



Addressing Tobacco in Managed Care

CAPSTONE CONFERENCE—MAY 3, 2005

Purpose of this Paper

On May 3, 2005, the Robert Wood Johnson Foundation (RWJF) convened a Capstone Conference for its *Addressing Tobacco in Managed Care* (ATMC) national program. Subtitled “Synthesizing Lessons Learned and Identifying Future Research Opportunities,” the conference provided a forum for the discussion of the results of ATMC and the use of these results to build a vision for future work to reduce the prevalence of tobacco use. The conference was co-funded by RWJF, the Centers for Disease Control and Prevention (CDC), and the Agency for Healthcare Research and Quality (AHRQ). It was facilitated by Michael Fiore, M.D., M.P.H., and Susan Curry, Ph.D., ATMC national program directors at the University of Wisconsin Medical School and the University of Illinois at Chicago, respectively.

The purpose of this paper is to report the key points that were discussed at this conference. The paper will describe changes in policy and in health care systems that have proven effective in reducing tobacco use, it will highlight the strategies and tactics that have proven successful in bringing these changes about, and it will discuss how the experience of eight years of ATMC can inform future work to sustain and spread the gains achieved—both to the field of tobacco use cessation and, potentially, to the management of other behavioral risk factors (e.g., physical inactivity, diet, risky drinking, obesity) associated with chronic conditions and diseases.

The ATMC Program

The conference started with an overview by C. Tracy Orleans, Ph.D., RWJF senior scientist, of the aims and accomplishments of the ATMC program. Orleans explained that RWJF launched its ATMC program in 1997 to capitalize on developments in the health care delivery system that presented an exceptional opportunity to promote the integration of effective smoking cessation interventions into basic health care. These developments included the Agency for Health Care Policy and Research's (AHCPR) 1996 clinical practice guideline on smoking cessation; the National Committee on Quality Assurance's (NCQA's) inclusion of a tobacco-related measure in its core HEDIS measures of health plan quality (to both of which RWJF contributed); and the growth of managed care itself, with its concomitant emphasis on preventive care, centralized systems of care and feedback of data on performance to providers.

In 2000, the U.S. Public Health Service (USPHS) concluded, in its Clinical Practice Guideline, *Treating Tobacco Use and Dependence*, that systems-level strategies adopted by health plans, providers and practices have the potential to significantly affect tobacco use by patients. RWJF's ATMC program complemented and expanded upon this conclusion by providing grants to evaluate the effectiveness of replicable systems-level strategies that would lead health care providers, practices and plans to adopt and adhere to AHCPR and USPHS recommendations.

The systems-level strategies identified by the USPHS guideline included recommendations to:

- Implement tobacco-user identification systems in every clinic.
- Provide education, resources and feedback to promote provider intervention.
- Dedicate staff to provide tobacco dependence treatment and assess the delivery of this treatment in staff performance evaluations.
- Promote hospital policies that support and provide inpatient tobacco dependence services.
- Include tobacco dependence treatments (both counseling and pharmacotherapy) identified as effective in the USPHS guideline—as paid or covered services for all subscribers or members of health insurance packages.
- Reimburse clinicians and specialists for delivery of effective tobacco dependence treatments—and include these interventions among the defined duties of clinicians.

The ATMC research projects examined the impact of these organizational strategies on such outcomes as smoker identification, tobacco use reduction among patients, rates of clinician intervention and costs of intervention efforts, across a full spectrum of managed care organization models.¹

¹ Results from ATMC have been published in two special supplements of the journal *Nicotine and Tobacco Research*, the first in 2002 (Volume 4 Supplement 1) and the second in April, 2005 (Volume 7 Supplement 1).

Setting the stage for the panel discussions that followed, Orleans summarized the many measurable gains in how tobacco use cessation interventions are supported and used in the health care system since the inception of ATMC:

- 62 percent of smokers now report being advised by their physicians to quit, versus 40 to 50 percent in the mid-1990s.
- 40 state Medicaid programs cover tobacco cessation treatment (versus 24 in the mid-1990s).
- Medicare now covers smoking cessation treatment.
- 97.5 percent of members of America’s Health Insurance Plans (AHIP) provide full coverage for evidence-based tobacco cessation treatment (versus 75 percent in 1997).
- There is a national portal for smoking cessation quitlines serving smokers in all 50 states and the District of Columbia.
- HEDIS contains three tobacco-related measures (up from one).
- A search of medical research journals shows 83 citations for articles on tobacco cessation in managed care from 1996–2005, versus five such citations for 1980–1995.

In addition to these measurable gains, ATMC has created a field of research and a network of researchers who have experience changing the systems through which health providers treat chronic conditions, and who can evaluate, in real-world practice settings, the effectiveness of these systems changes. Several speakers at the Capstone Conference noted the contribution of the ATMC national program directors and staff in creating this field and research methodology, and in designing the ATMC’s work so that the program’s components would complement each other and form a comprehensive strategy that was indeed effective in achieving the results described above.

The Capstone Conference

The heart of the May 3, 2005 Capstone Conference began with a set of panel discussions (chaired by Curry and Fiore) around three categories of systems-level strategies: (1) provider education, reminder systems and feedback; (2) incentives and reimbursement; and (3) the use of technology. Each discussion included presentations from ATMC participants on their work in each category, as well as a review of the evidence base for the effectiveness of each strategy (many of the studies cited in the evidence reviews were by ATMC participants). Through the discussions of changes that have been evaluated, three key themes emerged:

1. Tools to support tobacco use cessation do exist and are becoming widespread, but the motivation (of providers *and* patients) to use these tools continues to be essential for their success.
2. There is a body of knowledge beginning to be built around tools that work to build this motivation to change, but more research is needed in several areas.
3. An important area for future study is how new treatment and delivery approaches (especially those based on technology) can enhance motivation to change (for both providers delivering advice and assistance to quit and for patients receiving it).

What Tools Exist?

Provider Education, Reminder Systems and Feedback

Ronald M. Davis, M.D., F.A.C.P.M., of the Henry Ford Health System presented a review of the evidence from two sources:

- The Task Force on Community Preventive Services (*American Journal of Preventive Medicine*, 20(2S): 16–66, 2001).
- The Cochrane Collaboration (Jamtvedt G, Young JM, Kristoffersen DT, Thomson O'Brien MA, Oxman AD. "Audit and Feedback: Effects on Professional Practice and Health Care Outcomes." *Cochrane Database System Review*. (3): CD000259, 2003).

The evidence shows that the most effective strategies are those that affect system operations: provider reminder systems, for example, do work, while insufficient evidence exists that provider education interventions alone are effective. This is not a provider-only issue; interventions that support the provider's actions are required. Examples of such systems-related interventions include a combination of provider education and feedback (strong evidence exists to support such an intervention), as well as interventions that include patient education. There is some evidence that audit and feedback can be effective in improving professional practice in general, although the effects may be small to moderate.

The experience of participants in the ATMC program confirmed these findings. Charles Bentz, M.D., F.A.C.P., of Providence Health System and William Wadland, M.D., M.S., of Michigan State University College of Human Medicine each described a doubling of rates of providers advising their smoking patients to quit after interventions that included some combination of provider reminders, education and feedback on results.

Bentz and Wadland were joined in the discussion by Sue Swartz, M.D., M.P.H., of the Maine Medical Center whose ATMC project found that interventions involving provider education and feedback require strong social support to be effective; intensive face-to-face work with providers is one way of giving this support. Other Capstone Conference participants highlighted the importance of developing interventions that match the specifics of the practice's organization. Provider education, reminder systems and feedback, for example, may be easier to implement in staff model managed care organizations with their centralized organizational structures, medical records and information systems. Having a clinical champion within a practice can also increase the chance of such interventions being successful.

Incentives and Reimbursement

Evidence for the effectiveness of strategies involving patient co-pays, incentives and provider reimbursement was summarized by Helen Halpin, Ph.D., of the University of California at Berkeley School of Public Health, who described results for incentives directed at smokers themselves and at health care providers. "The Guide to Community Preventive Services: Tobacco Use Prevention and Control: Reviews, Recommendations and Expert Commentaries," in the *American Journal of Preventive Medicine*² recommends reducing smokers' out-of-pocket treatment costs based on evidence that co-pay reductions increase treatment use and long-term quit rates. Halpin noted that the 2005 Cochrane Collaboration (Kaper J, Wagena EJ, Severens JL, Van Schayck CP. "Healthcare Financing Systems for Increasing the Use of Tobacco Dependence Treatment"³) found stronger evidence for patient co-pay elimination than co-pay reduction, based on several new studies, including two funded under the program (Roski J, Jeddloh R, An L, Lando H, Hannan P, Hall C, Zhu SH. "The Impact of Financial Incentives and a Patient Registry on Preventive Care Quality: Increasing Provider Adherence to Evidence-Based Smoking Cessation Practice Guidelines" in *Preventive Medicine*;⁴ and Boyle RG, Solberg L, Magnan S, Davidson G, Alesci NL. "Trends: Does Insurance Coverage for Drug Therapy Affect Smoking Cessation?" in *Health Affairs*⁵).

2 *American Journal of Preventive Medicine*, 20(2) Supplement, 2001.

3 *Cochrane Database System Review*, (1): CD004305, January 25, 2005.

4 *Preventive Medicine*, 36(3): 291–9, 2003

5 *Health Affairs*, 21(6): 162–8, 2002

For providers, the evidence shows that certain types of rewards—particularly those that take place at the system level—do make a difference in getting providers to support tobacco use cessation. These incentives or rewards include extra income or public recognition for providing high-quality care as well as incentives created by accreditation measures from national organizations, such as the NCQA’s HEDIS measures. For example, health plans reporting higher scores on their tobacco-related HEDIS measures may be publicly recognized as providing higher quality care.

The presenters from ATMC sites highlighted several relevant findings from their work on incentives. Financial incentives can be costly and may be difficult to sustain over time. Joachim Roski, Ph.D., M.P.H., reported on a project at Allina Medical Group that studied the impact of a \$5,000 incentive to clinics and found a modest impact from the incentive on clinician behavior. Moreover, incentives must be noticeable: the Massachusetts General Hospital study, described by Nancy Rigotti, M.D., showed that direct payment to physicians had a positive impact but a modest salary incentive, paid annually, did not. This study also showed that the changed behavior lasted only as long as the incentive did. Finally, in discussing the expected impact of the growing interest in “pay for performance” efforts, participants highlighted the problem that the reliance of most financial incentive programs on administrative data alone—which may not capture all smoking cessation interventions—will limit the usefulness of pay for performance efforts regarding smoking cessation strategies.

Technology

Victor Strecher, Ph.D., M.P.H., of the University of Michigan presented a framework for evaluating technology used to disseminate tobacco cessation information. Highlighting the potential of e-technology, Strecher noted that over seven million individuals use the Internet to search for information on smoking cessation. The Internet also is a low-cost option and can be used to individually tailor intervention components. More research is required to understand the optimal design of a tailored message as well as how other technologies (e.g., electronic medical records) can be integrated into the tailoring process.

David Albert, D.D.S., M.P.H., and Anna McDaniel, D.N.S., R.N., reported on experience within ATMC with interventions involving new technologies. Albert and his colleagues at Columbia University School of Dental and Oral Surgery found that technology-based provider coaching, using CD-ROMs and e-mail, can be an effective tool to increase dentists’ use of the USPHS clinical practice guidelines. Study results showed an increase in dentist screening for tobacco use among their patients. While the study did not result in an increase in patients’ quitting smoking, it did show reduction in tobacco use among the patients counseled. McDaniel, of Indiana University, reported on the use of interactive voice technology to collect patient data that were then uploaded into an electronic medical record and used to generate reminders for providers to address tobacco use during routine clinical visits.

How Can These Tools Be Used More Effectively?

The evaluation studies of ATMC provide a great deal of information about health systems strategies to encourage tobacco use cessation. The studies have shown strategies that work and strategies that don't work, and—equally valuable—have clarified areas for future research. Each of the three capstone panel discussions identified a research agenda in its topic area:

- A better understanding of what constitutes optimal provider feedback is needed to learn the best metrics on which to give feedback, how often it should be delivered, and how best to assess the impact of feedback on clinical practice. Future research opportunities include evaluating what feedback should focus on, how often feedback should be delivered, and how best to get and use outcome information as part of this feedback to increase the feedback's effectiveness.
- A better understanding of the impact of incentives is also important. Still unanswered are questions regarding the optimal size of financial incentives that have an impact on providers, and alternative targets for improvement beyond “advice rates,” which are often used. As the federal Centers for Medicare & Medicaid Services and other payors move to payment for services based on quality indicators, the answers to these questions become critical.
- A greater understanding of the correct mix of technologies is needed. What is the right combination of technological support and face-to-face contact? Is it possible that finely tailored cessation materials will limit patient choices? Does the usefulness of technology vary among ethnic, racial or socio-economic groups? What are effective methods of promoting and recruiting participants to use tools such as interactive Web sites? For these tools, the costs of promotion could be higher than the costs of the content, an inversion of the usual relationship between the two.

How Can the Motivation to Use These Tools Be Enhanced?

The presentations and discussions at the Capstone Conference highlighted the need to design messages about smoking cessation that will motivate providers and patients to use existing tools to realize change. A key ATMC finding is that tailoring and customization make all strategies more effective, and to RWJF's James Marks, M.D., M.P.H., senior vice president and director of the Health Group, this concept of “message relevance” becomes in itself a new form of incentive. Specifically, the findings of ATMC's studies showed the importance of adapting feedback mechanisms to practices' organizational characteristics, as well as the value of personalizing feedback to the provider. Technology greatly increases the ability to tailor messages to their recipients and to deliver these tailored messages to people in a wide range of settings—at many places in the health care delivery system—quickly and cheaply. Tailoring is a field of inquiry with tremendous potential, and further evaluation is warranted to determine when and how tailoring can have the greatest impact.

Ultimately, the research that will help design effective motivating messages must take place in real practice settings. ATMC provides a model for this by evaluating the effectiveness of systems changes in a variety of models of managed care plans.

The Policy and Funding Environment in Which Future Research Will Take Place

ATMC has developed a body of knowledge about effective health system innovations to ensure delivery of evidence-based smoking cessation interventions and has informed a research agenda for the future. Many of the questions and interests that arose out of ATMC were echoed in the future directions laid out at the capstone conference by governmental and private sector policy-makers and funders.

Carolyn Clancy, director of AHRQ, described the importance to the agency's mission of actions that spur system change and create tools so that system change can occur. She announced AHRQ's intention of reforming a consortium to update the tobacco cessation clinical practice guidelines, with special focus on areas in which new research has become available since the guidelines were last revised in 2000—including youth cessation, quitlines, special populations, pharmacotherapy, people with psychiatric conditions and making the business case for cessation. Clancy also reported that AHRQ had just released *Helping Smokers Quit, a Guide for Nurses*. The guide, prepared in partnership with Tobacco-Free Nurses: Helping Nurses Quit, a program funded by RWJF in August 2003, is working to assist the nation's nearly three million practicing nurses in helping their patients—and themselves, if they are smokers—quit using tobacco. In terms of needed research, Clancy highlighted the prevalence of racial, ethnic and socioeconomic disparities in tobacco use, and the effects of tobacco on women and girls, and stressed the importance of linking research studies to real-world practice settings. Clancy praised the network of researchers built by ATMC and called for more of such networks, noting their power to influence policy, and pledged her commitment to continued collaboration with such work.

Other speakers from a range of both public and private funding agencies described their organizations' interests and offered suggestions as to how their areas of focus might intersect with the future research needs identified through ATMC.

- Mark Clanton, M.D., M.P.H., of the National Cancer Institute (NCI) highlighted the NCI's interest in funding research into the effectiveness of systems change and noted several specific programs underway, especially the NCI's seven Transdisciplinary Tobacco Use Research Centers (TTURCS), funded at \$12 million over five years (with support from RWJF). The TTURCs work across disciplines to gain better understanding of the etiology of tobacco use and addiction, the impact of advertising and marketing on tobacco use, effective prevention strategies, the treatment of tobacco use and addiction, the identification of biomarkers and the impact of tobacco exposure.
- The American Legacy Foundation focuses its work on identifying new and better ways to provide smoking cessation programs for smokers who want to quit, with a special emphasis on culturally tailored cessation strategies. Cheryl Heaton, Dr.P.H., Legacy's president and CEO, said that a key lesson learned from throughout Legacy's work is that "if you market it, they will come." She confirmed Strecher's observation that the tailoring of messages is critical to their success, and added that Legacy will be building its Web site into an active tool to support smoking cessation.

- The CDC funds both research and programs directed to tobacco use cessation. A major area of current focus, reported Ann Malarcher, Ph.D., M.S.P.H., of the CDC's Office on Smoking and Health, is its newly-released report on key outcome indicators for evaluating comprehensive tobacco control programs. The report identifies a number of short-term outcomes, but Malarcher noted that the CDC has not yet achieved consensus on a set of indicators to measure each outcome, highlighting this as an area where future research would be most helpful.
- RWJF has provided a two-year, \$400,000 grant to the ATMC's national program office for a "roots and wings" strategy to help sustain the network of researchers created by ATMC and to further its impact. The goal, explained Orleans of RWJF, is to help ATMC's work get "into the DNA of ongoing health care quality improvement." RWJF also will be integrating its work on tobacco, and its ATMC-gained experience in developing practice-based research networks, into a broad focus on multiple risk factors for chronic illness, including tobacco use as one of four risk factors (lack of physical activity, unhealthy diet, tobacco use, risky use of alcohol) that will be the subject of intervention efforts. This program, *Prescription for Health*, is a joint effort of RWJF, AHRQ and the Office of Behavioral and Social Science Research (OBSSR) at the National Institutes of Health (NIH). RWJF's established *Substance Abuse Policy Research Program* will provide ongoing funding for tobacco-related health care system change research similar to that supported under ATMC.
- Gaining a better understanding of the barriers to widespread use of smoking cessation tools is a strong interest of the National Institute on Drug Abuse (NIDA). Beverly Pringle, Ph.D., of NIDA described a research agenda that will look at such issues as the high percentage of substance users who are also addicted to tobacco, the need for more effective tobacco use prevention interventions in elementary and secondary schools, and the lack of understanding in the primary care setting of the nature of all types of addiction, including addiction to tobacco.
- Complementing Carolyn Clancy's comments, Tricia Trinité, M.S.P.H., A.P.R.N., of AHRQ's Center for Primary Care, Prevention and Clinical Partnerships, highlighted AHRQ's interest in linking clinical interventions around tobacco use cessation with interventions that are in the community. Some funding is available for provider-initiated projects to explore what types of interventions are suited to which venue, and how best to coordinate the two.

Summary

The ATMC Capstone Conference demonstrated ATMC's accomplishments in identifying, implementing and evaluating changes in the systems of care that increase the use of evidence-based tobacco use cessation strategies and, through these strategies, decrease the numbers of people who use tobacco.

The conference provided additional evidence of ATMC's accomplishments. The best research raises more questions, as emerging findings lead to new ideas about how best to address the topic of study. The discussion at the Capstone Conference included many new questions about how the system changes tested in ATMC could be made to work even more effectively.

A key area for future exploration appears to be how best to build demand among providers and patients for the tobacco-use cessation tools tested through ATMC and other such efforts. From the discussion at the Capstone Conference, a hypothesis emerged that the use of technology to target outreach and information tools, combined with feedback to providers on their use, may increase motivation to change.

While there are relatively few organizations able to fund the next round of research (and these potential funders have limited funds), there is wide recognition that ATMC-like changes to systems of care are required and that these are the types of changes that should be supported. The funders also are, as a group, interested in exploring reduction in tobacco use as part of a broader focus on behavioral approaches to the prevention and management of chronic disease.

Ultimately, the most engaging prospect raised by ATMC is whether the system-based interventions developed under its auspices can be translated, as one participant said, "from one system to another." ATMC provided a model of practice-based research; the challenge for the model is to apply it further, and see how far its effectiveness can reach.