practice-based networks, academic health centers, managed care organizations, and others. The structural and organizational diversity of these health systems may help to facilitate the evaluation of models and tools for research translation to actual care settings that might not otherwise occur.

In addition, these partnership arrangements may help to accelerate and magnify the impact of the research on health care practice by:

- disseminating evidence-based knowledge to audiences that include practitioners, patients, and administrators;
- identifying information important to health care organizations efforts to improve the quality of health care;
- providing practical assistance to physicians, and other health care providers in implementing research in direct patient care; and
- supporting the further development and refinement of successful and sustainable strategies to translate research into practice that improves outcomes.

Cooperative agreement activities. A steering committee composed of grantees and AHRQ staff is undertaking activities to strengthen individual studies and facilitate synergism between the studies. Several work groups have been formed to discuss common issues, data elements, methods, tools, and outcomes. The goal of these activities is to help advance the scientific base for clinical research implementation.

TRIP Projects

TRIP-II

Better Pediatric Outcomes Through Chronic Care. Evaluates use of affordable technology and family-focused educational intervention program to improve the asthmatic conditions of poor, inner-city, minority children, ages 5-18, who are enrolled in a community health center-based Medicaid managed care organization. (Principal investigator: Judith Fifield, University of Connecticut Health Center, Hartford, CT.)

Developing an Asthma Management Model for Head Start. Develops and tests an evidence-based asthma case management model for low-income minority children enrolled in 29 Head Start programs. Outcomes to be measured include asthma-related school absences, symptoms, quality of life, emergency department visits, and hospital use. (Principal investigator: Perla A. Vargas, Arkansas Children's Hospital, Little Rock, AR. Partnering organizations: Pulaski County Head Start and Arkansas Foundation for Medical Care).

Diabetes Education Multimedia for Vulnerable Populations. Compares usual care with patient education via an interactive, multimedia computer program to improve diabetes-related knowledge, attitudes, self-efficacy and compliance with self-care recommendations. The study takes place at clinics serving predominantly African American and Hispanic patients. (Principal investigator: Ben S. Gerber, University of Illinois, Chicago, IL. Partnering organizations: Community Health Clinic and the Cook County Hospital Ambulatory Network).

Implementing Adolescent Preventive Guidelines. Compares usual care with an office-based intervention, consisting of tools and clinician training, and evaluating the outcome of delivery of preventive services during routine well-care visits. (Principal investigator: Charles E. Irwin, University of California, San Francisco, CA.)

Improving Pain Management in Nursing Homes. Develops and implements a culturally competent, evidence-based educational and behavioral intervention to improve the quality of pain assessment and management in 2 nursing homes. Influence and changes of organizational variables and cost-effectiveness of the intervention to nursing homes will be assessed. (Principal investigator: Katherine R. Jones, University of Colorado Health Sciences Center, Denver, CO.

Improving Quality With Outpatient Decision Support. Assesses physician compliance with paper-based and electronic guidelines, reminders, and alerts for outpatient settings. Target areas for the reminders and alerts are disease management, medication management, and ancillary test ordering. (Principal investigator: David Bates, Brigham and Women's Hospital, Boston, MA. Partnering organizations: Beth Israel and Massachusetts General Hospitals and their outpatient clinics).

Improving Utilization of Ischemic Stroke Research. Assesses the effectiveness of a model for accelerating the use of evidence-based treatment guidelines for acute ischemic stroke in 24 urban and rural hospitals in Minnesota. (Principal investigator: Catherine Borbas, Minneapolis Medical Research Institute, Minneapolis, MN. Partnering organizations: Harvard

Medical School and the University of Minnesota School of Nursing).

An Internet Intervention To Increase Chlamydia Screening. Tests Internet-based learning modules designed to increase primary care physician screening of at-risk female patients and decrease incidence of pelvic inflammatory disease. (Principal investigator: Jeroan Allison, University of Alabama, Birmingham, AL. Partnering organization: U.S. Quality Algorithms).

MCO Use of a Pediatric Asthma Management Program. Compares a specially modified version of the Easy Breathing program with an asthma management program presently being used in a large managed care organization (MCO) in the Hartford area. (Principal investigator: Michele M. Cloutier, University of Connecticut Health Center, Hartford, CT. Partnering organizations: ConnectiCare and the Connecticut Children's Medical Center).

A Model for Use of the Urinary Incontinence Guideline in U.S. Nursing Homes. Tests the effectiveness of a model of care implemented by nurse practitioners in collaboration with nurses and physicians to translate the AHRQ Urinary Incontinence Guideline into practice in 10 New York nursing homes. (Principal investigator: Nancy M. Watson, University of Rochester School of Nursing, Rochester, NY).

Optimizing Antibiotic Use in Long-Term Care. Assesses whether an evidence-based clinical algorithm for managing urinary tract infections in older adults in residential long-term care facilities (LTCFs) can reduce the overall use of antibiotics in LTCFs. (Principal investigator: Mark B. Loeb, McMaster University, Hamilton, Ontario, Canada. Partnering organizations: University of Toronto, Queen's University, St. Joseph's Health Care System Research Network nursing homes, and nursing homes in Ontario.)

Primary and Secondary Prevention of Coronary Heart Disease and Stroke. Evaluates the impact of a quality improvement model using academic detailing and electronic medical records on adherence with clinical practice guidelines for prevention of cardiovascular disease and stroke in 22 primary care settings across the United States. (Principal investigator: Steven M. Ornstein, Medical University of South Carolina, Charleston, SC. Partnering organizations: 22 affiliated Practice Partner Research Network sites.)

Translating Prevention Research Into Practice. Compares two methods of integrating preventive services in a group practice plan serving a low-income minority Medicaid population. Clinical areas addressed are infant mortality, cardiovascular disease, cancer screening, HIV/AIDS and immunizations. (Principal investigator: Robert A. Levine, Meharry Medical College, Nashville, TN. Partnering organization: Tennessee State University Center for Health Research).

TRIP-I

Do Urine Tests Increase Chlamydia Screening in Teens? Uses a small-group educational program for clinic personnel augmented with weekly supervision and followup to reinforce the educational content to improve screening for sexually transmitted diseases among asymptomatic, sexually active adolescents attending Kaiser Permanente outpatient clinics. (Principal investigator: Mary-Ann Shafer, University of California, San Francisco, CA).

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Evidence-based Practice: From Book to Bedside. Evaluates a multidimensional, model-based approach to implementation of an evidence-based guideline for acute pain management of elderly patients (65 years and older) hospitalized for hip fracture in nonintensive settings. (Principal investigator: Marita Titler, University of Iowa, Iowa City, IA).

Evidence-based 'Reminders' in Home Health Care. Investigates providers' use of evidence-based guidelines in the treatment of two highly prevalent chronic diseases—congestive heart failure and cancer—and how the use of guidelines affects quality and cost of care. (Principal investigator: Penny Feldman, Visiting Nurses Service of New York, New York, NY).

Evidence-based Surfactant Therapy for Preterm Infants. Tests the effect of standardizing the current variability in surfactant administration practices for the prevention and treatment of neonatal respiratory distress syndrome to reduce both mortality and morbidity for preterm infants. (Principal investigator: Jeffrey D. Horbar, University of Vermont, Burlington, VT).

Improving Diabetes Care Collaboratively in the Community. Assesses health outcomes and quality of care for indigent, vulnerable patients with diabetes who receive primary care at rural and urban community health centers in medically underserved areas. (Principal investigator: Marshall H. Chin, University of Chicago, Chicago, IL).

Improving the Evidence for Unstable Angina Guidelines. Investigates whether agreement with unstable angina guideline recommendations for triage is associated with decreased MI and mortality rates and decreased short-term health care utilization rates (e.g., readmissions). (Principal investigator: David Katz, University of Wisconsin, Madison, WI).

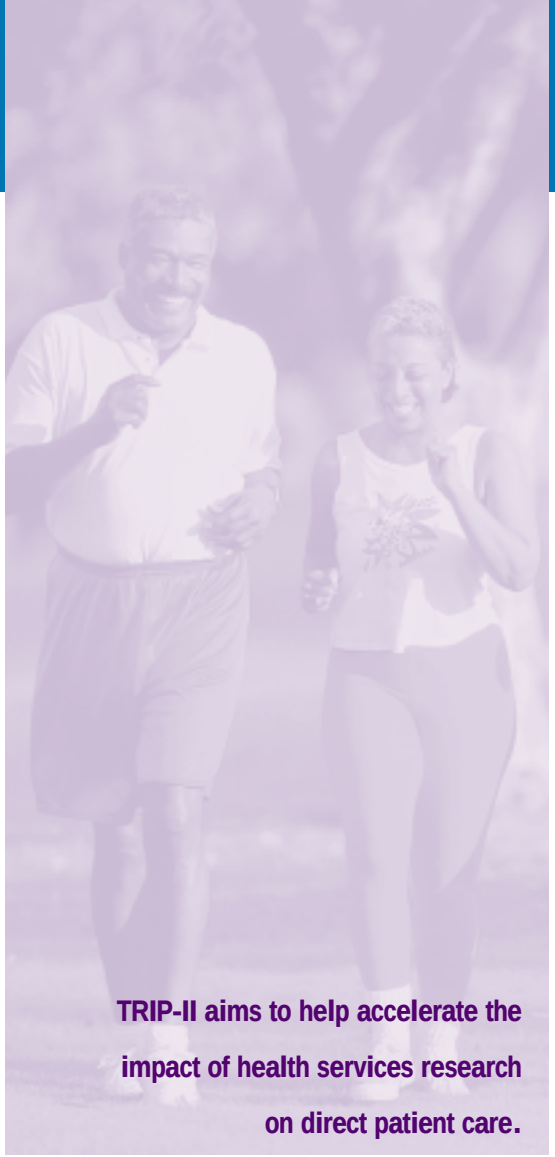
Interventions To Improve Pain Outcomes. Develops and implements three combinations of different quality improvement interventions to measure their impact on hospital patients' self-reported pain intensity, pain relief, expectations for pain management, and satisfaction with care. (Principal investigator: R. Sean Morrison, Mount Sinai School of Medicine, New York, NY).

Pediatric EBM–Getting Evidence Used at the Point of Care. Uses randomized controlled trials in three settings to investigate whether use of an evidence-based decision support system will improve outpatient care for specific pediatric diseases—otitis media, acute sinusitis, bronchiolitis, allergic rhinitis. (Principal investigator: Robert Davis, University of Washington, Seattle, WA).

Point of Care Delivery of Research Evidence. Assesses strategies for the automated selection of credible and substantial research evidence, matching of patient data with the clinical evidence, and direct delivery of high-quality evidence to the point of clinical decisionmaking. (Principal investigator: E. Andrew Balas, University of Missouri, Columbia, MO).

Practice Profiling To Increase Tobacco Cessation. Evaluates the impact of tobacco cessation profiling on provider and practice behavior, including screening for tobacco use and provision of tobacco cessation treatment, and assesses effects of the practice interventions on the quitting behavior of smokers. (Principal investigator: Susan H. Swartz, Maine Medical Assessment Foundation, Manchester, ME).

Several TRIP-II projects evaluate how implementation methods and tools affect health outcomes of minorities in six clinical areas.



TRIP-II aims to help accelerate the impact of health services research on direct patient care.

Reducing Adverse Drug Events in the Nursing Home. Tests whether a computer-based clinical decision-support system can lower the rate of adverse drug events and potential adverse drug events in nursing homes. (Principal investigator: Jerry Gurwitz, University of Massachusetts Medical Center, Worcester, MA).

Smoking Control in MCH Clinics: Dissemination Strategies. Tests two strategies—academic detailing/outreach and access to a centralized telephone counseling service— vs. a control group in their effectiveness to disseminate the "It's Time" smoking cessation program and the AHRQ smoking cessation guidelines in local public maternal and child health (MCH) clinics. (Principal investigator: Clara Manfredi, University of Illinois, Chicago, IL).

Translating Chlamydia Screening Guidelines Into Practice. Compares standard guideline implementation procedures to three other implementation strategies—one with only provider-specific components, one with only patient-specific components, and one with both provider- and patient-specific components—to investigate their effects on chlamydia screening rates. (Principal investigator: Robert Thompson, Center for Health Studies, Seattle, WA).

Translating Research: Patient Decision Support/Coaching. Examines the effectiveness of the Heart After-hospital Recovery Planner (HARP)—a combined decision-support and coaching intervention—in improving physician medication prescribing, patient secondary prevention, and participatory decisionmaking after hospitalization for myocardial infarction. (Principal investigator: Margaret Holmes-Rovner, Michigan State University, East Lansing, MI).

References

[1]Schuster M, McGlynn E, Brook R. How good is the quality of health care in the United States? Milbank Quarterly 1998; 76: 517-63.

[2]NHS Center for Reviews and Dissemination. Getting evidence into practice. Effective Health Care 1999 February; bull. 5(1).

For More Information

More information on AHRQ and its programs and projects is available on the AHRQ Web site at www.ahrq.gov.

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