I ncorporating new research findings into medical practice can take almost 2 decades according to estimates from the Institute of Medicine. Even when new research is published, clinicians tend to apply this knowledge inconsistently. The problem is most common in outpatient settings, particularly when providers are dispersed and have few opportunities to work in organized care teams in which new research may be more readily discussed and disseminated.

The realities of the healthcare marketplace today highlight the reality that physicians clearly need a better way to access, learn about, and sort through the vast array of data already at their disposal. According to a recent article in the *Washington Post*, the proliferation of data on best practices makes it difficult for physicians to know which approach is optimal for each patient.1 Physicians quoted in that article reported that competing studies reach different conclusions, creating confusion and inconsistency.1

**Academic Detailing Can Provide Answers**

There are also challenges related to the nature of the research that is available. The same article noted that of the 13,000 medical research studies done annually, only about 689 fall into the category of comparative research,1 the kind physicians can use to make better treatment decisions.

Therefore, a better way is needed to provide information about the latest evidence-based methods of delivering care, so that providers can put this information to use in daily clinical practice. One proved way to disseminate evidence-based research is academic detailing, a method of clinician engagement that involves one-on-one, clinician-to-clinician interaction to help providers become better informed and equipped to make clinical decisions.2-4

Academic detailing remains a misunderstood component of physician and provider education initiatives. Some believe it comes with its own set of biases; others say it is simply too time-consuming or costly.4 Nevertheless, a wide range of constituents, including pharmaceutical manufacturers, health plans and other payers, medical associations, and society as a whole, will need to identify and develop effective educational methodologies for physicians for many reasons. This is primarily because healthcare is becoming more complex every day, and engaging clinicians will be the key to delivering the best care. Fully exploring the structure, nature, and intent of academic detailing, as well as the ongoing evolution in provider education, will help all stakeholders ensure that they develop optimal strategies designed to improve care quality and patient outcomes.

**Continuing Medical Education**

Efforts to provide physicians with educational information and clinical updates outside of medical school take a variety of forms. The goal of such programs is to ensure that physicians are informed about the latest clinical information so they can achieve optimal patient outcomes. This seems simple enough, but finding the right approach to reach physicians is a challenge.

For years, the primary method to drive quality improvement was accredited, continuing medical education (CME). Most states, medical boards, accreditation agencies, hospitals, and other medical institutions require physicians to complete a certain number of CME hours annually to maintain licensure and practice privileges.

In recent years, CME has been delivered in live, didactic lectures given to large audiences. Today, a variety of learning opportunities and settings are used, including lessons for small groups, point-of-practice settings, online education, case-based learning, and performance/quality improvement programs. Among these methods, online-based learning has grown most quickly. In 2009, nearly 60,000 accredited hours were offered, representing a 2.5-fold increase since 2002.7

A 2008 evaluation of various CME activities showed that8:

- The more interactive the activity, the greater the educational benefit, defined as changing clinician behavior and improving patient outcomes
- Didactic-only programming has little benefit on its own, although outcomes improve when it is combined with interactivity

**Back to School: Quality Improvement through Academic Detailing**

Barry Patel, PharmD
President, Total Therapeutic Management, Kennesaw, GA, and Adjunct Clinical Associate Professor, Department of Pharmacy Practice, Mercer University, Atlanta, GA
INDUSTRY TRENDS

KEY POINTS

- The proliferation of clinical data now available to physicians makes it difficult to discern which approach will be optimal for each patient.
- Academic detailing is an effective method of face-to-face, physician-to-physician education that can provide the most up-to-date, evidence-based methods of patient care.
- With the growing trend of structuring reimbursement based on quality measures rather than services, physicians will need to improve the quality of care they deliver in hospital and office practice settings; academic detailing can help to meet quality targets.
- Some challenges of adopting the academic-detailing approach include physician resistance and doubts about the objectivity of the detailers; however, these can be overcome with proper planning and implementation.

- Interactive workshops are beneficial for changing clinical practice; in one study, researchers found that such a seminar helped physicians reduce asthma symptoms in children.
- It is not clear that using local opinion leaders to provide the education is any more effective than using other educators.
- Audit and feedback produced small or moderate effects on physician behavior, and the benefit was greatest if adherence to the recommended behavior was low initially.
- Even printed materials can have a positive effect on physician behavior, although whether patient outcomes improve is unclear. In 2007, the federal Agency for Healthcare Research and Quality (AHRQ) evaluated the effect of 136 CME articles and 9 systemic reviews on physician practice and patient care. The conclusion from that evaluation was that, “CME appears to be effective at the acquisition and retention of knowledge, attitudes, skills, behaviors and clinical outcomes.”
- Professional development activities that involve practice-based learning and improvement should be considered in any educational effort for physicians. Such activities may be part of a CME activity, but they differ from the traditional, didactic concept of CME in several ways. They:
  - Involve lifelong versus episodic learning
  - Are learner-centered rather than teacher-centered
  - Are comprehensive in scope, encompassing the practice and the clinical domain
  - Use a variety of learning formats and media
  - Are conducted in different venues rather than being done primarily in lecture halls.

Many researchers believe that practice-based learning may be more beneficial in changing physician performance and health outcomes than strictly didactic presentations. As a result, educators are considering other tools for disseminating evidence-based clinical information, including health information technology such as computerized physician order entry and electronic health record systems. In addition, academic detailing is being considered more frequently because it is the only one-on-one method that allows for an objective educational interaction.

In a 2010 article published in *Health Affairs*, Avorn and Fischer offered the following advantages of academic detailing over traditional educational options:

- Outreach to physicians in their offices ensures better market penetration and audience than centralized CME courses
- Communication can be tailored to individual participants, representing a big advantage in adult learning
- The opportunities to engage participants in discussion increase the likelihood that the message will lead to changed behavior.

**Expanding Academic Detailing to Evidence-Based Clinical Practice**

Academic detailing is a method of delivering evidence-based findings that involves trained healthcare professionals, such as physicians, pharmacists, and nurses, educating providers face-to-face. The principles of academic detailing and its effect on clinical decision-making were first published by Soumerai and Avorn. Since then, many private and public organizations, including AHRQ, have developed academic detailing programs to address pharmacy utilization and quality improvement.

Traditionally, academic detailing has focused on changing prescribing patterns for targeted medications, but in recent years it has been expanded to target adherence to evidence-based medicine guidelines.

One example of academic detailing being used to help physicians adhere to clinical-based medicine guidelines involves the Diabetes Physician Recognition Program (DPRP) of the National Committee for Quality Assurance. In this program, a large national health plan identified 40 primary care physician practices in 2 markets (Florida and Philadelphia) that had low performance scores in delivering care to patients with diabetes.

Believing that a pay-for-performance (P4P) program for these physicians would improve their results, the health plan administrators retained a healthcare quality improvement company to work with the 40 practices to help them meet the DPRP goals and gain higher rates of reimbursement. After informing the practices about the
benefits of DPRP, clinicians conducted 25 chart reviews at each practice, and used this information to apply for DPRP recognition status. Among the 40 practices, only 1 achieved the adequate number of points (75) to be eligible for DPRP status.¹²

Based on the results of the chart review, a clinical pharmacist conducted academic detailing to educate the providers about the benefits of following evidence-based national guidelines for optimal care of patients with diabetes and suggested the practices apply again in 6 months. Each practice was evaluated on how well it managed patients with diabetes in terms of control of blood glucose, blood pressure, and cholesterol levels; eye exams; nephropathy assessment; smoking status assessment, and giving smoking-cessation advice or treatment.¹²

Education was implemented with all practices, and 20 chose to conduct chart reviews 6 months later. Of these 20 practices, 17 achieved the 75 points needed for DPRP recognition. These results were significant in that only 1 of 20 (5%) practices achieved a score of 75 before the intervention, and 17 of 20 (85%) achieved a score of 75 after the intervention.¹² In addition, the practices showed marked improvement in clinical outcomes from the first chart review to the second (Table).

**Focus on Quality Improvement**

The DPRP example above is instructive in 2 ways. First, it shows that when academic detailers compare a clinician’s own quality data with national and local benchmarks, performance is likely to improve. Academic detailing is an ideal method of communication to disseminate medical evidence that demonstrates the need to meet quality targets, because it is built on a relationship of trust between the detailer and the provider. The collaborative and supportive one-on-one nature of academic detailing makes this method of communication particularly effective when comparing a clinician’s quality or performance scores with those of his or her peers. In these sessions, clinicians are often more open to discuss their own quality reports and the need to make improvements.

Second, this case example demonstrates that academic detailing can be useful to health plans seeking to improve quality and P4P programs. Considering that healthcare reform is changing the reimbursement environment by making quality improvement an important priority, providers involved in ACOs should not overestimate their ability to implement standardized care-management protocols.¹³ “The goal of protocols is to eliminate variation and complexity in the care deliv-

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Initial review, %</th>
<th>Post education, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documented increase of A₁c</td>
<td>54</td>
<td>91</td>
</tr>
<tr>
<td>in previous 6 mo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented increase of A₁c of &lt;7% in previous 6 mo</td>
<td>54</td>
<td>65</td>
</tr>
<tr>
<td>Documented increase of diabetic foot examination in previous 6 mo</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Documented increase of retinal eye examination in previous 6 mo</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Documented increase of LDL-C in past 12 mo</td>
<td>84</td>
<td>96</td>
</tr>
<tr>
<td>Documented increase of LDL-C &lt;100 mg/dL in previous 6 mo</td>
<td>49</td>
<td>63</td>
</tr>
<tr>
<td>Documented decrease in uncontrolled blood pressure of &gt;140/90 mm Hg</td>
<td>34</td>
<td>18</td>
</tr>
</tbody>
</table>

A₁c indicates glycated hemoglobin; LDL-C, low-density lipoprotein cholesterol.
Source: Total Therapeutic Management, Kennesaw, GA. Used with permission.

**Considering that healthcare reform is changing the reimbursement environment by making quality improvement an important priority, health plans are likely to consider academic detailing to promote these endeavors.**

In their August 2011 commentary in JAMA, health policy experts Singer and Shortell warned that health systems and providers involved in ACOs should not overestimate their ability to implement standardized care-management protocols.¹³ “The goal of protocols is to eliminate variation and complexity in the care deliv-
ery process that do not add value,” Singer and Shortell wrote,\textsuperscript{13} noting that it takes time to implement protocols.\textsuperscript{13} Academic detailing is well-suited for health systems seeking to implement care-management protocols, because providers can be better engaged regarding evidence-based care management to eliminate care variation, as opposed to a more demanding approach.

Another reason academic detailing will be important in the near future is that CMS is changing the way it pays hospitals, and health plans are likely to do so as well. CMS has stopped paying for so-called never events and is expected to reduce or eliminate payments for hospital-acquired infections and high readmission rates. When CMS does stop these payments, industry leaders believe that health plans will likely follow suit.\textsuperscript{14} For this reason alone, physicians will need to improve the quality of care they deliver in hospitals and other settings, and again, academic detailing can help physicians and health plans to meet quality targets.

**Medicare Advantage Quality Ratings**

Providers in Medicare Advantage managed care plans could face similar challenges. Medicare Advantage plans are expected to use quality ratings unveiled in October 2011 to attract more business and promote their ratings, given that the federal government will pay bonuses ranging from 3 to 5 percentage points to plans that rate the highest on a new rating scale. The ratings this year will be used to figure bonus payments that Medicare Advantage plans can receive in 2013.\textsuperscript{15}

When it introduced the new “star ratings” program for Medicare Advantage plans, CMS said that 5 stars is the highest rating a plan can get, and starting in 2012, plans can market their ratings to consumers. As a result, there

---

**INDUSTRY TRENDS**

---

**Figure**  Typical Academic Detailing Program Flow

To implement an academic detailing program, follow these steps: work plan development, recruitment and hiring of medical professionals, training in content and communications, deployment, documentation, management, communication, and measurement and evaluation of predetailing and postdetailing metrics.

CRF indicates Case Report Form; IRB, Institutional Review Board; QA, quality assurance.
is great interest among plans in how they may improve or sustain their star rating. Academic detailing could help health plans increase their ratings by educating physicians about the importance of meeting quality targets.

The following example illustrates the effectiveness of academic detailing in meeting quality goals beyond treatment-based education.

To evaluate the effectiveness of educating primary care physicians in 2 medically underserved communities in New York City, researchers used academic detailing to explain the importance of recommending breast cancer screening to patients with low economic status, African Americans or Hispanics.16 Educators received printed material and had detailing visits lasting an average of 10 minutes per session. They also attended 6 dinner seminars, got a newsletter on the topic, and received office-based breast cancer prevention materials. Compared with a control group in a similar neighborhood that received no intervention, physicians in the intervention group reported increased use of mammography and breast self-examinations among their patients. Physicians in the intervention group also were more likely to use office-based tools and techniques, such as chart stickers, than were physicians in the control group.16

Potential Barriers to Academic Detailing

For all the benefits of academic detailing, challenges exist, which can be overcome with appropriate planning (Figure). In a qualitative study of family physicians, researchers found that physicians did not use academic detailing because they did not want to schedule office time for the visit or for educational purposes.17 Of note, some of the physicians also stated that they did not want CME activities that are provided by a nonphysician.17

Other challenges include physician resistance or lack of understanding about evidence-based medicine, doubts about the objectivity of the details (including concerns that the information was biased and designed primarily to cut costs), and concerns that the information is not current, or that they had other ways to obtain it.17

All these potential barriers need to be considered when implementing an academic detailing program. Administrators can take steps to overcome these during the planning phase.

Embracing New Educational Paradigms

Despite what in reality often amounts to perceived barriers, healthcare industry leaders seeking to develop new ways to provide medical education are likely to consider the benefits of academic detailing, especially as healthcare reform unfolds and health systems begin to work more closely with physicians in ACOs and patient-centered medical homes.

In addition, academic detailing will continue to evolve to address concerns about partiality. New approaches to academic detailing focus on therapeutic categories as opposed to specific brands, helping to alleviate concerns among pharmaceutical manufacturers regarding the potential for bias.

As new reimbursement models are introduced, healthcare leaders will likely discover the value and benefits of academic detailing. The result will be provider education programs that are peer-to-peer focused and tailored to meet the needs and preferences of individual physicians, while ensuring that the decisions physicians make will likely be focused on the evidence designed to provide optimal outcomes for individual patients.

Author Disclosure Statement

Dr Patel reported no conflicts of interest.

References

12. Krämer M, Perez HE, Stacy T. Physicians recognize in a large health plan. Presented at the 14th International Annual Meeting of the International Society for Pharmacoeconomics and Outcomes Research; May 16-20, 2009; Orlando, FL.