AMA Journal of Ethics

Formerly *Virtual Mentor*

July 2015

Volume 17, Number 7: 597-714

Patient Care in the ACA Era

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 599-600

FROM THE EDITOR

Learning How Health Care Works

When President Barack Obama signed the Patient Protection and Affordable Care Act (ACA) on March 23, 2010, I was a senior in college working on my engineering design project. Our device aimed to address the $300 million annual cost associated with bleeding complications following cardiac catheterizations. This project was my first glimpse into the world of clinical medicine and its inefficiencies. Questions started to form in my mind about health care policy, but my efforts to understand the subject were thwarted by the seemingly foreign language it was written in. I postponed the effort, reasoning that medical school would be the optimal time to learn the subject.

By the end of my second year of medical school, I was prepared to tackle the first step of my licensing examination but still felt lost in the realm of how health care *worked*. What did the different insurance plans mean? Who financed health care? Why did cost for the same service or lab test vary so greatly from place to place? How would the ACA affect my patients? My clinical practice? During my clinical clerkships, I listened to heated debates between proponents and opponents of health care reform. I met patients who were getting a health maintenance exam for the first time in a decade after obtaining insurance from the marketplace. More than ever, I wanted to understand the basics of our immensely complex health care system so I could have a meaningful discussion with my colleagues and assist my future patients in achieving their goals of care.

This desire was my inspiration for the July 2015 theme issue of the *AMA Journal of Ethics* on patient care in the Affordable Care Act era.

Medical school is designed to provide foundational knowledge in basic science and clinical medicine to prepare graduates to care for patients in a formal, supervised residency training program. However, rising health care costs in the US have shifted the attention of medical educators from asking, "What is the best test or treatment?" to "What value does this treatment have, all things considered?" And the things that are considered include the relative benefit of one treatment over another or over no treatment, discomfort and inconvenience of receiving the treatment, and cost of the treatment. Many of us enter medicine to learn the art of healing, not to become economists or policymakers; however, the changing landscape of health care requires current and future clinicians to be cognizant of the numerous components that constitute *benefit* to a patient.

While crafting this theme issue, I spent countless hours hunched over my laptop trying to understand the various provisions of the ACA and identify ethical dilemmas and important topics of discussion. Questions that arose in my search evolved into the theme issue's ethics cases: How should clinicians and patients use physician quality metrics in referral and physician selection? What is the role of clinical judgment in applying evidence-based screening guidelines? Should patient satisfaction scores be tied to financial incentives? My research led me to understand why entire degrees are devoted to public policy and economics. I harnessed the wealth of knowledge in these fields by asking researchers to contribute their expertise in areas such as the current status of health care in Massachusetts, primary care incentives, the so-called "Cadillac" tax, comparative effectiveness research, and public and private insurance coverage. With time, and a careful reading of contributions to this theme issue, I started to gain a basic understanding of the ACA's various provisions and their ethical implications and to appreciate how useful this knowledge has been, and will be, to my clinical practice.

This issue of the *AMA Journal of Ethics* is meant to increase readers' familiarity with some of the ACA's instituted programs and to serve as a springboard for discussion of the law's effects and merits. Ultimately, I hope that the ethics cases and commentaries will inspire dialogue among students, residents, and physicians about the impact of health policy on patient care.

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Acknowledgement
I would like to thank Dr. Ernest Krug for his relentless support and mentorship. I would also like to thank the *AMA Journal of Ethics* team for their suggestions and assistance in crafting this theme issue. Finally, thank you to all of the authors who contributed insightful manuscripts.

ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 601-607

ETHICS CASE

Close-Call Screening and Shared Decision Making

Commentary by Evelyn Chan, MD, MS

Dr. Samuelson is an internist employed by a large hospital system. As she walks into the office, a colleague greets her.

"Hey, Dr. Sam! You're looking a lot better than the last time I saw you!" Dr. Martin had seen Dr. Samuelson's last couple of patients for her one night the previous week, when she'd suddenly been laid low by what was probably the flu.

"Thanks for covering for me."

"No problem! Just don't make it a habit," Dr. Martin jokes. "By the way, while I was seeing Mr. Johnson and entering his visit info into the record, the little flag lit up reminding me that he met the criteria for lung cancer screening, so I went ahead and gave him a script to get the CT scan done. You saw the policy memo about the new core quality measures, right? They've really been pushing for 100 percent adherence to the USPSTF lung cancer screening guidelines in the EMR."

"Oh, OK. Well, I should get caught up on my work. Thanks again for seeing my patients."

As she walks to her office, Dr. Samuelson wishes she had told her colleague not to order any routine testing for her patients—only tests that were indicated by their present concerns. She did not automatically order even the recommended scans for her patients because of the unintended consequences of false-positive and false-negative results, incidental findings, and radiation exposure. She had seen it time and time again with mammography and worried that the USPSTF recommendations ended up causing trouble and pain for more patients than were helped.

Commentary

The ethical dilemma in the case concerns the hospital's guidelines and US Preventative Services Task Force (USPSTF) quality measures that endorse annual low-dose CT screening for lung cancer in patients ages 55 to 80 with a history of smoking [1], despite evidence suggesting a "close call" between benefits and risks [2, 3]. To manage this case, Dr. Samuelson should engage patients in shared decision making (SDM). This process allows clinicians to balance adherence to evidence-based guidelines with clinical judgment in patient care, particularly in situations in which screening tests offer potential

benefits and harms. The ethical justification for shared decision making resides in respecting patient autonomy while upholding the principle of nonmaleficence or "above all, do no harm" [4]. We will discuss the scope of the problem, the evidence in favor of and against CT screening, why shared decision making is the ethical "solution," and how to implement it while considering system-level and patient-level issues.

Evidence and Guidelines

Lung cancer is the leading cause of cancer-related mortality in the United States with about 158,040 expected deaths in 2015, accounting for about 27 percent of all cancer deaths [5]. The strongest risk factors for lung cancer are age over 55 years and a history of smoking. About 20 percent of the population smokes and only 15 percent of smoking cessation efforts succeed [2]. Outcomes in lung cancer depend on the stage of diagnosis. Because only about 15 percent of lung cancer cases are currently diagnosed at stage 1 [2], screening has been explored as a way to improve lung cancer survival. In the 1970s, three randomized controlled trials funded by the National Cancer Institute did not support routine chest x-ray or sputum cytology as effective screening tests for reducing lung cancer mortality [6]. As a result of the National Lung Screening Trial (NLST), low-dose CT has emerged as a potentially superior screening method with 55 percent to 85 percent of cancers detected in stage 1 [2].

The NLST was launched in 2002 to determine whether screening with low-dose CT (LDCT), as compared to chest x-ray (CXR), would reduce mortality from lung cancer among persons aged 55-74 at high risk for lung cancer [7]—those with a 30-pack-year history of cigarette smoking who, if they had quit, had done so within the previous 15 years. Participants were invited to undergo three annual screenings. Over the follow-up period, the median duration of which was 6.5 years, there were 20 percent fewer deaths from lung cancer in the LDCT group, but the absolute risk reduction was just 0.33 percent [7]. In all three rounds, a higher rate of positive screening test results was found with LDCT than with CXR. About 320 high-risk smokers or former smokers would need to be screened for every life saved, which compares well with other screening tests—to save one life from breast cancer, 2,000 people have to be screened; for colon cancer, 1,200 people [8]. However, false positive rates for these other tests are much lower. Age-related subgroup analysis showed that NLST participants age 65 years or older had not only a higher rate of false positive results than those younger than 65, but also a higher cancer prevalence [5].

Although comparative modeling [9] has been done and other European randomized controlled trials are in progress [10] to examine further the efficacy of LDCT as a screening method for lung cancer, the NLST remains the primary evidence base for screening guidelines. Drawing on this evidence, the USPSTF issued guidelines in 2013 giving LDCT a grade "B"—meaning that it is likely to offer moderate to substantial net benefit—to screening with LDCT for high-risk current and former smokers [1]. These

guidelines recommend annual screening with LDCT in patients aged 55-80 years who have a 30 pack-year smoking history and who currently smoke or have quit within the past 15 years. Screening should be stopped when a patient has not smoked for 15 years or has a health problem that limits life expectancy or the ability or willingness to undergo curative lung surgery.

Approximately 10 million people in the US would qualify for annual LDCT screening based on these criteria [10, 11]. Under the Affordable Care Act (ACA), a grade B from USPSTF means that private health insurers are required to cover LDCT at no cost to their eligible beneficiaries in 2015 [12]. The Centers for Medicare and Medicaid Services (CMS), on the other hand, can expand coverage based on A or B recommendations but is not required to do so [13]. In April 2014, the Medicare Evidence Development and Coverage Advisory Committee (MEDCAC) reviewed the evidence base for LDCT and expressed low to intermediate confidence that "there is adequate evidence to determine if the benefits outweigh the harms" for patients covered by Medicare [14]. In February 2015, CMS ultimately decided that the evidence was sufficient to support annual LDCT under the Medicare program, if the following criteria are met: age 55-77 years, no symptoms of lung cancer, tobacco smoking for at least 30 pack-years, and a current smoker or one who has quit within the past 15 years. Additionally, smoking cessation materials have to be available for patients and the initial order and subsequent orders for LDCT screening have to include screening counseling and shared decision making with a physician, physician assistant, nurse practitioner, or clinical nurse specialist [15].

Other professional organizations, such as the American Cancer Society [5] and the National Comprehensive Cancer Network [16] have generally recommended eligibility criteria similar to that of the USPSTF with smoking cessation referral and screening in facilities with multi-disciplinary expertise for follow-up.

The different objectives of the USPSTF and MEDCAC illustrate some of the difficulties of implementing evidence-based policy on a population level. The USPSTF places the greatest weight on the evidence from randomized controlled trials. Such trials evaluate whether a preventive service works in a narrow population of patients under tightly controlled circumstances. However, the results of randomized controlled trials do not predict how well an intervention will perform in practice. For payers, including Medicare, the effectiveness of a preventive service is defined as the ratio of real-world benefits to harms for its population and is more relevant than findings derived from a selected population in a randomized controlled trial.

Other difficulties in implementing screening are the out-of-pocket costs some patients can expect to bear for follow-up studies to investigate false positive LDCT screening results [3, 11, 12, 14] and that the NLST participants, and therefore the results, were not representative of the population for which screening is recommended. Lower screening

uptake might be expected in those with socioeconomic or geographic barriers to health care or specialty follow-up [3].

Implementing Evidence-Based Recommendations on the Individual Level

Evidence-based recommendations cannot be applied at an individual level without clinical judgment. An individual patient may have more comorbidities than the NLST study participants, leading to a higher ratio of harms to benefits for the patient. Screening an individual patient also brings a high risk of false positive test results, anxiety, radiation exposure, and potentially numerous diagnostic workups and complications from these procedures. There is a real risk of psychological harm from receiving news about a lung nodule that might be cancer when workups might involve invasive diagnostic procedures before producing a benign result [3]. About 39 percent of patients who had an LDCT had at least one abnormality in three annual screenings. Fully 96.4 percent of abnormal results were false positives, 72.1 percent of which required workups [7]. More than 90 percent of the positive screening tests in the first round of screening led to a diagnostic evaluation, usually further imaging. But other workups included invasive procedures such as bronchoscopy and other surgeries. Additionally, invasive diagnostic procedures after a false positive LDCT were modestly more frequent [7].

Implementing Shared Decision Making

The USPSTF, CMS, the American Cancer Society, and the National Comprehensive Cancer Network all recommend shared decision making about lung cancer screening. As the USPSTF puts it, "the decision to begin screening should be made through a shared decision-making process whereby patients and providers discuss the potential benefits, harms, and uncertainties of screening" [1].

Clinicians can support shared decision making through a multi-step process. The clinician can assess the availability of LDCT in the geographical area, the patient's eligibility for screening, the time required for shared decision making over one or more visits, the patient's knowledge, and the patient's preferences for engagement—active, collaborative, or passive—in the decision making process. The clinician can then counsel the patient about the purpose of annual LDCT screening, smoking cessation programs, the potential benefits and harms of screening (including radiation exposure and patient costs for follow-up testing and diagnostic interventions), the scientific uncertainties (including false-positive test results and workups related to that), and how results and follow-up might be reported and conducted [3, 10, 11, 14]. Discussions might differ depending on the patient's age and race, due to the previously described limitations of the NLST trial results.

On an annual basis, clinicians might assess any change in patient preferences and review the decision making process. Clearly documenting the initial discussion and follow-up

discussions [11, 15], including the use of educational materials or decision aids [3, 10, 11, 14], can possibly safeguard the clinician from medical-legal consequences (if, e.g., a case of lung cancer is detected before a decision has been made about lung cancer screening or a patient has major downstream complications from screening) [11].

On a system level, accountable care organizations (ACOs) may want to develop cancer care groups of cancer specialists and primary care physicians to provide guideline-concordant, patient-centered, coordinated care. They may also want to coordinate lung cancer screening with smoking cessation programs and shared decision making. Low-risk patients who inquire about screening should be informed about the potential harms and that there is no evidence to indicate that the benefits of screening outweigh the risks. Patient-centered medical homes can identify patients eligible for lung cancer screening with LDCT. Additionally, the electronic medical record can be used to evaluate the performance and quality of a lung cancer screening program with LDCT and notify the responsible clinicians about abnormal imaging results that need followup [11]. Some systems, such as the Veterans Health Administration, are embarking upon demonstration projects [17] to determine whether they can provide screening and followup with accuracy, efficiency, and safety similar to that achieved in the NLST. New processes may be needed to monitor quality, ensure adequate capacity, and track outcomes in different regions of the country in different practice settings. Such demonstrations might inform other health care organizations and affect the manner in which health care providers offer LDCT to patients.

In summary, Dr. Samuelson needs to consider the hospital environment in which she is practicing—both system-level issues and patient-level issues—to promote shared decision making about LDCT screening. On an individual level, she might promote shared decision making by offering a decision aid to her patients and then discussing the decision with them in a clinic visit. A Cochrane review of 115 randomized clinical trials of patient decision aids concluded that they help increase patients' knowledge, improve their risk perceptions, and stimulate patients to take a more active role in decision-making processes [18]. By drawing upon the resources of a coordinated health care system and offering a decision aid to her patients, Dr. Samuelson will be able to uphold patient autonomy and the principle of nonmaleficence through shared decision making. She just needs to remember that the USPSTF guidelines that the hospital system supports also explicitly promote shared decision making. "Adherence" to the guidelines means adherence to this process that acknowledges patient preferences in determining whether it is appropriate to order an LDCT.

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The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental.

ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 608-615

ETHICS CASE

Utility of Physician Report Cards in Patient Referral

Commentary by Gaurav Jay Dhiman and Yvonne M. Diaz, MD

A large hospital system, wanting to improve outcomes on coronary artery bypass surgeries (CABG), has decided to implement a public surgery report card for cardiothoracic surgeons based on morbidity and mortality outcomes on these procedures. While sitting in the doctors' lounge, Dr. Smith, a cardiologist, overhears her colleagues discussing the report card system.

"You have to refer your patients to the best possible cardiothoracic surgeon. If I know that a surgeon has high complication rates, why would I risk the health of my patient?" explains Dr. Cummings.

Dr. Thomas looks skeptical. "So you think those reports will be accurate? Do you really think the cases will be risk adjusted so that the surgeons who take the most difficult cases don't end up getting the worst 'grades,' so to speak? And what happens when one of your patients needs an emergency CABG and the best surgeon is unavailable? Are you going to advise him or her to refuse the surgery?"

Dr. Smith hears her pager and gets up to return the page. The call center connects her with the hospitalist on service to notify her that Mr. Green—a long-time patient—has just been admitted and is on his way to the catheterization lab. The hospitalist notes that he is planning to consult cardiothoracic surgery if Mr. Green's catheterization report reveals clogged arteries and the need for CABG surgery. Ordinarily, Dr. Smith would have referred the patient to Dr. Anderson, who has performed CABG surgery for most of her patients. But now she considers what she overheard in the lounge and replies, "Let me call you back with a specific surgeon to consult. I need to look something up."

Commentary

One of the ways the Patient Protection and Affordable Care Act (ACA) has transformed American health care is through a strong push for transparency, stimulating the development and public dissemination of health care report cards so that patients, physicians, and health care organizations may be better informed about their choices of clinician. These evaluations rely on either process measures or outcomes measures. Process measures, or "quality indicators," describe activities performed by professionals and staff, such as completion of immunizations or screening tests. Outcomes measures, on the other hand, assess the results of the health care intervention the patient has

undergone and may include complication rates, length of hospital stay, mortality and morbidity rates, and patient satisfaction with care [1]. Our discussion focuses on physician report cards (PRCs) based on patients' treatment outcomes and the value of these report cards for clinicians. PRCs' comparative outcome data may help both new and seasoned physicians in their referrals and may be a useful tool for self-assessment and improvement. Report cards, however, must be taken as merely one tool in the referral toolbox.

Benefits of PRCs for Physicians

Physician report cards assist patients and physicians in choosing clinicians with track records of high-quality care [1]. Traditionally, physicians have relied on word of mouth from colleagues or patients, as well as patients' personal experiences, to identify the best physicians available. As a quantitative way to discriminate among physicians, PRCs may give referring physicians the knowledge to make this decision themselves. Sometimes, physicians may receive financial and non-financial "kickbacks" for referrals to a specific physician or medical practice, which PRCs may help deter. PRCs may also assist physicians new to a hospital or region in directing patients to the highest-quality physicians. This is especially vital if they do not have the benefit of word of mouth from colleagues or their own patients' experiences. Recent graduates from residency, still early in their careers, may greatly benefit from these evaluations.

Whether PRCs are made publicly available or used internally within a practice or hospital, objective and comparative measurements of performance also help physicians understand their own professional strengths and weaknesses and encourage them to improve [2]. This, in turn, is meant to promote competition among physicians to provide high-quality care [1, 3]. Hospitals can use PRCs to assess their physicians for new or continued medical staff privileges and to better understand deficiencies or variation in hospital standard procedures [4].

Although the general public does not rely on publicly available PRCs as much as expected [5], and some experts argue that there is not convincing evidence that PRCs are beneficial [6, 7], some studies have found that publicly available report cards may lead to improved outcomes [8]. For instance, Werner et al. found that the quality of nursing home postacute care improved with the release of PRCs, although rehospitalization rates did not change [9]. In a study based on the New York state coronary artery bypass surgery report-card system, patients who visited the surgeons with the highest report card ratings were roughly half as likely to die as those who visited bottom-quartile surgeons [10]. The same study found that, with each release of publicly available PRCs in New York, surgeons performing coronary artery bypass grafts (CABG) who fell into the bottom quartile of performers were more likely than their higher-performing counterparts to move clinical locations or switch careers.

Limitations of Report Cards

Inconsistent availability. Despite their potential benefits, PRCs have many limitations, one being that completed PRCs may not be representative of the physician population. Most PRCs are voluntary, meaning that low-performing or skeptical physicians may opt out of evaluations [1]. Health care insurers and state hospital associations also tend to produce more PRCs than state medical associations [11]. More primary care physicians are evaluated than specialists, and more report cards are produced to evaluate hospital performance or practices than individual physicians [11].

Difficulty of use. With no standardized system for PRCs, hospitals and practices have great leeway in choosing which metrics to use and how to word findings. Thus, physicians and patients may have difficulty comparing PRCs from different systems.

While it would be comforting to think that PRCs would reduce unethical referral practices (e.g., kickbacks for referral to a specific physician or practice), they may, indeed, be ignored. Even with comprehensive PRCs, physicians may be skeptical about how measures are collected and refer their patients to physicians within their institutions, perhaps out of familiarity or loyalty [12]. As it stands, physicians, for the most part, do not rely heavily on PRCs [6, 13, 14], and hospitals tend to care about them primarily for purposes of quality improvement and cost management [5, 11]. PRCs are not yet used by most of the medical community and are not part of the "standard of care."

Inaccuracy. Physician report cards may not accurately reflect a physician's performance. If they are not risk adjusted to account for care of sicker patients, physicians who treat higher-risk patients may have less favorable PRCs than those who turn such patients away [3]. Taking PRCs at face value may mean referring to a physician whose score does not accurately reflect his or her level of skill or who is likely to turn away a "risky" patient to preserve or boost performance marks [15-19].

Even if PRCs are risk adjusted, there are ways for physicians to game the system. In an effort to boost or preserve his or her PRC score, a physician may document that the patient is healthier following treatment than he or she actually is or reduce the amount of pain reported by a patient [16].

Even if PRCs are risk adjusted and physicians participate honestly, differences in outcome measures between a high- or low-scoring physician and the group average often are not statistically significant, and sample sizes for individual physicians tend to be small.

Inapplicable results. The physicians with the "best" report cards simply may not be readily available. Perhaps a long queue of patients precludes them from tending to an emergency, or their schedules are booked well in advance. Moreover, these physicians

may be too geographically distant from patients for a visit to be practical [13]. Some patients—those with less pressing health problems, more accessible transportation, or even personal connections within the medical community—may have better access to the most-highly rated physicians.

Questionable relevance. A given physician's PRC may not rate outcomes for a specific medical condition [3, 15], even a common one, or may disproportionately report on outcomes for one disease over another [11]. Similarly, the PRC may be a general evaluation, rating only morbidity and mortality outcomes and access. And event rates are typically low (e.g., mortality may happen in only 1 to 3 percent of cases), at least for CABG [20], raising the question of whether physicians' performance differences even matter. Also, although the medical profession has placed a great emphasis on developing physicians' communication and interpersonal skills [21], PRCs often do not measure these [22].

Some have suggested including in PRCs "measures of the appropriateness of care" so that physicians do not provide *low*-risk patients unnecessary treatments more suitable for high-risk patients [1], a practice that would lower their rates of complications and mortality.

Ethical Considerations in Our Case

The four basic principles of medical ethics—respect for autonomy, beneficence, nonmaleficence, and justice—factor into the decision to use PRCs. Although a physician may choose not to disclose using a PRC in making a choice for referral, Brown et al. argue that informing patients about how and why their physicians may use PRCs demonstrates a respect for informed consent and patient autonomy [12]. With knowledge of predicted risk and return associated with a specific treatment from a particular physician, the patient has necessary information about a treatment, in keeping with the physician's responsibility to both benefit a patient and keep him or her out of harm's way [23], and remains free to refuse it [24]. But if the quality of that information is compromised or subpar, it is difficult to know how to uphold the principle of nonmaleficence, which requires that physicians "not intentionally create a harm or injury to the patient, either through acts of commission or omission" [23]. A physician may inadvertently run afoul of the principle of nonmaleficence by making a patient referral based on a PRC drawn from dubious or incomplete information. *Knowingly* referring a patient to a doctor who has an overinflated PRC score, engages in "downcoding" patients' actual posttreatment medical problems, or avoids treating patients from particular demographic groups would certainly violate the principle of nonmaleficence. On the other hand, PRCs provide some objective measures and have—to a degree—been shown to help improve patient outcomes [8, 9], so neglecting available PRCs may constitute a failure to promote the principle of beneficence, the responsibility to benefit a patient and improve his or her health [23]. Because they are not yet in the standard of

care, however, failing to act on a PRC is not a neglect of beneficence. Although not *reading* available PRCs is unethical, ignoring evaluations because of certain mitigating factors is ethical.

Finally, the principle of justice—"a fair distribution of goods in society" [23]—is the least likely to be upheld when using PRCs. As discussed previously, existing health and social disparities may contribute to a given patient's "riskiness," and a physician may deem a particular ethnicity [17] or socioeconomic group [18] at greater risk for worse outcomes and refuse to treat patients in these groups.

Handled correctly, PRCs can provide a valuable tool for physicians referring patients. Until PRCs become ubiquitous, a physician in Dr. Samuelson's position should check PRCs but also be allowed to rely on her own, colleagues,' or patients' opinions of the preferred physician. The decision is easy if opinion and the PRC lead to the same conclusion. However, if the PRC is incongruent with popular opinion, Dr. Samuelson should, beyond reading evaluations, consider whether:

1. the PRC has a sufficiently large sample size, reports statistically significant differences in outcomes, and has measures pertinent to a patient's specific condition;
2. the report accounts for patient-specific risk (if not, skepticism is reasonable);
3. the subject physician is likely to turn away a potentially risky patient or may have subconscious biases regarding ethnicity and socioeconomic status;
4. the PRC includes measurements of interpersonal or communication skills;
5. the "best" physician for a referral can readily see a patient and is geographically accessible.

Undoubtedly, following all of these suggestions can help maximize PRCs' utility while ensuring that they do not inadvertently harm patient health. However, following these steps for every patient in every referral situation is highly unrealistic. Especially because this may be a time-sensitive situation and the best-rated surgeon may not be available, it is ethically permissible for Dr. Samuelson to make her referral in good faith to a less highly ranked physician if the most highly ranked is not available. In this case, she must be allowed to rely most heavily on word of mouth of colleagues or patients, as well as personal experience.

Conclusion

PRCs are increasing in availability. They may provide both new and seasoned physicians with comparative metrics to help guide referral patterns and may be a useful tool for self-assessment and improvement. They also may have a role in moving towards a value-based care model that accounts not just for the quantity of services provided but also for their quality [25]. However, PRCs have major limitations. They frequently contain inconsistent measures of outcomes, address certain outcomes disproportionately, lack

adequately large sample sizes or statistically significant differences in patient outcomes, and, sometimes, do not adjust for patient risk. A physician desiring to consult a PRC in referring a patient to a colleague may find that his or her institution does not even produce them. Even when a PRC exists and contains accurate information pertinent to an individual patient's needs, the most highly rated physician may not be available or may be too geographically distant. For these reasons, PRCs are not yet the standard of care for physician referrals, but Dr. Smith ought to use her judgment if accurate PRCs are available and pertinent in her patient's case.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 616-621

ETHICS CASE

Patient Satisfaction Reporting and Its Implications for Patient Care

Commentary by Shivan J. Mehta, MD, MBA

A hospital's Committee on Patient Quality meets monthly to discuss a strategic plan to address deficiencies in scores on its Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey results. Dr. Anderson begins the meeting by proposing a new pain management protocol to the group. He references the plateau in pain management scores in the HCAHPS report, warning that the organization will sustain substantial financial penalties by failing to improve in the "patient experience of care" domain. As Dr. Anderson begins to explain the new protocol for pain management and how it will bring about an upward trend in scores, Dr. Parker interjects.

"Can we take a step back for a moment? I understand that patient satisfaction surveys can provide a lot of useful information to our hospital system. But a low rating on—let's say pain control—doesn't mean the patient received low-quality care."

"I agree with what you're saying, but this is the reality of pay for performance. Plus, there is value in considering patient satisfaction—happier patients are more likely to adhere to our recommendations and return in the future. As you mentioned, we can learn a lot from these surveys—like how helpful it was to have extra volunteer greeters in the lobby to assist patients with finding their way in the hospital," explains Dr. Anderson.

"I still don't think it makes sense for Medicare to tie the survey results to our reimbursement," Dr. Parker counters. "Financial penalties for hospital-acquired infections and preventable readmissions make sense. Public reporting of morbidity and mortality encourages systemic improvements and patient empowerment. But all of these are objective measures. Patient satisfaction just isn't an objective measure of care quality."

Commentary

The discussion between Dr. Anderson and Dr. Parker highlights a growing emphasis on patient satisfaction across the country—more specifically, concerns over linking financial incentives to patient experience scores as part of the Hospital Value-Based Purchasing program authorized by the Affordable Care Act (ACA) [1]. Through both financial incentives and public disclosure, hospitals are being rewarded or penalized based on their patient experience scores. Dr. Parker is challenging the notion that these metrics are important for hospitals and asking whether hospitals should put resources towards

improving their patient survey numbers. Can we effectively measure patient experience, he asks, and, more importantly, should reimbursement be tied to these metrics?

Measuring Patient Experience

There are a variety of survey instruments to measure patient experience in both the hospital and clinic settings, and these metrics are being linked to financial reimbursement from Medicare and other insurers. For example, the Centers for Medicare and Medicaid Services (CMS) have used the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, a set of 32 questions administered to a random sample of hospital patients about their experience of care, since 2008 [2]. The results of these surveys are posted on CMS's "Hospital Compare" website [3]. Now, as part of the ACA's Hospital Value-Based Purchasing Program [1], CMS is withholding 1 percent of Medicare payments—30 percent of which is tied to HCAHPS scores—to fund the incentives of the program [4]. The proportion of the payouts that is withheld from hospitals will undoubtedly increase over time. There are similar incentive components in the Physician Quality Reporting System (PQRS). Overall, measurement of and incentives linked to patient experience are increasing [5].

Benefits of Patient Experience Measurement

As part of its "triple aim," the Institute for Health Care Improvement describes the patient experience of care as including both care quality and patient satisfaction, suggesting that these features are interrelated [6]. Regardless of whether one considers experience an indicator of quality, improving patient experience ratings is beneficial for patients and clinicians for a number of reasons.

As physicians, we want our patients to have not only better outcomes but also a positive experience of care. Patients' perceptions of their care are reflections of the doctor-patient relationship and include holistic aspects of healing and emotional well-being. If we care about the experience of our patients, why shouldn't we measure it and strive to improve our performance? HCAHPS is the most studied system for measuring patients' experience of their care on an individual and hospital level [7], so it is a useful step towards helping clinicians think more broadly about outcomes that matter to both them and their patients.

Patient experience scores may also have an association with more objective clinical quality measure scores. For example, hospitals with better patient experience scores also have some higher quality measures for acute myocardial infarction and aspects of surgical care [7-9]. There are two possible explanations for this relationship. First, hospitals that have better engagement with patients may encourage greater adherence to clinical standards of care and follow-up. Patients who are more satisfied with a practice may be more likely to come in for visits and follow the recommendations of the clinicians that they trust. Second, better patient experience scores could indicate that a

hospital has stronger teamwork, organizational leadership, and commitment to improvement, characteristics that could be associated with better quality measures and patient experience scores. Both of these possible explanations suggest that there is benefit for clinicians in measuring and rewarding patient experience of care, since doing so has the potential to improve overall quality of care.

There are also potential benefits to measuring patient experience of care for advancing hospitals' and practices' business goals. To take care of patients, hospitals and clinics need to be sustainable financially. A significant portion of revenue is related to volume, which includes new and repeat patient visits. Although there are some publicly available quality metrics, like the results of the HCAHPS surveys [3], patients often make medical decisions based on reputation and word of mouth. Thus, physicians need to focus on patients' satisfaction with care because it may drive patient volume more than technical acumen alone. Another reason physicians might focus on patients' experience of care is that there is evidence suggesting that "the frequency with which physicians are sued is related in part to patients' satisfaction with interpersonal aspects of medical care" [10, 11]. While these may not be the primary reasons for physicians to focus on patients' experience of care, doing so may actually provide operational benefit, in addition to better patient care.

Concerns about Patient Experience Measurements

Measuring patient experience raises a number of concerns. First, while measures of patient experience are associated with some quality metrics, there are some situations in which high-value care may be at odds with patient satisfaction. The Choosing Wisely initiative, for example, describes a number of commonly used procedures and services that could be considered low-value, such as early imaging for back pain or antibiotics for upper respiratory infections [12]. Given regulations and declining reimbursements, physicians have limited time to spend on each patient visit [13], and it may be time consuming to explain to patients who expect low-value treatments why they should be withheld. If a physician is faced with penalties for low patient experience scores, it may be the path of least resistance to agree to such requests; even the anticipation of patient dissatisfaction may drive unnecessary or different care in individual cases. Moreover, in one large study, high patient satisfaction was associated with greater inpatient health care utilization, higher overall health care expenditure, and higher mortality [14], findings that the authors subsequently explained by saying that "sicker patients may be both more satisfied and more likely to die" [15]. They acknowledged further that their study "suggests the need for careful appraisal of the nexus between greater health care consumption and a subjectively better health care experience" [15].

Second, there may be unintended consequences of incentive programs for underserved and vulnerable populations. Safety net hospitals typically do worse on patient experience metrics than their counterparts that provide less care to underserved populations [16]. If

institutions that have a greater safety net function have more challenging patient populations and fewer resources to devote to improving low scores, financial incentives could exacerbate existing inequities in care. Additionally, quality reporting can widen racial and clinical disparities in care [17]: faced with penalties for low patient satisfaction scores, physicians could avoid caring for patients who may be more challenging to treat and perceived to be difficult to please, that is, underserved minorities, those with lower socioeconomic status, and those with mental health concerns. There are already disparities in care across our health care system, and incentives for patient satisfaction have the potential to make the situation worse.

Third, there are concerns about the validity and implementation of patient experience measures and surveys. Patient experience measures are based on patients' expectation of care as opposed to objective measures of experience [18]. Patient perceptions also may not be correlated with technical quality [19]. Additionally, the voluntary surveys are relatively long and are often answered many weeks after the experience. There may be selection and recall bias in the responses of those with very positive or negative experiences. Limited sample sizes could also affect the validity of the scores across different hospitals and clinics. Moreover, it is not clear whether there is a "crowding-out" effect of patient experience surveys on other potentially more important or valid quality metrics. More research needs to be done on the consistency with which surveys are implemented.

Conclusion

Getting back to Dr. Anderson's and Dr. Parker's debate, patient experience surveys already play significant role in patient care across the country. Physicians can no longer choose not to participate in, but they can decide how best to engage with, incentive programs. Hospitals and clinics are using these scores to justify greater investment in improving experience for patients—a big step for an industry not known for customer service. That overall trend will likely be good for patients. Improving patient experience is certainly something that we want for health care, but implementing incentives based on patient experience can be risky. More evidence is needed about the validity of these measurements and any unintended consequences on care delivery. Patient experience scores should also be evaluated in the context of other clinician incentives, whether productivity or quality metrics. Physicians, hospitals, and policymakers must continue to refine these incentive programs and ensure that they play an appropriate role in care.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 622-629

BANDER ESSAY CONTEST

2013 Winning Essay

The Accountable Care Paradigm Shift: New Ethical Considerations

Andrew R. McNamara, MD

Midstate Internal Medicine is an LLC (limited liability company) of 12 physician equity partners, each with equal ownership of physical assets and equal share of overhead expenses in a leased building. Serving an area of about 120,000, their urban and suburban practice has been financially solvent for the last ten years.

Since the passage of the Patient Protection and Accountable Care Act of 2010, Midstate physicians had been considering collaborating with a local hospital and other practices to form an accountable care organization (ACO) because of concerns about the future economic viability of their standalone practice. They were stalled at the point of creating a payment scheme and accountability structure for the ACO's many physicians.

At this juncture, Midstate received an unsolicited offer from Roosevelt Hospital, the largest hospital system in the state. Roosevelt wanted to buy the entire practice (physical assets, accounts receivable, and goodwill), an arrangement that would, Roosevelt's senior management explained, solve Midstate's concerns about forming an ACO, inasmuch as Roosevelt had purchased several physician practices in recent years and functioned as an extended ACO itself. In the long run, Roosevelt's executives explained, the consolidation would lower costs to patients and insurers as continuity of care was enhanced, fewer unnecessary tests were performed, and complications and hospital stays were reduced through the integration of hospital and physician services.

When Midstate Medical Group physicians met to consider the offer, all 12 acknowledged that they had seen a decline in patient visits as Roosevelt acquired local practices and kept its referrals within its system, a trend that was likely to continue. However, they had been their own bosses for more than 25 years and were skeptical about life as salaried employees. Stories were already circulating at specialty meetings that physicians in the Roosevelt system had to meet admissions quotas, for example.

Response

Thomas Kuhn, in his landmark book *The Structure of Scientific Revolutions*, challenged the idea that scientific progress is composed of the progressive accumulation of facts and theories that march toward a greater understanding of the natural world. Rather, he argued that science advances episodically during periods of "revolutionary," accelerated

progress. These reset the prevailing worldview, establishing a new paradigm upon which "normal" science resumes. He defined "paradigms" as achievements that are "sufficiently unprecedented to attract an enduring group of adherents" away from the status quo and as "open-ended," with plenty of problems for the "redefined group of practitioners to resolve" [1].

This is an apropos description of what the 2010 Patient Protection and Affordable Care Act (ACA) produced with the creation of accountable care organizations (ACOs). This law defined an ACO as an alliance of hospitals, physicians, and other health care professionals who collaborate for the purpose of being accountable for the cost and quality of health care delivered to a set of at least 5,000 Medicare patients [2]. The ACO model represents a radical upheaval in the way health care is delivered. The core bioethical principles of beneficence, nonmaleficence, justice, and respect for autonomy are all central to the goals of providing access to quality, evidence-based care while at the same time containing costs. In this paper I will examine each of the principles in relation to ACOs and provide examples of ethical issues that may arise for the Midstate Medical Group in their decision to join a hospital-based ACO.

Beneficence

Central to the ACO model is the effort to promote beneficence—to "do *good*" by providing evidence-based care and to be held accountable for that good. Patients have traditionally trusted their physicians to be intellectually competent and morally unquestionable. The ACO model brings about a paradigm shift, supplementing fee-for-service payment with payment incentives that are tied to the quality of care. ACOs receive a portion of their cost savings as incentive payments from Medicare for meeting quality care measures. This demands a new type of fiduciary responsibility, which becomes part of a physician's moral responsibility to "do good." Fiduciary responsibility encompasses the physician's role in asset and cost management for individual patients as well as the larger society of patients [3]. This represents a drastic departure from traditional medical practice, wherein cost of care was immaterial and the emphasis on thoroughness required the exploration of every diagnostic and treatment possibility. It will be imperative that the Midstate group be cognizant of this change in physicians' fiduciary responsibility in making their decision to join an ACO.

In order to quantify physicians' skills and outcomes, the Centers for Medicare and Medicaid Services (CMS) has identified 33 measures of patient care that will be monitored. These include the domains of patient and caregiver experience, care coordination and patient safety (e.g., performing medication reconciliation after discharge), preventive health (e.g., tobacco cessation intervention, cancer screening) and specific issues in at-risk populations (e.g., aspirin use in diabetics and beta-blocker therapy for left ventricular dysfunction) [4]. Reporting quality measures requires an infrastructure dedicated to peer review and quality assurance.

In addition to infrastructure, an enormous culture change extending beyond the moral obligations of the physician has to be in place in order for an ACO to be successful. Health care delivery must make the switch from being *re*active to being *pro*active. Currently, patients are treated when they have acute episodes, for example asthma exacerbations, cardiac arrests, and diabetic comas. Although such acute treatments will still be necessary, the focus will shift toward preventive measures such as smoking cessation, weight reduction, and diabetes education. The attitudes of administrators must change and permeate the workplace to affect those of ancillary staff.

Effective communication is crucial. In a study evaluating communication between primary care physicians (PCPs) and hospital-based physicians (HPs) in six academic centers treating 2,336 patients, Bell et al. found that PCPs for 77 percent of patients were aware that their patients had been admitted to the hospital, but direct communication between these PCPs and HPs occurred for only 23 percent of patients. A discharge summary was available within two weeks of discharge for 42 percent of patients [5]. These cultural issues all contribute to how much *good* is ultimately performed for the patient. The Midstate group would need to consider communication among professionals as part of their decision to join the Roosevelt system.

Nonmaleficence

The Hippocratic concept of "primum non nocere" permeates medical culture. While communication between physicians in an ACO takes determined follow-through, ACOs do foster collaboration between physicians and hospitals to decrease harm to patients by penalizing "never" events such as development of venous thromboembolism and wound infections in hospitalized patients. Hospital policies, if carefully crafted, may strike a balance between respecting physician autonomy and avoiding patient harm, such as automated display of antibiotic guidelines in the electronic medical record (EMR), which, in one study, decreased vancomycin usage by 32 percent and reduced costs [6]. There are numerous other reports of EMR use improving care quality and coordination [7-10]. ACOs also promote decreasing readmissions, minimizing lengths of stay, and curtailing duplicative costs. There is an inherent tension, however, between the hospital's need to "fill beds" and the ACO's obligation to avoid unnecessary hospitalizations. Regarding duplicative costs, specialist physicians may face pressure to rely on tests previously performed outside the ACO system. These may vary widely in quality, which is particularly true for imaging studies, and may pose a safety and liability risk for the patient and the clinician. There may also be variability in quality when less costly devices and implants are used. The Roosevelt health network should have a robust system of checks and balances that includes an EMR system to prevent both unnecessary duplication of testing and reliance on previously performed, poor-quality tests.

Also important is the issue of referral sources. ACOs function best as closed systems, within which cost-containing and quality-improving measures can be implemented by the full complement of medical services and specialists. Does the Roosevelt system have all the necessary referral options for its patients' needs? An obvious problem arises if an in-house referral is not in the patient's best medical interest or if a medically necessitated referral to an outside source is denied or delayed.

Justice

Some would argue that the sorts of decisions I've been discussing constitute health care rationing, a term that has the negative connotations associated with inequalities in care and has engendered fear of health care reform in many Americans. Many authors argue that rationing has existed in our health care system for years, based on price, ability to pay, and several cost-containment policies such as certificate-of-need regulations and lower Medicaid payment rates to clinicians [11, 12]. Even such decisions as whether to order daily lab draws or how soon to schedule a new referral in a busy clinic fundamentally constitute rationing. In the microcosm of an ACO, some form of rationing needs to be present for the model to remain solvent [13]. The question then becomes, should there be explicit rationing policies, or should implicit rationing occur at the bedside? Some would argue for rationing by policy, to prevent individual physician bias that would introduce many discrepancies [14], but do such policies erode the autonomy of the physician in the practice of medicine? This ethical conundrum needs to be addressed by the Midstate group with strong adherence to evidence-based data.

The principle of justice also encompasses respect for morally germane laws. Three such laws—the anti-kickback statute [15], the "Stark" physician self-referral law [16], and the Gainsharing civil monetary penalty (CMP) statute [17] apply to ACOs and have ethical implications. In sum, these laws make it illegal to knowingly pay or be paid for the referral of patients for any service reimbursed under Medicare/Medicaid, prohibit physicians from making referrals to any entity with which they or immediate family members have a financial relationship, and prevent hospitals from disbursing payments to physicians to reduce medically necessary services to Medicare and Medicaid patients. These laws were all created with the goal of preventing financial incentives from interfering with just and appropriate patient care.

A problem arises with these statutes in the context of ACOs, however. The ACO model requires group collaboration within a health care system that would violate the above-mentioned laws. CMS and the Office of Inspector General have established waivers to protect ACOs from penalties related to these laws as long as the ACO remains in good standing with the Medicare Shared Savings Program and to protect certain start-up activities related to ACO formation [18]. The Midstate group would be wise to assure that these protections would apply to the group as it incorporates into a larger ACO system and that there is complete transparency during the process.

Special mention should be made of socially disadvantaged and clinically vulnerable patient populations. When these populations overlap, those in the middle—members of ethnic minority groups with complex chronic illnesses who live in impoverished neighborhoods—are particularly susceptible to inadequate care. This could arise if physicians "dump" patients by referring them or otherwise avoiding their care [19]. A 2002 Institute of Medicine report found that members of racial and ethnic minorities often receive lower-quality care than patients of European descent—differences not explained by insurance coverage, access to care, income, education, or patient preferences [19, 20]. Does the Roosevelt system have safeguards in place to avoid these injustices?

Respect for Autonomy

The bioethics principle of respect for individual autonomy encompasses two often competing interests—the autonomy of the patient and that of the physician. With the increasing complexity of medical treatment and controversies over end-of-life decisions, preserving patient autonomy in medical decision making has become a key interest [21-23]. Americans demand freedom of choice in health care [24, 25].

Certain ethically justifiable limits must be placed on patient autonomy, however, for the ACO to be viable. The patient can no longer be considered a mere consumer of health care, but also has an ethical obligation to be a responsible co-manager of health care resources who makes decisions based on sound, evidence-based data. The physician's role is to present that data and to educate and guide the patient and surrogates toward medically appropriate care that avoids overtreatment, undertreatment, and mistreatment. This role is especially important during end-of-life discussions, when the temptation to "do everything" in the face of a truly terminal disease process should be avoided. Zhang et al. showed that health care costs for patients with advanced cancer in the last week of life were 35.7 percent lower when end-of-life discussions occurred than when they did not. Lower costs were correlated with a better quality of death, and there were no survival differences between the groups [26]. Physicians should maintain patient trust while staying steadfast in their dedication to limit care to that which is medically sound and evidence-based. The ACO is ethically justified in upholding those limits. The Midstate group should confirm that the Roosevelt system would be unwavering in its support for the physicians in this endeavor.

The ACA provides ACOs with the means to reward patients who stay engaged in their health by offering premium reductions for participation in wellness programs or for meeting body mass index (BMI) targets. Education is key. Patients may at first be skeptical of doctors and hospitals profiting from what patients may perceive as providing *less* care. But patients, too, may benefit from the savings derived from receiving what is actually *effective* and *appropriate* care. Overcoming patients' skepticism will involve

educating patients throughout their health care surveillance and health care delivery. The patient, as well as the physician, has an ethical responsibility to control costs since the collective decisions of both impact the resources subsequently available for others.

Summary

The current state of our health care system is analogous to the status of science that Kuhn describes as "a proliferation of compelling articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals" [27]. ACOs represent a paradigm shift in the way health care is delivered. As with any dramatic public policy change, ethical issues will arise. These are surmountable challenges, and with open communication, physicians such as the Midstate group can partner effectively with hospital systems to ensure the delivery of quality, evidence-based care while at the same reorienting the culture to be attentive to its fiduciary responsibilities.

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ISSN 2376-6980

American Medical Association Journal of Ethics
July 2015, Volume 17, Number 7: 630-636

IN THE LITERATURE

Accountable Care Organizations: The First Two Years' Performance and Directions for the Future

Kieran Holzhauer

McClellan M, Kocot SL, White R. Early evidence on Medicare ACOs and next steps for the Medicare ACO program. *Health Affairs Blog*. January 22, 2015.

In December 2014, the Centers for Medicare and Medicaid Services (CMS) released a notice of proposed rulemaking that detailed proposed changes to its initial policies governing accountable care organizations (ACOs). The notice prompted health care economists to appraise the performance of ACOs to date. The evaluation posted by McClellan, Kocot, and White on the *Health Affairs Blog* [1] goes a long way in helping us understand the goals set and obstacles faced by this innovative model for care delivery and physician payment.

Background: Accountable Care Organizations

One provision of the ACA established an avenue for the creation of accountable care organizations (ACOs)—voluntarily formed groups of doctors, hospitals, and other health care organizations that work together to minimize the cost of providing high-quality care [2]—for patients covered by Medicare. Proponents of the ACO model argue that providing a unified health care "home" can improve the quality and lower the cost of health care [3]. Advocates also assert that the role of physicians as leaders in ACOs gives the patient-physician relationship a more central role within the health care system [4].

The Centers for Medicare and Medicaid Services (CMS) has set up several incentive options for ACOs: the Medicare Shared Savings Program (MSSP), which is subdivided into two arms, the Pioneer ACO Model and the Next Generation ACO Model. ACOs that are part of the MSSP can earn "shared savings," a percentage of the money they have saved CMS, by meeting minimum savings and quality standards. In the "two-sided risk" arm, ACOs can earn up to 60 percent of the savings they generate by reducing the cost of care; if, on the other hand, they fail to meet savings and quality benchmarks, they will face penalties. In the "one-sided risk" arm, ACOs face no penalties for failing to meet these benchmarks but can earn only up to 50 percent of savings realized by CMS. The Pioneer ACO Model operates similarly for the first two performance years, but with higher levels of risk and potential earnings. In subsequent years, Pioneer ACOs can shift to a population-based payment system, in which reimbursements are based on the number of beneficiaries as opposed to individual services provided [5]. The Next

Generation ACO Model provides an avenue for experienced ACOs that have adopted the Pioneer or MSSP model to assume higher levels of risk and reward [6].

There are two additional possibilities for physician-owned and rural ACOs. The ACO Investment Model and the Advance Payment Model both provide "prepaid savings," i.e., advance payments, to encourage new ACOs (particularly those owned by physicians) to form in rural and underserved areas and existing ACOs to take on greater financial risk.

Data: The First Two Years, 2012 and 2013

Early data published by CMS revealed mixed financial results [7]. While CMS-released quality data is still sparse, early quality performance looks positive. However, in neither the MSSP nor the Pioneer ACO Model has a direct correlation appeared between quality and savings [1, 8].

Cost savings. Savings are determined by comparing expenditures to a historical benchmark determined by an approximation of the organization's per-beneficiary spending over the prior three years [7].

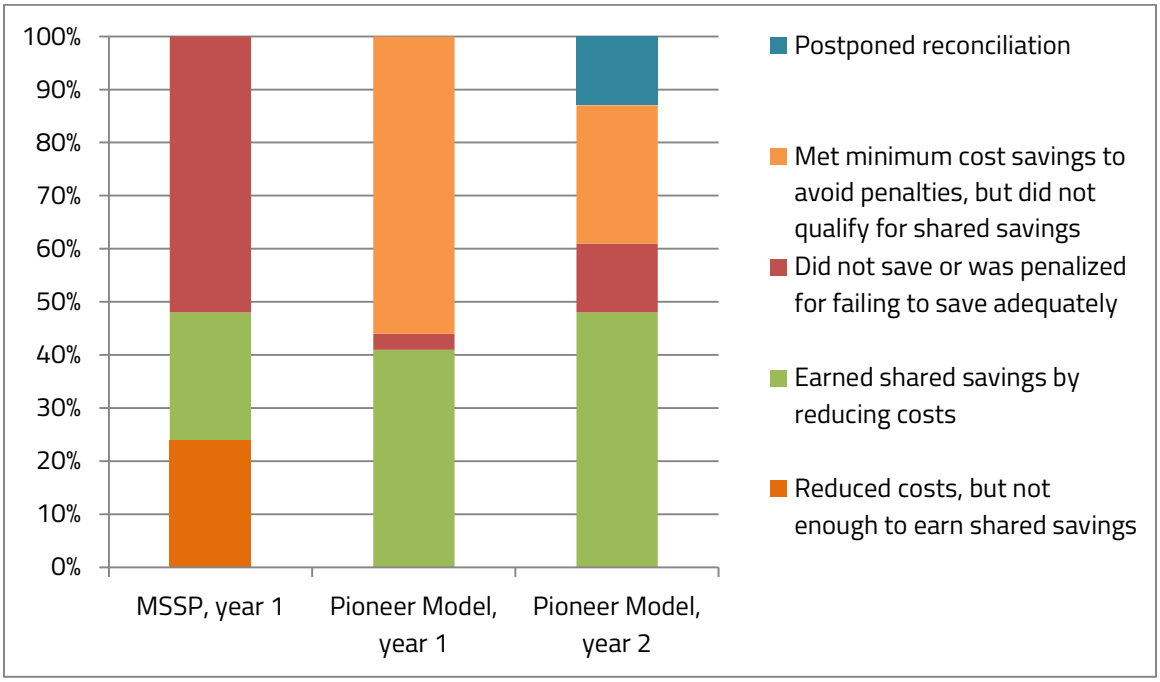

Figure 1. Cost savings in the first two years of the MSSP and the Pioneer Model, 2012 and 2013 [1, 9].

Of the 220 ACOs in the MSSP, 48 percent reduced costs. Just over half of that group met the requirements to earn shared savings [1]. In the first year, 41 percent of the 32 ACOS in the Pioneer Model saved enough to qualify for shared savings, 3 percent owed money, and the remaining 56 percent performed within the minimum range to neither earn nor

owe money. In the second year, 48 percent of the 23 returning ACOs earned shared savings, 13 percent owed money, 26 percent performed within the minimum loss or savings range, and 13 percent chose to postpone reconciliation until the third year [9].

Quality improvement. CMS measures an ACO's care quality using 33 metrics divided among 4 domains: patient/caregiver experience, care coordination/patient safety, preventive health, and at-risk population [10]. The measures are collected through patient surveys, claims, the Medicare and Medicaid Electronic Health Record Incentives Program data, and the Medicare and Medicaid Group Practice Reporting Option Web Interface [10]. In performance year one, pay depends on reporting of quality measures. In performance years two and three, pay for performance standards gradually replaces pay for reporting [11]. Points earned based on the percentile an ACO achieves in these measures factor into the determination of the percentage of shared savings it receives.

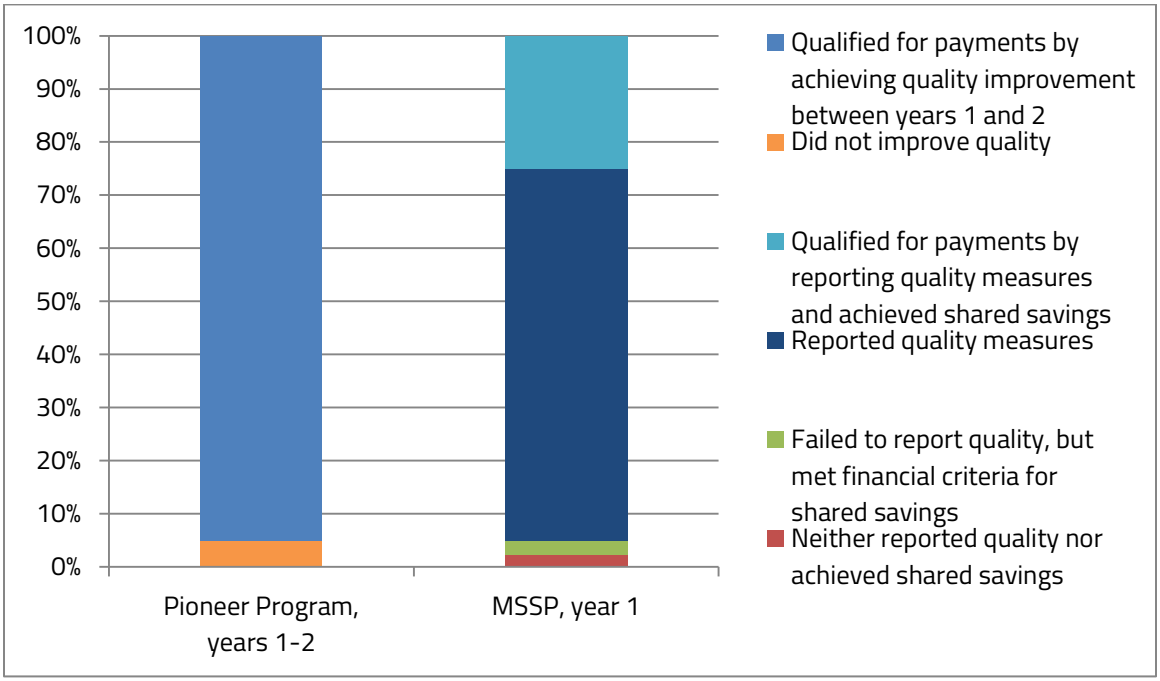

Figure 2. Quality improvement in the first two years of the MSSP and the Pioneer Model, 2012 and 2013 [1, 9, 12].

In the Pioneer model, all 23 participants that went on to the second year of the program saw overall quality improvements between years one and two [9]. In the MSSP year 1 data, 209 of the 220 ACOs successfully reported quality measures [12]. Of those 209, 52 also achieved shared savings [1]. Of the 11 ACOs that did not report quality measures, 6 met the financial requirements for shared savings.

Overall, results on cost savings and adherence to program requirements are mixed, but data on quality improvement seems promising.

The Authors' Analyses

A second article discussing this early data, by Scott Heiser, Carrie Colla, and Elliott Fisher, points to geography as one potential predictor of ACO success [8]. An ACO located in a higher-cost area has a higher baseline cost per beneficiary, which allows for greater comparative savings. McClellan, Kocot, and White note, however, that the minimum cost reduction rates required for particular organizations to earn shared savings are region-specific, based on past performance in the hospital's referral region. While being in a higher-cost region, such as Florida and Texas, may make it easier to reduce costs quickly, successful and unsuccessful ACOs exist throughout the country; geography does not solely account for varying performance. They

> note that the beginning financial benchmark explains less than 10 percent of the variation in early financial performance, and note that there are many successful ACOs in lower-cost areas as well.... Many other factors matter.... Based on our work in the ACO Learning Network, as well as the findings of many case studies and other anecdotal reports, more important factors likely include clinical interventions, analytic capabilities, leadership and culture, and other up-front investments. This suggests that Medicare ACOs will continue to benefit from experience and learning before most are willing to accept downside financial performance risk, a critical objective for the program.... The results also suggest that allowing flexibility and focusing on results...could help more organizations succeed [1].

Potential Ethical Issues in ACOs

Ethical concerns could arise in Medicare ACO programs if the pressure to increase savings and improve quality scores overwhelms the desire to act in the best interest of the health and well-being of patients. Some have expressed concern about the loss of patient autonomy given the ACOs' financial interest in referring patients to physicians within the ACO [13]. A second concern is the preferential acceptance of patients with low expected long-term health care costs to the organization, which would be an unethical means of reducing costs. If ACOs become the standard model of health care provision, patients who have predictably high costs of care will not have adequate health care options. Over time ACOs could also find loopholes to decrease costs by maintaining quality *scores* but reducing the actual quality of care by preferentially treating lower-cost patients or cutting corners in areas not directly measured.

The Medicare ACO quality assessment includes metrics that examine physicians' clinical, communication, and interpersonal skills, but physicians are not asked about their feelings towards the ACO and the care that it provides. Although conflict of interest precludes physician-completed assessments from factoring into shared savings, regular

reflection and self-evaluation by physicians could improve the quality of care and physician well-being.The transition to an ACO also changes physicians' incomes, work environment, autonomy, and routine [4]. The level of upheaval associated with ACOs warrants examination of how physicians are responding to the transition and the changes that they see in quality of life for themselves and quality of care for their patients.

ACOs' Future

According to McClellan, Kocot, and Wright, a better understanding of the determinants of ACO success will improve the sustainability and growth of the program by reducing participant uncertainty [1]. There is uncertainty, for example, about whether joining a CMS ACO provides an achievable route to lowered costs and improved quality; this deters entry to and triggers withdrawal from ACO programs. They posit that further honing of MSSP policies, particularly surrounding benchmark calculations, will reduce some of the financial uncertainty. A successful ACO program, they argue, rests upon improving current programs and providing more clearly delineated steps for experienced ACOs to continue to improve savings and quality while accepting more risk.

Physicians solely or in conjunction with hospitals lead more than 80 percent of ACOs [4]. Physician leadership has been identified as one of the potential advantages of ACOs because of physicians' ability to maintain patients' interests and uphold strong physician-patient relationships [4]. Smaller physician-led ACOs have also been associated with a greater degree of financial success [1], perhaps due to the expedience with which change can be designed and implemented. CMS's standards require strong clinical and managerial leadership to meet financial and quality goals, suggesting a need for leadership training to be incorporated into medical education. Although the Institute of Medicine recommended that medical schools support the changing organization of patient care, education, and research by contributing to the development of leaders, few medical schools have introduced leadership topics into their curricula [14, 15]. If ACOs are to continue to expand their share of the health care market and if physicians are to continue to take on leadership roles in ACOs, leadership training must be integrated into medical education.

Moreover, having both quality and financial requirements prevents ACOs from being rewarded for reducing cost at the expense of quality or vice versa—the reason the managed-care model became unethical. But these dual requirements diminish the sustainability of these programs; a time will come when continuing to reduce costs while maintaining high quality care is impossible and improvement and innovation can no longer be measured by increased quality and decreased price. This stage will require more creativity, and even then the model may need to be replaced or rethought.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 637-646

STATE OF THE ART AND SCIENCE

Incentives for Physicians to Pursue Primary Care in the ACA Era

Kathleen Klink, MD

When President Obama took the oath of office in January 2009, there was mounting evidence that primary care not only improved patient and population outcomes, but also contained costs [1-3]. It was clear that improved access to quality primary care would be a focus of his administration. Responding to the 2008 economic crisis and recognizing tremendous gaps in the health care delivery system—particularly in the primary care workforce—Congress passed the American Recovery and Reinvestment Act (ARRA) in 2009. The act addressed a number of health delivery system issues; it implemented the Health Information Technology for Economic and Clinical Health (HITECH) Act, which introduced the concept of meaningful use of electronic health records; created the Office of the National Coordinator for Health Information Technology; reinvigorated the National Health Service Corps (NHSC) with a $300 million investment; and expanded the Health Resources and Services Administration (HRSA) workforce programs, including the NHSC, by close to 50 percent [4].

Societal undervaluation of primary care services continued, however, reflected by the lackluster investment in primary care infrastructure that has not reimbursed for foundational components of primary practice such as care coordination and chronic care management. Instead, the fee-for-service model of payment has incentivized increased services, procedures, and tests [5, 6]. The widening income gap between generalists and specialists and the failure of the Resource-Based Relative Value Scale (used by HMOs to determine clinician payments) to reduce the inequality between office visit fees and payments for procedures [7] have contributed to the trend.

The Council on Graduate Medical Education (COGME) is authorized by law to advise the Secretary of Health and Human Services and Congress on the supply and distribution of physicians in the United States [8]. In light of both primary care's contribution to improved outcomes and longevity and the attrition of primary care physicians, the COGME recommended that at least 40 percent of the physician workforce should practice primary care and that their salaries should average no less than 70 percent of specialists' salaries [9].

Five years ago, on the heels of the financial crisis, the Affordable Care Act (ACA) was signed into law. More than 48 million people in the nation were uninsured [10], and many were ineligible for coverage due to preexisting conditions. Simultaneously, out-of-

pocket costs were rising, premiums were increasing, and the health share of the gross domestic product (GDP) was at an all-time high [11-13]. The ACA supported two seemingly conflicting goals: expanding insurance coverage to more people and for more care—e.g., preexisting conditions and preventive care services—while at the same time containing costs.

A major focus of the ACA is covering primary care services, such as preventive services and annual wellness visits for Medicare beneficiaries. Under the act, primary care physicians, who provide 60 percent of services in qualifying evaluation and management codes, could receive a 10 percent bonus in Medicare payments for five years, beginning in 2011 [14]. For certain primary care services, Medicaid payments administered by states would be required to match those of Medicare in 2013 and 2014 [15].

The principles underlying the ARRA and the ACA are similar; both attempt to improve outcomes and lower costs by enhancing access to care through federal investments and by modifying health care delivery, payment, and regulatory incentives. The strategies encompass a number of tactics, including implementation of the patient-centered medical home to decrease fragmentation and improve care coordination. New payment models are based both on services rendered (fee for service) and value added or outcomes—a sea change in reimbursement policy. Medicare spending in highly capitated (i.e., fixed payment per patient) practices has been shown to cost less per beneficiary than fee-for-service-based practices [16-18]. Although these policies were a step in the right direction, none can be effective without widespread, robust, and accessible primary care [19].

In order to improve access, the ARRA and the ACA together provided enough funding to double the safety net system through community health centers (CHCs) and federally qualified health centers (FQHCs). These are private nonprofit organizations that provide primary health care and fully comprehensive "enabling" or support services in defined medically underserved areas. They receive federal grant funding through section 330 of the Public Health Service Act [20] and enhanced reimbursement from Medicaid and Medicare. They also accept private insurance and must accept all patients regardless of insurance status. The aim is to improve access to care for low-income, underserved, and vulnerable populations. In 2013, there were more than 9,000 CHC service sites serving almost 22 million patients [21].

Primary Care Delivery and Payment Transformation

The primary care workforce shortage has been well documented [22, 23], and many underserved urban and rural areas don't have the workforce capability to provide the most basic health care services [24]. Due to the increasing trend in physician specialization [25], there has been little improvement in the ratio of primary care

physicians to patients during a period when the overall physician-to-population ratio has increased dramatically [25].

Primary Care and the Public Good

With compelling evidence that health systems with high-functioning primary care services have decreased mortality and improved health outcomes [9], the sector can be classified as a public good, similar to police and fire services. Physicians are empowered by society to collectively and individually be agents of change, but changing society requires advocacy and a demand for social justice [26]. All physicians have taken an oath to serve in the public trust, an obligation that can be fulfilled through service as well as education [27]. Yet medical school graduates are shunning primary care in favor of more lucrative subspecialty careers, as evidenced by a direct correlation between mean overall specialty salary and US graduates' residency fill rates [28].

Because almost all graduates of family medicine residency programs go on to practice in primary care (unlike internal medicine graduates, who tend to subspecialize or limit their practices to hospital care), family medicine can be used as a proxy for medical school primary care production. Prior to 2000, 73 percent of entering family medicine residents were graduates of US allopathic schools, but the percentage shrank to 46.1 percent for those entering the workforce between 2001 and 2013 [29]. Conversely, more than one-third of those entering the workforce between 2001 and 2013 were international graduates, who made up 13 percent of those entering the workforce before 2000 [29]. Even with increasing numbers of international graduates entering the US workforce through primary care residencies [30, 31], the nation is falling behind on projected primary care needs, which are burgeoning due to population growth, increased insurance coverage, and impending physician retirements [22].

High student debt, which may disproportionately affect students with a lower socioeconomic status, has been cited as a deterrent to entering primary care practice [32]. The low value ascribed to primary care during medical school also may affect career choice, suggesting that altering school culture and supporting motivated students could be effective in enhancing the primary care workforce [32, 33]. Providing meaningful training experiences in safety net settings encourages and supports students to choose primary care and physicians to practice in similar environments [34, 35].

Inducements to Pursue Primary Care

Congress provided a raft of inducements to attract patients into primary care offices. Did they do the same to attract physicians into those same offices to provide care for the newly insured? Specifically, the ARRA and the ACA made five changes to induce medical students to pursue primary care careers and to support primary care training programs.

Decreased payback time and penalty fees for the Primary Care Loan (PCL). The PCL is a low-interest loan program for medical students who intend to pursue primary care; the decrease in fees comes without any cost to the government.

Investments in the National Health Service Corps (NHSC). NHSC resources are used to recruit primary care clinicians to underserved areas or populations through student debt relief. Sixty percent of NHSC physicians continue to practice in underserved communities ten years after their service commitment has ended [36], and the workforce treating the underserved as of 2014 was estimated at more than 2,400 physicians (personal communication from Craig Kennedy, executive director, Association of Clinicians for the Underserved, May 5, 2015). The ARRA provided $300 million toward debt repayment for participating physicians, and the ACA increased the award amount available to NHSC members. In 2014, $283 million was invested in NHSC awards to a variety of clinicians, including primary care physicians [4, 37].

Investments in the Teaching Health Center GME program (THCGME) and primary care residency program expansions. Federally funded by $230 million over five years, beginning in 2011 [38], THCGMEs are community-based ambulatory patient care centers (such as community health centers—including those operated by the Indian Health Service or receiving Title X grants—rural health clinics, or community mental health centers) that operate primary care residency programs. This funding supports new resident slots or the establishment of new programs. NHSC members may fulfill 50 percent of their service obligation time through clinical teaching at THCGME programs [39]. Congress authorized, but did not fund, THCGME development grants, which would have allowed programs to plan curricula and enhance faculty [40].

Enhancements to Title VII programs. The US Public Health Service Act, title VII, was enhanced to include opportunities for primary care capacity building [41]. Authorized by this act and the ARRA, the Primary Care Training and Enhancement (PCTE) grants fund training programs for primary care students, residents, faculty, and academic units [42]. Funding was authorized for $125 million per year [40, 41], but subsequent annual appropriations have ranged from $37 million to $39 million [43], and the estimated award amount for federal fiscal year 2015 was less than $37 million overall [44].

Technical changes to Medicare GME support. Under title VII authority, $168 million from the Public Health and Prevention Fund was used to support community-based primary care residents over a five-year period, at a rate of $80,000 annually—which is lower than other graduate medical education (GME) program support per position [45-48]. Projected production was almost 900 supported resident years, although the actual number of physicians who are going on to practice is still not known [49], nor is it known if these positions will be supported after 2015 when the funding ends.

A technical but important shift in Medicare GME reimbursement to sponsoring institutions was the new policy that allows programs to pay residents training in nonhospital (ambulatory) settings. It removed much of the disincentive for community-based ambulatory rotations and longitudinal primary care. In addition, Medicare allowed certain residency training slots to be redistributed among departments within an institution to high-need specialty areas [50]. The residency slots redistribution, though a step in the right direction, has been anticipated to have minimal impact [51].

Although Congress authorized many incentives, appropriations were not forthcoming for others.

Options to Enhance Primary Care GME

Released in 2010, the Council on Graduate Medical Education's twentieth report, *Advancing Primary Care*, recognizes the importance of primary care as a mechanism for enhancing health and decreasing costs nationally [9]. The council recommends that no less than 40 percent of the physician workforce practice primary care; that existing primary care practices be transformed into new models such as patient-centered medical homes; and that payment reward care that is comprehensive, continuous, coordinated, and community-based, all hallmarks of high quality.

The report identifies recruitment of primary-care-oriented students, faculty support of primary care practice, and curriculum enhancements as key factors in promoting and sustaining change. It urges GME leaders to address maldistribution and train residents about the social determinants of health disparities.

Certain changes in the medical education curriculum have the potential to attract students and improve residency graduates' preparation for providing high-quality and meaningful service in primary care. These changes would emphasize caring for a defined patient population over time, working on health teams that include multiple professions such as behavioral health professionals and pharmacists, and working with communities as part of a larger health system such as an accountable care organization. Finally, and importantly, we should encourage commitment to leadership and research investments in population and health services among residents who become faculty [52].

Conclusions

The ARRA and the ACA have directly funded and provided windows of opportunity for the development of primary care physicians and practices. Whether they have done as much as they could have is yet to be seen. Nevertheless, so much is changing that "change management" has become a popular topic in faculty development and primary care delivery settings. Primary care physicians, educators, academic health centers, medical school leaders, and policy pundits must respond to the public need by embracing change. Students and residents deserve to be inspired by the opportunities the health care crisis

provides us, to make change, to be part of change: to make a difference. Indeed, educators and curriculum designers should encourage them to take leadership positions and make demands for the social justice and health equity that improve the well-being of the whole population.

Strategies for change include engaging, promoting, and developing primary care faculty; recruiting primary care-oriented students; and enhancing primary care curricula and training experiences to make longitudinal care of patients relevant and compelling as a profession. Primary care residency programs in academic health centers where students are initially exposed to primary care practice must be improved so that the purviews of primary care are presented and viewed as the complex and interesting systems that they are, as exciting as the beating heart in the interventional cardiology suite. Longitudinal care experiences that foster interest in and familiarity with primary care should not have to compete for time and attention with concurrent inpatient/hospital duties. Primary care time should be protected, not tacitly treated as unimportant.

Commonly referred to in motivational learning settings is the dual meaning of the Chinese symbol for "crisis": "danger" and "opportunity." The crisis in primary care is here: the realization of opportunity depends on vision, leadership, and support reforms to revitalize the long-neglected and overtaxed primary care system. Linking primary care with the communities it serves to improve the quality of health care and slow the rate of spending must become a priority.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 647-650

STATE OF THE ART AND SCIENCE

The Next Generation of Physician Report Cards

Amanda S. Xi, MD

Almost a century ago, staff surgeon Ernest Amory Codman called for measurement and reporting outcomes in medicine [1]. Today, debate continues about selecting meaningful metrics, appropriately adjusting for patient risk, and determining what data to report publicly. As the leading cause of death in the United States and a major contributor to health care spending, cardiac disease is a logical target for outcomes measurement [2].

The Beginning of Public Reporting

Public reporting of cardiac surgery outcomes began with New York State Commissioner of Health David Axelrod's concern over a substantial variation in mortality rates following coronary artery bypass surgery (CABG) [3]. Due to inadequate data collection, it was unclear what caused this variation in outcomes. Learning from the shortcomings of the Health Care Finance Administration (now the Centers for Medicare and Medicaid Services) mortality rates initially published in 1986—specifically, failure to adjust adequately for patient risk [4]—New York opted to create a different kind of registry that accounted for patient risk factors [3]. Data from the New York State registries were published in *JAMA* and *The New York Times* in 1990 [5, 6]. Due to a lawsuit brought by *Newsday* newspaper citing New York's Freedom of Information Law, surgeon-specific mortality rates were released to hospitals and the public in late 1991. Initially, to ensure adequate statistical power, surgeon-specific data were collected only for surgeons who had more than 200 cases in three years [7].

The Initial Impact of Public Reporting

The release of surgeon-specific data resulted in New York hospitals' restricting privileges for low-volume surgeons, who collectively had a risk-adjusted CABG mortality rate of 11.9 percent (the statewide rate was 3.1 percent at the time) [8]. A subsequent study found that a substantial number of the surgeons with the highest risk-adjusted mortality rates had ceased performing CABGs by 1996 [9].

Studies that examined the impact of public reporting of post-CABG mortality showed a decrease in in-hospital mortality from 3.52 percent to 2.78 percent in New York between 1989 and 1992 [10] and found that the numbers were not skewed by surgeons' referring high-risk patients out-of-state—the percentage of out-of-state transfers actually decreased during the study period [11]. Two years after the release of the New York CABG outcomes, Pennsylvania followed suit and also saw a decrease in in-hospital

mortality from 4.9 percent to 3.8 percent between 1991 and 1995 [12]. Overall, the initial impact of public reporting on CABG outcomes was positive.

Despite the positive CABG outcomes, New York physicians' use of outcome-related report cards was limited—surveys in 1997 and 2001 indicated that a majority of cardiologists (57 percent) did not rely on report card data or (71 percent) share it with patients [13, 14].

Physician Report Cards for Value-Based Care

With the shift in reimbursement models from fee-for-service to fee-for-performance, we have entered a new era for physician report cards. The Physician Quality Reporting System collects data on quality measures that are reported publicly on the Physician Compare website [15] (established by the Centers for Medicare and Medicaid services—CMS—in 2010, as required by the Affordable Care Act) [16]. Currently, the website provides specific performance data for group practices and accountable care organizations (ACOs) and identifies individual physicians who are participants in quality improvement initiatives [16].

Report cards are also branching out into new, non-outcome-based measures of care quality. CMS's Hospital Value-Based Purchasing program uses various measures of quality—including patients' hospital experience, as measured by the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey—to calculate hospital payments [17]. In 2012, the University of Utah launched an online physician review tool. Initially, physicians privately received their own patient experience reviews and were encouraged to use the information to improve. The next step of the program allowed review of the data by their physician colleagues to compare performance and encourage competition. Finally, individual physicians' report cards from patients were publicly released on the University of Utah's website. This transparency initiative led to a substantial improvement—from the 18th percentile to the 90th percentile—in the health system's ranking for patient satisfaction [18]. The University of Utah recognized the importance of transparency and encouraged both physician and patient engagement to achieve meaningful improvement in patient satisfaction.

Conclusion

Physician report cards have evolved substantially from the first publicly reported, surgeon-specific post-CABG morbidity and mortality rates in New York. With the increasing collection of quality data and intent to publicly report on physician quality metrics, we are entering an era in which physicians will be held accountable for their patients' outcomes and patients will have more information readily available to make informed clinician selections. In the coming years, it will become increasingly important for physicians to understand and appropriately discuss the available report cards with patients. Nearly one century later, Dr. Codman's pleas for transparency have come to

fruition.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 651-655

POLICY FORUM

Comparative Effectiveness Research Would Contribute More to Ethical Policy Making if Cost Were Considered

Kevin D. Frick, PhD

A common framework for ethical considerations in medical decision making includes four principles: (1) respect for autonomy (the patient should be able to make choices), (2) beneficence (medical care professionals should act in the best interest of the patient), (3) nonmaleficence (physicians should not harm), and (4) justice (benefits should be distributed equitably) [1]. Three of the four principles are most easily interpreted at the patient level; the fair distribution of benefits, however, cannot be considered without thinking at the population level. As payers and policymakers demand a more evidence-based approach to ethical medical care, they must ask the following questions: (1) Does the relatively new field of comparative effectiveness research (CER) better serve medical ethics than research designs that provided evidence previously? (2) Is CER still missing elements important for ethical decision making?

Before Comparative Effectiveness Data

Prior to the Affordable Care Act's comparative effectiveness research initiative, constructing evidence-based arguments for policy, guidelines, or best-practice recommendations required ranking the quality of clinical evidence; generally, randomized controlled trials (RCTs) were ranked as the highest quality form of evidence [2-4]. Since participants in such trials are randomly assigned to trial treatment or control groups, if differences between the groups' average outcomes are statistically significant, they are taken as evidence that the trial treatment had some effect or that one treatment is better than another. Randomization is the only way to ensure that unobservable participant characteristics are initially distributed more or less similarly across treatment groups. The use of the term "unobservable" here means patient information unavailable to the researcher. The patient and clinician may be aware of information that the researcher does not have that could affect the decision about which treatment to assign and the expected effectiveness of alternative treatments in nonrandomized settings. This can cause bias in this type of study.

Despite the potential for high levels of internal validity, randomized trials can lack external validity or generalizability to individuals not included in the study. The clinical centers at which randomized trials are conducted are not generally representative of the sites at which all patients receive care. The inclusion criteria for study subjects are often extensive, may eliminate people who have comorbidities that may be common in the

"real" patient population, and may otherwise limit the subjects in ways that make the conclusions clear but not necessarily applicable to the general population with the condition being studied. Additionally, the results of randomized trials are average results for everyone in the study. Studies that have a large enough sample size to allow clear inferences about subsets of the clinically relevant population tend to be expensive and are therefore less likely to be undertaken.

Comparative Effectiveness Research

As the field of evidence-based medicine has grown, the need was recognized for clinical evidence with greater external validity for the purpose of developing policy, guidelines, and best practices. In this context, the field of CER emerged. While there are numerous definitions of this term, the definition that is found on the White House website [5] is:

> Comparative effectiveness research is the conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat and monitor health conditions in "real world" settings. The purpose of this research is to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision-makers, responding to their expressed needs, about which interventions are most effective for which patients under specific circumstances.
>
> - To provide this information, CER must access a comprehensive array of health-related outcomes for diverse patient populations and sub-groups.
> - Defined interventions compared may include medications, procedures, medical and assistive devices and technologies, diagnostic testing, behavioral change, and delivery system strategies.
> - This research necessitates the development, expansion, and use of a variety of data sources and methods to access comparative effectiveness and actively disseminate the results.

CER and Ethics

Given this definition, it is worth contrasting the ethical dimension of decision making using randomized trial results (i.e., findings applicable primarily to patients in academic medical centers) with that of decision making using CER results (i.e., findings based on data reflecting real-world conditions for diverse patients covered by heterogeneous payers in varying clinical settings).

Controlled randomized trials address ethical principles at a population level—recommendations based on RCT results are in the average best interest and avoid overall harm. However, individual patients and medical care professionals acting in the best interest of and doing no harm to those individual patients will be helped by having

information about the effect of care for clearly defined subpopulations in specific, real-world settings. The variation in clinical settings that can be captured in CER—different levels of facility quality, wide variation in professionals' training settings and experiences, and heterogeneous support staff—are crucial and may lead to a range of outcomes applicable within the general patient population. Hence, the type of information that will lead to better-informed decisions will be more readily available from comparative effectiveness studies in which information for each subgroup is ascertained and then combined with the epidemiological data on the patient population.

Cost

Critically, however, while high-quality CER provides clinical effectiveness information for specific patient populations, it lacks any reference to cost [6, 7]. This omission was intentional; CER focuses solely on clinical effectiveness in real-world settings with real-world populations while avoiding the sticky political debates that invariably arise when making decisions about allocating limited resources and having to acknowledge explicitly that at least some people will be denied health care resources. Yet cost information is critical because the distribution of benefits is only partially determined by who would benefit more, clinically, from the treatment if they received it in the real world; it is also determined by how many patients *can* receive that treatment in the real world, i.e., the distribution of available resources to varying subpopulations.

In other words, assuming that the average costs apply to everyone does not make any more sense than assuming that everyone would have the average clinical outcome. It is worth considering adding cost to the data for making ethical medical policy and guidelines recommendations—a concept encapsulated by the term comparative cost effectiveness (CCE), which I first heard used by my colleague Josh Feldstein at the Center for Applied Value Analysis [8]. CCE entails using data from comparative effectiveness studies to inform cost-effectiveness analyses or other economic evaluations, applying the same expectations to cost data that apply to clinical effectiveness data. We would have to find ways to link the cost results to the heterogeneous populations being treated by heterogeneous clinicians in real world settings, taking into account complication rates, failure to receive treatment, and other real-world conditions. An example of the CCE approach is to look at a new device or pharmaceutical product, compare it with existing competitive products, and assess how the adoption of the new product would affect the bottom line of a hospital, insurer, or integrated delivery network.

Adding cost considerations to CER results would allow those setting policy and making treatment recommendations to make decisions that are more in line with the four principles of medical ethics: patients and their clinicians could make decisions with an understanding of the clinical *and financial* consequences, expanding the principles of doing no harm, beneficence, and respect for autonomy into the financial sphere (assuming that patients are clear about tradeoffs between money and quality and length

of life), and the population distribution of potential benefits and burdens in light of individual and population financial constraints could be projected with greater precision. Finally, on a societal level, cost data could help policymakers understand what else would have to be given up to achieve a given set of benefits, facilitating deliberations about both justice and how to prioritize medicine and other public needs.

In sum, CER may advance ethical medical decision making, but without including cost data, important aspects of the distribution of benefits and burdens will remain unaddressed.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 656-664

POLICY FORUM

Consumer Satisfaction with Health Insurance Coverage in Massachusetts

Sharon K. Long, PhD, and Thomas H. Dimmock

Massachusetts's 2006 comprehensive health reform initiative was the template for the Patient Protection and Affordable Care Act (ACA) of 2010, which is making wide-ranging changes to the health care system nationally. Like the Massachusetts 2006 reform, the ACA utilizes a Medicaid expansion option, subsidies for private insurance, a health insurance marketplace, insurance market reforms, requirements for employers, and an individual coverage mandate, among other things, in an effort to expand health insurance coverage for the nation [1]. There is early evidence of rapid gains in insurance coverage for the nation under the ACA [2-4], echoing the large gains in coverage in Massachusetts following its 2006 reform [5-10]. Subsequently, health insurance coverage in the Commonwealth has remained well above the national average [11-17]. For example, in 2013, 95.4 percent of all Massachusetts residents were estimated to be insured, while only 85.6 percent of residents nationwide were [11].

Health insurance coverage provides a first step toward improving access to and affordability of health care for all, but coverage does not guarantee either access or affordability. This paper examines Massachusetts residents' satisfaction with their health insurance coverage using the 2013 Massachusetts Health Reform Survey (MHRS) [18]. We find that nonelderly adults in Massachusetts are generally quite satisfied with their coverage, their network of health care practitioners, and the quality of care available with their plans. However, they are less satisfied with the financial protections afforded by their health insurance coverage and often report financial barriers to care and problems paying medical bills. Health care affordability continues to be a challenge for Massachusetts residents, despite near-universal coverage.

Massachusetts Health Reform Survey

The MHRS has been conducted by the Blue Cross Blue Shield of Massachusetts Foundation most years since 2006 to monitor and understand the state's health care system [19]. Its participants are a stratified random sample of approximately 3,000 adults aged 19 to 64 interviewed by telephone (landline and cell phone) in English and Spanish [18]. The 2013 response rate was 30.4 percent. The MHRS gathers information on health insurance coverage, including the respondent's assessment of it; health care access and use, including the respondent's experiences with using it; and health care affordability.

All tabulations based on the MHRS were prepared using weights that adjust for the complex design of the survey, undercoverage, and survey nonresponse. In this text, we focus on estimates that were statistically significant at the five percent level or better.

Results

Massachusetts attained near-universal coverage by the second year after health reform and has maintained it ever since [11-17]. The most recent federal survey data show that 94 percent of nonelderly adults in Massachusetts had health insurance coverage at the time of the survey in 2013, with most of those adults covered all year [11].

In 2013, nearly two-thirds of insured adults in Massachusetts rated their health insurance coverage as very good or excellent in terms of the range of services available, the choice of doctors and other practitioners, the quality of care available, the locations of their doctors and other practitioners, and their ability to gain access to specialist care (see figure 1). Roughly another quarter rated each of those aspects of their plan as good. The remaining adults rated those dimensions of their health plans fair or poor.

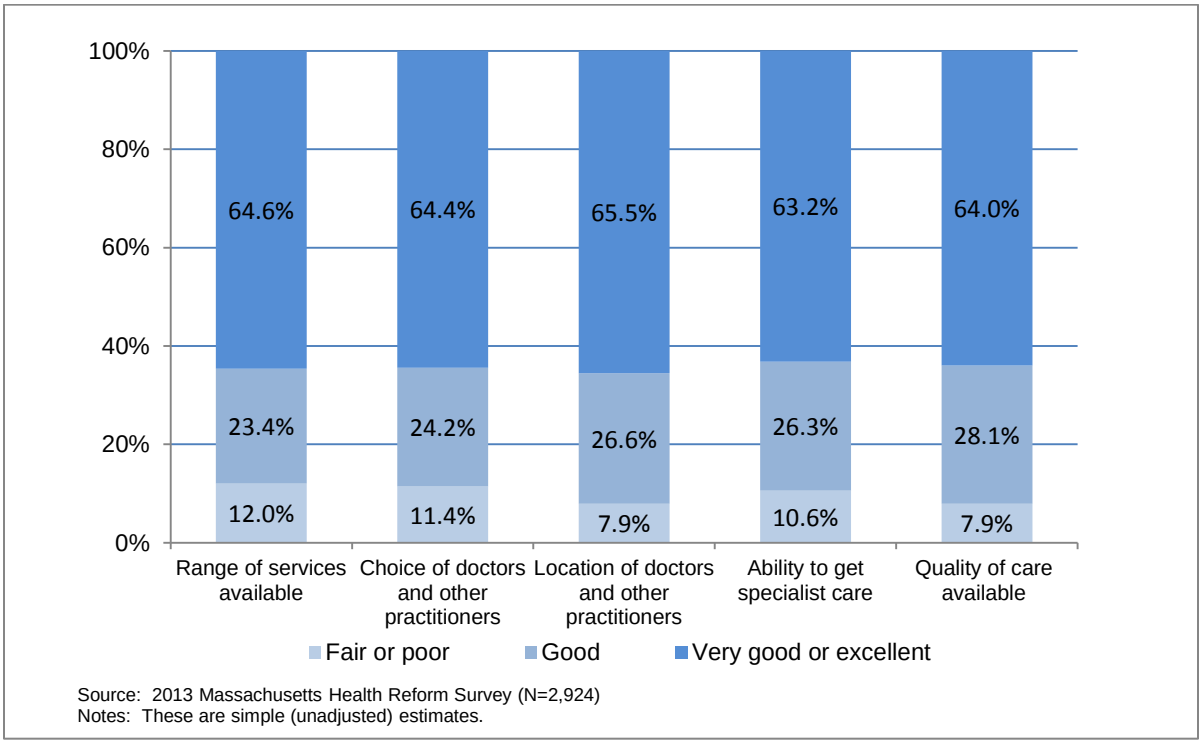
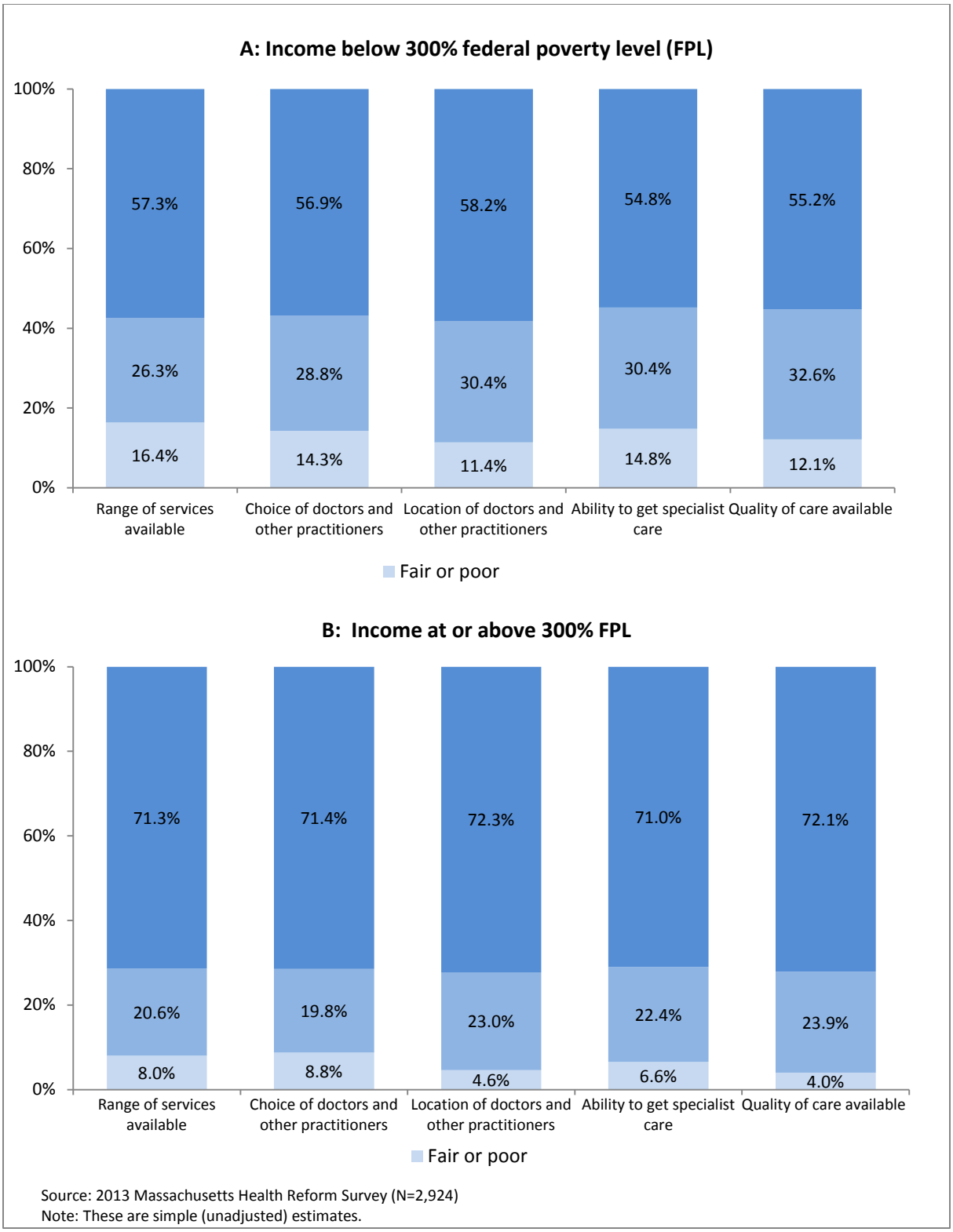


Figure 1. Rating of care available under health insurance plan by insured nonelderly adults (ages 19-64) in Massachusetts, fall 2013 [18].



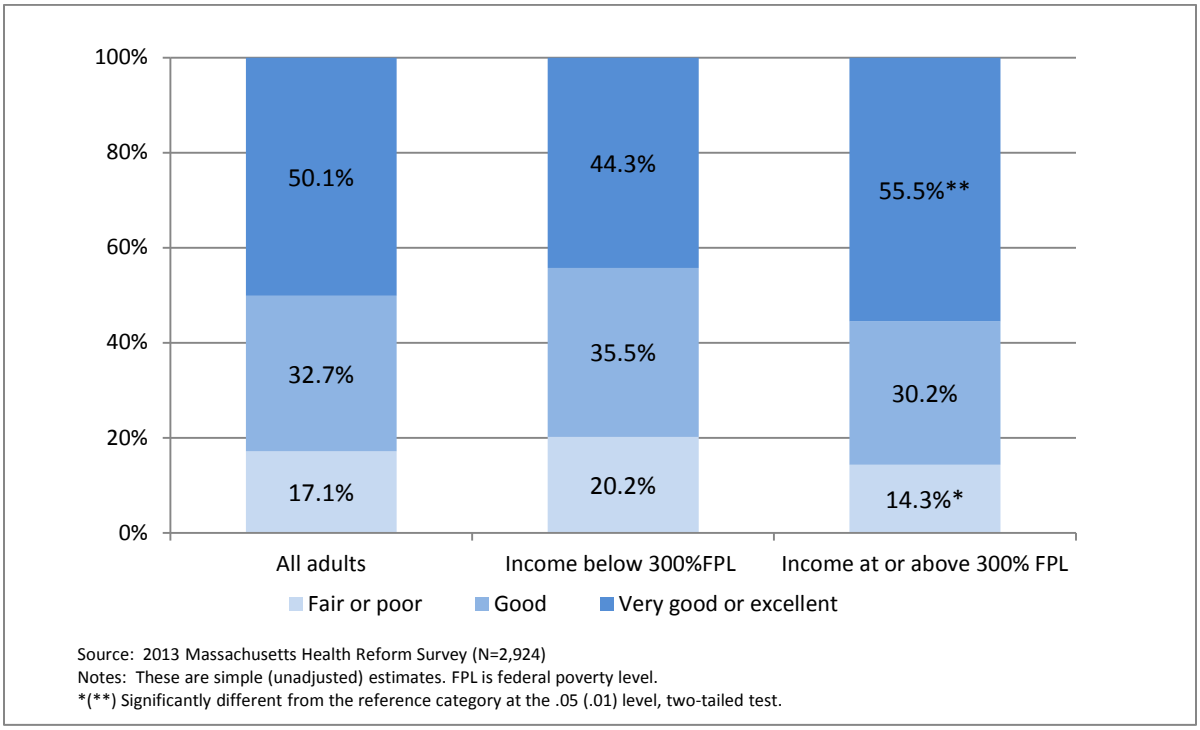
Source: 2013 Massachusetts Health Reform Survey (N=2,924)
Note: These are simple (unadjusted) estimates.

Figure 2. Rating of care available under current health insurance plan by insured nonelderly adults (ages 19-64) in Massachusetts, by family income, fall 2013 [18].

Higher-income adults (defined as those whose family income is at or above 300 percent of the federal poverty level, or FPL) tended to rate their health plans more favorably than did those with lower incomes (see figure 2).

Nearly a quarter (23.2 percent) of the insured adults who had coverage for all of the prior year reported difficulty obtaining health care because of lack of access, including 10.5 percent who reported difficulty finding a general doctor and 9.4 percent who reported difficulty finding a specialist. These problems were more common for lower-income than higher-income adults.

Massachusetts's health care consumers rated the financial protection against high medical bills provided by their health plans less favorably than the nonfinancial aspects of their care. Only half of insured adults rated their plan's financial protections as very good or excellent; nearly one in five (17.1 percent) rated their plan's financial protections as fair or poor (see figure 3). As with the ratings of the nonfinancial aspects of their insurance plans, higher-income adults tended to rate the financial protections under their plan more favorably than lower-income adults did; two of the differences were statistically significant.



Source: 2013 Massachusetts Health Reform Survey (N=2,924)
Notes: These are simple (unadjusted) estimates. FPL is federal poverty level.
*(**) Significantly different from the reference category at the .05 (.01) level, two-tailed test.

Figure 3. Rating of financial protection under current health insurance plan by insured nonelderly adults (ages 19 to 64) in Massachusetts, overall and by family income, fall 2013 [18].

Problems with health care affordability were relatively common among insured adults in Massachusetts: 18.3 percent of insured adults reported expensive medical bills for services not covered by their health plans, and 25.1 percent of those who had coverage all of the prior year had had problems paying medical bills. Notwithstanding these issues, very few (roughly 1 percent) of the adults with coverage all of the prior year went without needed medical care because of costs; however, dental care and prescription drugs were more of a challenge, with 8.7 percent of adults with full-year coverage forgoing needed dental care and 6 percent skipping needed prescription drugs.

Problems with health care affordability were more of an issue for lower-income adults than for higher-income adults. As shown in figure 4, 28.9 percent of lower-income adults who were insured all year were very worried about their ability to pay their medical bills in the future, while only 13.8 percent of their higher-income counterparts were; the differences were statistically significant.

Source: 2013 Massachusetts Health Reform Survey (N=2,924)
Notes: These are simple (unadjusted) estimates. FPL is Federal Poverty Level.
** Significantly different from the reference category at the .05 (.01) level, two-tailed test.

Figure 4. Worry about ability to pay medical bills in the future by insured nonelderly adults (ages 19 to 64) in Massachusetts, overall and by family income, fall 2013 [18].

Conclusions

While near-universal health insurance coverage has become the norm in Massachusetts—almost all of the population is continuously insured—gaps in the available coverage lead to gaps in access to care and problems with affording care for Massachusetts residents, particularly low-income residents. Thus, despite the successes of the 2006 Massachusetts health reform in expanding health insurance coverage, more work is needed to ensure that access to affordable care is part of that coverage. In 2012, Massachusetts enacted a new law to address health care costs, entitled An Act Improving the Quality of Health Care and Reducing Costs Through Increased Transparency, Efficiency and Innovation (Chapter 224 of the Acts of 2012). This law establishes a statewide goal of bringing the rate of growth in per-capita health care spending down to the rate of growth of the gross state product. That reduction is to be accomplished by, among other things, encouraging wide adoption of alternative payment methodologies by both public and private payers (including specific targets for Medicaid), supporting the expansion of electronic health records and health information technology, placing new scrutiny on health care market power and price variation (with the potential of penalties for health care entities that exceed cost growth benchmarks), and increasing price transparency for consumers [20]. So far there has been little change in consumers' assessment of health care affordability under the new law [18].

The need to ensure that access to affordable health care is part of health insurance coverage will be a national issue as well. As in Massachusetts, increased health insurance coverage in the US has not guaranteed access to affordable health care, and there are few provisions in the ACA to change that. Consequently, in March 2015, problems with health care costs were an issue for many American families: 15.1 percent of nonelderly adults with health insurance coverage all year reported problems paying their and their families' medical bills [21], and medical debt, which is often due to medical bills that arise from cost-sharing provisions under health plans, including deductibles and co-pays, was reported by 24.5 percent of nonelderly adults [22]. With the share of Americans with high-deductible health plans growing and cost-sharing provisions increasing under many health plans [11, 23], affordability issues are likely to continue to be a challenge for many Americans in the absence of stronger cost-containment policies.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 665-671

MEDICINE AND SOCIETY

The Ethics of Expanding Health Coverage through the Private Market

Robert I. Field, JD, MPH, PhD

The private health care industry in the United States is larger than that of any other country in the world [1]. It accounts for about half of all health care spending, and it costs more, both on a per-capita basis and as a share of gross domestic product, than the entire health system of many developed countries [2]. Over the course of decades, its rate of growth has continued unabated [3].

Ironically, the main reason for the size of the private health care sector in America is the magnitude of the government programs that support it. Spending on public-sector health care in the United States is also among the highest in the world [4]. When the public and private sectors are combined, the American system outspends every other country by a substantial margin [5].

The relationship between public and private health care in the United States is marked by collaboration at many levels. Rather than crowding out private businesses, many government programs create the foundation on which they flourish [6]. The sponsorship of basic biomedical research by the National Institutes of Health, for example, does not compete with industry-sponsored research but rather complements it. Similarly, Medicare does not replace private insurance for the elderly, which was never widely available, but instead grants private insurers new business opportunities to serve key roles in administering the program.

However, this intertwined relationship creates an ethical minefield. Public funding supports private businesses that often place their own financial interests above those of patients. Nevertheless, those businesses also provide some of the best high-end care in the world and have pioneered the development of technologies that form the foundation of modern medicine.

The Affordable Care Act and Its Historical Roots

This ethical conflict has gained renewed importance with the passage of the Affordable Care Act (ACA) of 2010, which broadens health care coverage primarily through market mechanisms [7]. People who had previously been unable to obtain insurance because of a preexisting medical condition or low income are now guaranteed access to coverage through a reformed private market for individual policies and the expansion of Medicaid,

which in most states is administered by private plans [7]. Through these means, the law builds on the public-private partnership in the service of an important policy goal.

The ACA culminates a century-long effort to guarantee health coverage to all Americans that began with Theodore Roosevelt's call for such a plan in 1912 [8]. After several presidents tried to advance this goal and failed, Lyndon Johnson achieved the first significant success with the passage of Medicare for the elderly and disabled and Medicaid for the poor in 1965. A common thread in these plans is their reliance on a government-run and publicly funded payment mechanism to expand coverage.

In the 1970s, the quest to broaden coverage continued, but the premise behind policy proposals underwent an important shift. Beginning with the Nixon administration, proposals to expand health care coverage increasingly relied on the private market. Some proposals would have extended the reach of employment-based coverage by mandating that all employers offer health benefits [9]. Others sought to revitalize the market for individual policies by requiring that insurers cover all applicants regardless of health status [8]. The individual market proposals included a mandate that all Americans maintain health coverage to avoid the risk—known as adverse selection—that only the sick would buy in. One or both of these approaches formed the basis for President Bill Clinton's proposed Health Security Act of 1993 and the ACA [9].

The Affordable Care Act and the Private Market

The ACA's central provisions—the individual mandate, insurance exchanges, guaranteed coverage for those with pre-existing conditions, and Medicaid expansion—took effect in 2014, and they are widely credited as the driving force behind a substantial reduction in the percentage of Americans who lack health insurance [10]. However, the newly insured are not the ACA's only winners. By relying on private companies to broaden access to coverage, the law also brought insurance companies substantial new business opportunities. Private insurers now serve more than ten million customers, most of them new buyers of individual policies on the ACA's marketplace exchanges [11], and many of these companies also administer benefits for seven million new Medicaid enrollees brought in by the law's expansion of that program [12].

However, for those still committed to a government-run coverage program, this arrangement falls short in several ways [13]. Even under the most optimistic projections, the law will still leave millions uninsured [14]. The exchanges face a perpetual risk that too few insurers will participate, threatening the competition that is needed to sustain affordable prices. There is also concern that private insurers will still find ways to avoid prospective customers who are ill, despite the law's mandate that they cover everyone [15].

Advocates of a government-run plan for expanding coverage also point to underlying ethical concerns about a market-based system. Private health insurers tend to be less efficient than government programs; their overhead rate is estimated to be about 15 percent, while Medicare's is roughly 2 percent [16]. This inefficiency, which results in part from costs for higher executive compensation and shareholder dividends, represents a taxpayer subsidy for private interests with no direct benefit to patient care.

The ACA's model of government support for private industry also raises a fundamental long-term concern. The strength and resources that private firms gain from their public foundation affords them substantial political influence. They use it to lobby legislators to retain and expand the programs on which they rely. As a result, the private health care industry has become a force to be reckoned with, enjoying sufficient political power to derail most efforts to eliminate or reduce its government support [9]. The ACA has expanded the industry's reach yet again, and, in doing so, it further strengthens a powerful constituency that works to stifle efforts to replace market-based coverage with a government-run approach [9].

This is not to say that a government-run coverage plan would be devoid of ethical concerns of its own. Without market pressures to promote efficiency and responsiveness, public programs can become overly bureaucratic and inflexible. Their structures can become ossified, lacking adaptability and promoting bureaucratic self-preservation over beneficiary interests. Critics charge that some aspects of the Food and Drug Administration's process for reviewing new drugs, for example, have become particularly slow and cumbersome for this reason [17]. Moreover, public programs are particularly vulnerable to political manipulation by interest groups and by politicians seeking to promote ideological agendas. This occurred, for example, in the imposition of restrictive rules for funding by the National Institutes of Health of research involving embryonic stem cells [18].

The Ethical Balance between Private and Public Approaches

Where should the balance lie between the competing ethical considerations raised by private and public approaches to expanding health care access? A starting point is to bear in mind that proposals to extend health care coverage do not arise in a vacuum. The political environment shapes the nature of any plan that can succeed. In the current environment, a guarantee of universal health coverage through a government-run program would be challenging to enact, at best [19]. The real ethical contest is not between the merits of private and public plans but between the compromises inherent in the ACA's market-based approach and those that would arise from continuing to defer the goal of comprehensive coverage reform.

The question of which sets of compromises are preferable can be analyzed by considering whether the use of a market-based solution upholds the key ethical

principles that guide the provision of health care. The principle of utilitarianism emphasizes the breadth of the benefits of expanding coverage in any form. The ACA affords millions of people access to care they might otherwise have been denied, while bolstering an industry that is a mainstay of the economy. The help that market-based reform grants to some of the most vulnerable members of society—those who are sick and those who are poor—is consistent with the principle of beneficence. Market-based reform also promotes justice by allocating health care resources more fairly—guaranteeing coverage to everyone who wants it rather than only to those in the fortuitous circumstance of belonging to an eligible group. The promotion of each of these ethical principles leads to a conclusion that the compromises associated with accepting market-based reform are ethically justified.

However, accepting the ethical foundation for expanding coverage through the private market leaves another layer of ethical concerns unaddressed. Most notable is that gains in coverage will not be distributed equitably. Of the millions of people who will remain uninsured under the ACA, some will lack coverage by choice, but many will lack it due to financial hardship. Moreover, the mandate to maintain coverage will impose a substantial economic burden on some, particularly those who purchase coverage but do not qualify for subsidies. While no program can be perfectly equitable, one that creates too great a disparity in allocating benefits and burdens would be ethically suspect.

Furthermore, the ACA does not guarantee access to care; it merely enhances access to coverage to pay for it. Insurance is of little value to a patient who cannot find a physician or hospital to render treatment. Nonfinancial barriers to care are widespread, resulting from factors such as geographic distance from physicians and hospitals and patients' mobility limitations. Expanding access to coverage is a significant accomplishment, but the ACA will leave an important part of its ethical mission unfulfilled if it does not enable its intended beneficiaries to use that access to actually obtain care.

The Ethical Landscape Ahead

What does this analysis say about the ethical direction of health policy going forward? What kind of health care landscape should we seek to create? It is tempting to answer that question by speculating about the shape America's health care system might have taken had its historical path led to a smaller role for the private sector. The complex public-private interaction that characterizes the system today might never have developed, leaving a broader range of possibilities for reform. The system that emerged might not have been one that included as distinguishing features limits on access and outsized cost. That alternative is an attractive scenario for many.

However, the United States has gone too far along the path to market-based health care facilitated by government support to turn back. With this model likely to continue to prevail for the foreseeable future, it is incumbent on public policy to guide it in a way that

minimizes its ethical shortcomings, which can have life and death consequences. Limited access to coverage has historically been among its most glaring shortcomings. The ACA, which builds on a market-based approach, redresses this century-old concern. The ethical imperative is to implement this and other health care reforms in the most equitable and effective way possible.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7:672-679

SECOND THOUGHTS

The Distributional Effects of the Affordable Care Act's Cadillac Tax by Worker Income

Bradley Herring, PhD, and Erin Trish, PhD

As a result of section 9001 of the 2010 Patient Protection and Affordable Care Act (ACA), a new excise tax on high-cost employer-sponsored health coverage will be introduced on January 1, 2018. Often referred to as the "Cadillac tax" in the media and health policy literature, this provision will introduce a 40 percent excise tax on health benefits that exceed a $10,200 threshold for single coverage and a $27,500 threshold for family coverage, annually. While the Cadillac tax is expected to affect only about 16 percent of employment-based health plans in 2018, the thresholds will increase with the Consumer Price Index; historically, this index has increased more slowly than the growth in health care spending, so that the Cadillac tax is expected to affect about half of employment-based health plans (which reflect actual health care spending) by 2025 [1].

The primary motivation behind this Cadillac tax provision is to mitigate the inefficiency associated with the tax exclusion for employment-based insurance. Health benefits provided by an employer are not subject to income or payroll taxes, which makes receiving additional compensation from an employer in the form of generous health benefits more attractive to employees than higher cash wages [2]. This increased generosity of health benefits (in the form of lower deductibles or copayments, coverage of additional services or clinicians, or both) can, in turn, lead to the overconsumption of low-value medical care, in which case the underlying costs of that care exceed its beneficial effects on health [3]. Just as an excise tax on cigarettes aims to reduce smoking, the Cadillac tax aims to get employees to switch to less generous coverage to avoid paying the tax.

Another political motivation behind the Cadillac tax provision appears to have been mitigating the inequitable way the employment-based tax exclusion affects those with varying levels of income. For instance, during the lead-up to the passage of the ACA, President Obama's senior advisor, David Axelrod, said, "this was an intriguing idea to put an excise tax on high-end health care policies like the ones that the executives at Goldman Sachs have" [4]. Because employer-sponsored plans are exempt from payroll and income taxes, the benefit of the current exclusion is indeed relatively larger for higher-income people (who have high marginal tax rates) and relatively smaller for lower-income people (who have low marginal tax rates). However, as we illustrate with

the numerical examples below, the Cadillac tax does not mitigate this inequity; it actually exacerbates it.

A Simple Numerical Example of the Tax Subsidy and the Effect of the Cadillac Tax

To illustrate these issues, we present a set of simple numerical examples for three different representative health plans prior to the implementation of the Cadillac tax and show the premiums and tax exclusions for a low-wage worker and a high-wage worker. We then show how the Cadillac tax is likely to affect the most generous of these three health plans.

The three different representative health plans, called silver, gold, and platinum in the ACA's individual health insurance exchanges, have actuarial values—the percent of total health care spending that a plan covers—of 70 percent, 80 percent, and 90 percent, respectively. In 2010, about 23 percent of group plans had an actuarial value of 90 percent or higher, about 41 percent of group plans had an actuarial value between 80 and 90 percent, and about 28 percent of group plans had an actuarial value between 70 and 80 percent [5]. We start by assuming that the premium is $10,000 for a single-coverage plan with an 80 percent actuarial value and that administrative costs are 10 percent of the premium without incorporating the Cadillac tax. We also adjust the total health care spending amounts (the sum of insurance benefits and out-of-pocket payments) for the three plans to be consistent with the RAND Health Insurance Experiment's -0.2 estimate of the price elasticity of demand for health care (i.e., that a 10 percent increase in the price of health care results in a 2 percent decrease in spending on health care) [3].

Table 1 displays the three plans' costs, benefits, and tax exclusions, before and after the implementation of the Cadillac tax, for low- and high-income workers. (The effect on Plan 3 of implementing the Cadillac tax is discussed further below.)

The net enrollee costs (the premium plus the out-of-pocket costs minus the tax exclusion) are shown for a low-income worker (with a 10 percent federal marginal income tax rate) and a high-income worker (with a 28 percent federal marginal income tax rate). Both of these workers also face federal payroll taxes on the employee and the employer of 7.65 percent each and a state income tax, which we assume equals one-fourth of the federal income tax. The resulting combined marginal tax rate is 26 percent for this low-income worker and 47 percent for this high-income worker.

Table 1. Costs, tax exclusions, and benefits by health plan and income

	Plan 1: 70% AV before and after CT	**Plan 2: 80% AV before and after CT**	**Plan 3: 90% AV before CT**	**Plan 3: 87% AV after CT**
Low-Income Worker[a]				
Premium[b]	$7,875	$10,000	$12,375	$12,810
Cadillac Tax	n/a	n/a	n/a	$1,044
Administrative Costs	$788	$1,000	$1,238	$1,177
Benefits Paid	$7,088	$9,000	$11,138	$10,589
Out-of-Pocket Costs	$3,038	$2,250	$1,238	$1,529
Total Health Care Spending[c]	$10,125	$11,250	$12,375	$12,119
Tax Exclusion[d]	-$2,034	-$2,582	-$3,196	-$3,308
Net Enrollee Cost[e]	$8,879	$9,668	$10,417	$11,031
High-Income Worker[f]				
Premium[b]	$7,875	$10,000	$12,375	$12,810
Cadillac Tax	n/a	n/a	n/a	$1,044
Administrative Costs	$788	$1,000	$1,238	$1,177
Benefits Paid	$7,088	$9,000	$11,138	$10,589
Out-of-Pocket Costs	$3,038	$2,250	$1,238	$1,529
Total Health Care Spending[c]	$10,125	$11,250	$12,375	$12,119
Tax Exclusion[d]	-$3,680	-$4,673	-$5,782	-$5,986
Net Enrollee Cost[e]	$7,233	$7,577	$7,830	$8,354

Notes: AV stands for actuarial value; CT stands for Cadillac tax.

[a] Assumes a 10 percent federal marginal income tax rate to give a 26 percent combined marginal tax rate.

[b] Includes both the employer and employee contributions to the premium.

[c] Equals the sum of the benefits paid plus out-of-pocket costs.

[d] Incorporates federal and state marginal income tax rates (the latter assumed to be one-fourth of the former) and a 7.65 percent federal payroll tax on each of employees and employers.

[e] Equals the premium plus the out-of-pocket costs minus the tax exclusion.

[f] Assumes a 28 percent federal marginal income tax rate to give a 47 percent combined marginal tax rate.

Inefficiency. The main takeaway regarding the inefficiency of the current employment-based tax exclusion is that it provides employees an incentive to obtain relatively generous plans that can lead to overconsumption of low-value, i.e., inefficient, care. Here's how: the magnitude of the tax exclusion increases as the actuarial value (and hence the premium) increases. As can be seen in table 1, the tax exclusion for the low-wage worker is $2,034 for plan 1's 70 percent actuarial value, but a higher $2,582 for

plan 2's 80 percent actuarial value, and an even higher $3,196 for plan 3's 90 percent actuarial value.

Inequity. The main takeaway regarding the inequity of the current employment-based tax exclusion is that the magnitude of the tax exclusion (holding the actuarial value of the plan constant) increases as one's combined marginal tax rate increases. For instance, the tax exclusion for plan 1 is $2,034 for a low-wage worker but a higher $3,680 for a high-wage worker. Similarly, the tax exclusion for plan 3 is $3,196 for a low-wage worker but a higher $5,792 for a high-wage worker. The net tax benefit (the initial tax exclusion before implementation of the Cadillac tax) for plans 1, 2, and 3 is shown graphically in figure 1, which also includes the tax exclusion amounts for the 15 percent and 25 percent federal marginal income tax rate brackets. Figure 1 also shows plan 3's net tax benefit (the tax exclusion minus the Cadillac tax) after the Cadillac tax's implementation.

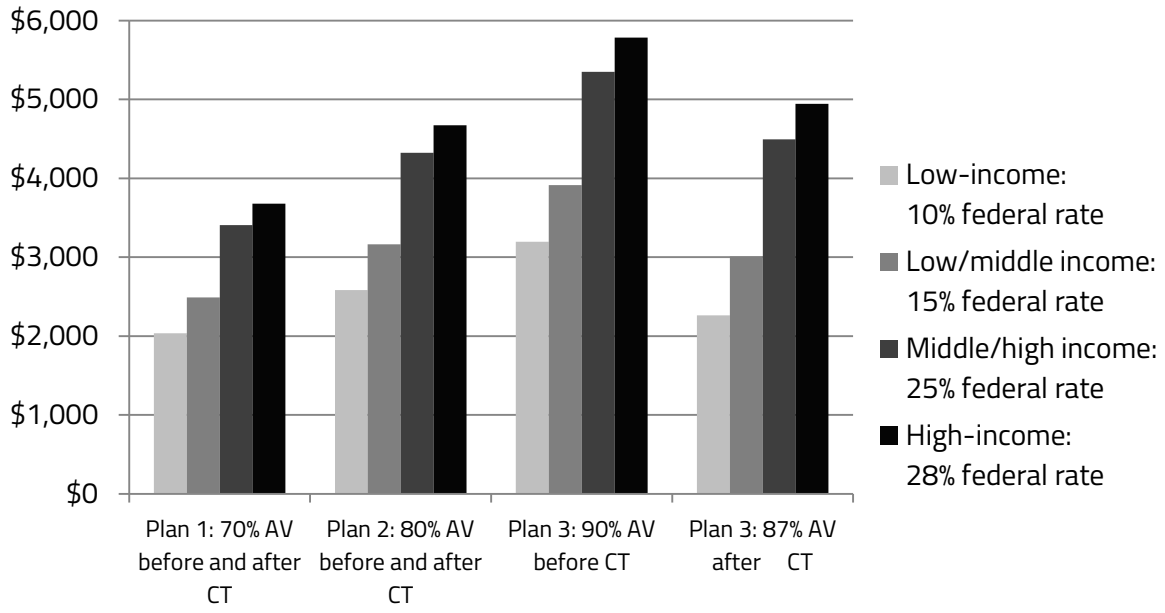

Figure 1. Net tax benefit by health plan and by income.
Notes: AV stands for actuarial value; CT stands for Cadillac tax.

So what is the effect of implementing the Cadillac tax? Plan 1's premium ($7,875) and plan 2's premium ($10,000) are under the Cadillac tax threshold of $10,200 for single coverage and are thus unaffected. Because plan 3's premium of $12,375 (prior to implementing the Cadillac tax) is over the $10,200 threshold and thus subject to an additional tax payment, people are expected to switch to lower-cost plans to reduce (but not necessarily eliminate) the Cadillac tax paid. Based on a synthesis of the relevant economic literature, the Congressional Budget Office assumes that a 10 percent increase in the price of health insurance results in a 7 percent decrease in spending on health

insurance [6]. As shown in the final two columns of table 1, this causes the benefits paid to decrease from $11,138 prior to implementation of the Cadillac tax to $10,589 following it.

The resulting decrease in the actuarial value from 90 percent to 87 percent following the implementation of the Cadillac tax is the intended effect of mitigating the inefficiency (i.e., the overuse of low-value care) associated with the employment-based tax exclusion. However, it only narrowly targets this inefficiency, because plan 2's tax exclusion is still larger than plan 1's tax exclusion (for both high-income and low-income workers) and thus maintains the bias towards plan 2's 80 percent actuarial value over plan 1's 70 percent actuarial value. Over time, though, the indexing of the Cadillac tax thresholds with the Consumer Price Index will mean that plans with increasingly lower actuarial values will be affected.

Finally, consider the differential effects of implementing the Cadillac tax on low-income and high-income workers. The decrease in the net tax benefit (i.e., the tax exclusion on the new, higher premium minus the Cadillac tax) is ultimately 11 percent less for the high-income worker than for the low-income worker: for the low-income worker, the net tax benefit decreases from $3,196 (i.e., the initial tax exclusion on the 90 percent actuarial value premium before the implementation of the Cadillac tax) to $2,264 (i.e., the $3,308 tax exclusion on the new, higher premium minus the $1,044 Cadillac tax; $1,044 is 40 percent of the amount by which the $12,810 premium exceeds the $10,200 threshold), for a decrease in the net tax benefit of $932. For the high-income worker, the net tax benefit decreases from $5,782 (i.e., the initial tax exclusion) to $4,942 (i.e., the $5,986 tax exclusion on the new premium minus the $1,044 Cadillac tax), for a decrease in the net tax benefit of $841. These amounts for plan 3's decrease in the net tax benefit are shown graphically on the left-hand side of figure 2, where the value of $906 for the 15 percent tax bracket and the value of $856 for the 25 percent tax bracket are added.

A similar regressive (i.e., less favorable for those with lower incomes) effect of the Cadillac tax implementation can be observed by examining the increase in the net cost (the premium plus the out-of-pocket costs minus the tax exclusion), shown graphically on the right-hand side of figure 2. For a low-income person in the 10 percent tax bracket, the net cost of plan 3 increases by $614. For a high-income person in the 28 percent tax bracket, the net cost of plan 3 increases by $523—15 percent less than $614.

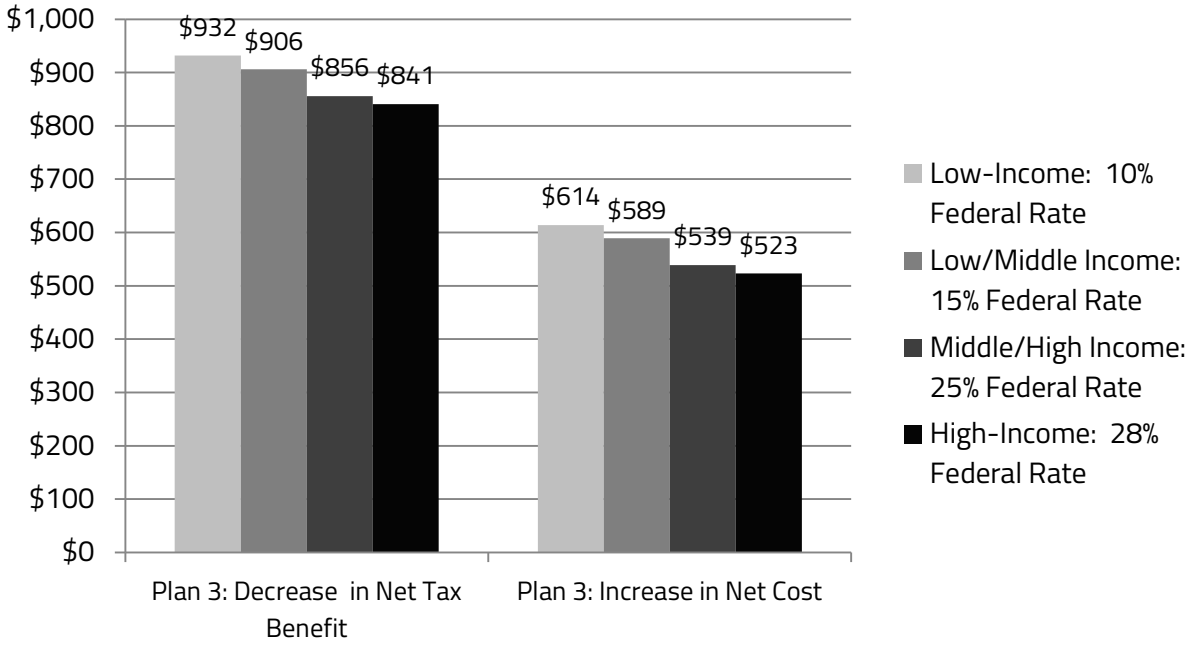

Figure 2. Changes in net tax benefit and net cost from implementing the Cadillac tax by income.

Discussion

Our analysis of plan 3, with its 90 percent actuarial value, demonstrates that the Cadillac tax can be viewed as a regressive policy, in that it results in a larger decrease in the net tax benefit for low-income workers than for high-income workers and a larger increase in net cost for low-income workers than for high-income workers.

One caveat is that this conclusion holds for high-income and low-income workers who are both in the same initial plan (i.e., plan 3 and its 90 percent actuarial value, in this example). Under certain circumstances, the aggregate effect of the policy change might not be regressive—if, initially, high-income people were disproportionately in plans with higher actuarial values and low-income people were disproportionately in plans with lower actuarial values, individual high-income workers would have smaller losses than their low-income counterparts under the Cadillac tax, but, since there are more insured higher-income workers than lower-income insured workers, the total amount of those losses could be equal to or more than the total amount of losses affecting lower-income workers. However, this seems unlikely: while higher-income workers are more likely to be insured than lower-income workers [7], we are not aware of any evidence to indicate that higher-income workers with insurance have more generous benefits than insured lower-income workers. For instance, according to group insurance data from the 1997 and 1999 Community Tracking Study's Household Survey, income was an insignificant predictor for a plan's overall cost sharing [7].

For people in a given plan affected by the Cadillac tax, the magnitude of the excise tax added to the premium is the same for low-income workers and high-income workers. But because the employment-based tax exclusion works as a subsidy covering a percentage of one's premium, including any Cadillac tax paid, the low-income workers receive a relatively smaller subsidy to offset a portion of the Cadillac tax while the high-income workers receive a relatively larger subsidy to offset a portion of the Cadillac tax. All this adds up to a regressive effect.

One potential remedy for this inequity would be to transform the Cadillac tax into a cap on the employment-based exclusion at, for example, the seventy-fifth percentile or median premium. While this apparently has the political disadvantage of making the subsidy more transparent (as opposed to the Cadillac tax, which looks like a tax on insurers rather than an indirect tax on middle-class workers), it would partially address the inefficiency of plans over the cap and not introduce any new inequity by income. Another potential remedy would be to scrap the Cadillac tax and transform the employment-based tax exclusion into a universal (or perhaps progressive) refundable tax credit, but the extent of redistribution from high-income workers to low-income workers might be politically untenable.

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 680-688

SECOND THOUGHTS

What the ACA Should Have Included—Physician Perspectives at the University of Pennsylvania

Sneha Kannan

Many feel that the United States health care system is unstable, unsustainable, and broken in numerous ways. The largest health care overhaul in decades, the Patient Protection and Affordable Care Act (ACA) was passed and implemented in 2010 [1]. Professional medical organizations have come out in support of the act, but the degree to which organizations other than the American Medical Association (AMA) were consulted in crafting the bill is murky at best [2]. And what about doctors themselves? The vast majority of physicians feel that the AMA doesn't effectively represent them [3]. A Physician's Foundation survey in 2012 found over 82 percent of doctors agreed that "physicians have little influence on the direction of health care and have little ability to affect change" [4]. Physicians whose lives and practices are profoundly affected by health reform policy do not feel they have a say about which issues are important and how best to solve them. It's time for them to be a part of the debate.

To begin elucidating physicians' point of view on health care reform, researchers in the University of Pennsylvania hospital system polled medical school faculty over the past several months, asking the following question: "If you could spend the next year solving a problem in the US health care system, what would it be and why?" The open-ended question allowed physicians to select the problems they thought most pressing, and the concrete time frame encouraged responses that were relevant and timely from a policy perspective.

Survey Respondents

A total of 460 medical school faculty members (out of a faculty body of 2,192) at the University of Pennsylvania (UPenn) who had interacted with preclinical medical students over the prior 16 months were polled. The response rate among physician faculty members was 53 percent (244). Of the respondents, 3 percent were primary care physicians (internal medicine, pediatrics, family medicine), 10.8 percent were in surgical specialties, and the rest were in other specialties, with more than 50 specialties represented. The faculty status of physician respondents is displayed in table 1.

Survey Results

The top problem areas identified by respondents to the survey are shown in figure 1.

Table 1. Faculty status of physician respondents

Faculty status	Percentage
Assistant professor	31.3
Professor	29.7
Associate professor	22.6
Instructor	3.7
Adjunct professor	1.9
Other	10.8

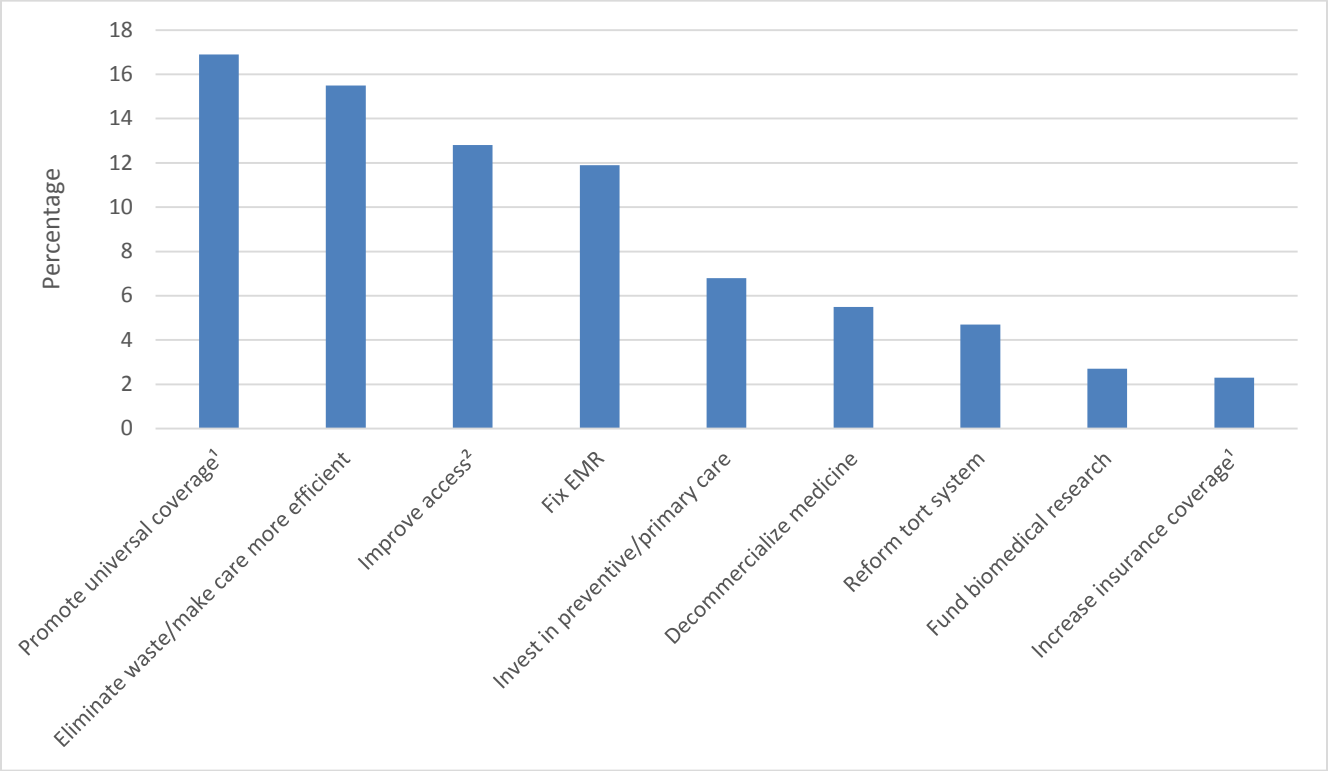

Figure 1. Top health care problem areas identified in the UPenn physician survey.
Notes: [1]coverage refers to financial affordability as defined by WHO [5]; [2]access is defined as the availability of resources and physical accessibility.

A comprehensive list of the UPenn physicians' goals for health care reform was created by this author from the survey responses and appears in table 2.

Table 2. The UPenn physician action list

Increase access to care for patients—specifically low-income, disadvantaged, and elderly patients
Focus on preventive medicine and increasing primary care availability.
Improve patient education about preventive lifestyle measures and the complexity of the medical system.

Make major changes to insurance structure Decouple insurance from employment. Investigate moving to a single-payer system. Educate the public about the economics of insurance and the need for everyone to pay a share of the costs. Increase coverage, most prominently for mental health services. Hold insurance companies accountable for paying for treatments that work. Simplify the bureaucracy so doctors don't spend so much time dealing with insurance companies.
Fix the EMR (electronic medical record) Enable EMRs used in various institutions to communicate with one another. Create an EMR that won't curtail physician-patient interaction or place a burden on physician time.
Remove third-party control over patient care Prohibit requiring pre-approval from insurance companies for most treatments so that they are no longer an obstacle to care. Eliminate counterproductive government regulations. Mitigate commercial and political influence over the practice of medicine.
Fundamentally change the way we treat physicians Reward value, not volume. Stop the practice of "speed medicine"—give clinicians more time with their patients. Ensure government policymakers and hospital administrators value and respect physicians.
Abolish the culture of defensive medicine Reform the tort system to allow physicians to practice medicine without fear of frivolous litigation.
Make costs transparent Elucidate costs and standardize reimbursements. Simplify insurance reimbursement structure because understanding costs and insurance requires more time than physicians believe they have. Educate physicians about simplified reimbursements. Require that physicians factor costs into treatment plans.
Eliminate waste Eliminate unnecessary care/change the culture of defensive medicine. Use evidence-based standards to identify the best available interventions and treatments. Become better stewards of scarce resources. Spend more money on research to innovate and replace costly and inefficient technologies. Elucidate patient goals better, especially end-of-life care goals.

It's worth noting that most of the responses to this survey aren't new ideas. The plurality of responses concerned increased or universal insurance, which is the main goal of the ACA. But if just these physicians had been involved in framing health care policy, the ACA's other important goals and the subsequent public response to their implementation might have looked very different.

Below are three specific examples of proposals, based on survey responses, for tackling issues physicians felt were poorly addressed by the ACA.

Consider Both Quality and Cost in Treatment Guidelines

Analysis. Use of evidence-based medicine and research into costs of treatment were favored by 16.8 percent of respondents. Physicians indicated that information about quality and outcomes (as determined by comparative-effectiveness research) ought to be used when deciding treatment regimens but that cost was also a necessary factor. Essentially, rather than pure cost effectiveness research or comparative effectiveness research, physicians recommended research into value: the integration of the two.

Cost and comparative effectiveness solutions are an integral part of the future of health care, given their ability to provide insight into evidence-based medicine that better applies our existing resources and limits use of unnecessary treatments [6, 7]. The ACA did include measures to promote comparative effectiveness research but forbade the consideration of cost in Medicare payment considerations [8]. It also went a step further and prevented the Patient-Centered Outcomes Research Institute (PCORI) from doing any cost effectiveness research at all [9]. Politically, cost effectiveness research has been linked to the unpopular idea of rationing care and has therefore become unpopular itself [9]. However, the doctors polled in this survey felt that eliminating cost from the equation would not curb rationing, which would still happen through unequal distribution of resources—favoring overprescription of low-value treatments for those who have means and access at the cost of providing health care to those who do not.

Proposal. The surveyed physicians' responses indicate that collecting evidence about the value of health care interventions to improve the delivery of care should be prioritized. PCORI should be allowed to be cognizant of costs and to publish them in recommendations for treatments of comparable safety and efficacy. Standards to prove comparable efficacy should be rigid, but the costs of treatments that meet them should not be ignored. Translating these findings into reimbursement policies is a complicated step to come later, but at the very least research organizations ought to investigate costs (as opposed to what patients are *charged* or billed) and publish that information. Physicians could help explain the benefit of value-based medicine to politicians and the public, which could make the idea as palatable as comparative effectiveness research has become with physician endorsement [9].

Analysis. Of survey respondents, 10.9 percent would have spent the next year fixing the Medicare EMR incentive program. The ACA provided incentives to physicians for engaging in the "meaningful use" of electronic health records—i.e., using them to record and transmit patient information, track treatments and outcomes, and support clinician decision making—before 2015. The meaningful use program sets baseline requirements for EMR systems, including compliance with HIPAA (the Health Insurance Portability and Accountability Act) and the ability to extract data for research and quality improvement purposes, among others. Clinicians who do not participate in or fail to meet standards will receive reductions in Medicare payments starting in 2015 [10].

By promoting early adoption of improperly designed existing EMR systems, policymakers emphasized speed over sustainability and usefulness; trying to implement changes to an already inefficient EMR system is much harder than starting with an efficient EMR system (which is why many hospitals that are due to meet meaningful use Stage 2 standards have applied for hardship exemptions and why so few have met those standards today [11]). Respondents to the survey would have preferred adopting a better-designed EMR, even at the cost of a delay.

Of the physicians who wanted to fix the EMR, 83 percent reported having problems using the in-house EMR to communicate with external EMR systems. Printing, scanning, and then emailing a note to be placed in a patient record in another system (as physicians do daily at UPenn) satisfies meaningful use Stage 1 standards, clearly showing that meaningful use can be achieved with subpar systems [12]. But merely satisfying meaningful use Stage 1 standards could, according to all survey respondents, lead to duplicate tests because of time constraints or inadequate patient hand-offs between clinicians due to poor communication.

Most importantly, meeting these meaningful use standards is tied to Medicare payouts, with hospitals possibly seeing up to a 5 percent reduction in payments for failing to participate or meet the standards [9]. Hospitals and doctors have a short time to make their software compatible with the standards and may succeed at the risk of increasing costs and reducing quality. Concurrently, EMR companies are reaping billions in profit from health information technology laws [13].

Proposal. Meaningful use standards should be delayed by two to three years, and EMR manufacturers should be tasked with creating a superior product, a major requirement of which would be the capacity for universal exchange of information across EMR systems. A failure to create such a product should result in exclusion from the program and thus falling profits. These consequences would give EMR manufacturers a compelling incentive to conduct thorough market research and ensure systems are adopted with appropriate goals in mind.

Minimize Counterproductive Regulations

Analysis. Of survey respondents, 12.7 percent favored removing the influence of third parties, most commonly insurance companies and regulation related to insurance policies. An example is provided below.

The Hospital Readmission Reduction Program (HRRP) reduces Medicare payments for each patient readmission within 30 days that exceeds the national average for five conditions—heart failure, heart attack, pneumonia, chronic lung problems, and elective hip and knee replacements [14]. The idea was to encourage hospitals to increase follow-up and coordination of care to avoid preventable readmissions [15], certainly a noble goal.

The ACA also contains the "two-midnight rule," which redefines how a patient is classified as an inpatient (someone whose condition is expected to require two nights in the hospital), a status with higher reimbursement rates than those for outpatients [16]. The Centers for Medicare and Medicaid Services (CMS) implemented policies that would allow auditors to deny payment for hospitalization if they disagreed with the hospital's classification of an inpatient [17]. These policies, when combined, allow insurers to avoid a significant number of payments, and a coalition of hospitals and the American Hospital Association are suing the Secretary of Health and Human Services (HHS) on the basis that this avoidance violates the Administrative Procedure Act [18]. Although asking physicians to justify their classification of patients as "inpatient" is also a noble goal, it's unclear if this rule's effects achieve the desired outcomes.

Insurance companies' unwillingness to pay the higher inpatient rates has influenced the way in which the surveyed physicians practice; 62.5 percent of survey respondents who favored removing the influence of third parties identified insurance companies as one such unwelcome influence. This could get in the way of the thorough admission care HRRP intends. Based on the procedures CMS has implemented and the fact that insurance companies can retroactively rescind payments, it is reasonable to suppose that the burden on physicians to fight insurance companies will only increase. The lawsuit shows that many hospitals have already found these regulations unfair and unwelcome.

Proposal. A concerted effort should be made to understand the consequences of policy implementation on care delivery and workflow and avoid unintended consequences by involving physicians in decision making. In this particular case, physician input should be used to replace the two-midnight rule with a more productive policy, given the conflicts in testimony about its effectiveness and the lack of evidence backing its implementation [19] as well as its harmful effects on the HRRP program. Physicians' input would also help in determining metrics that significantly impact readmission rates, unlike the

current measures [20]. If improperly implemented, the HRRP program could increase defensive medicine practices and unnecessary tests on first admission. If properly implemented, the HRRP program could be a powerful force for improved outcomes and reduction of unnecessary care.

Looking Toward the Future

This paper has shown that physician input can generate actionable policy recommendations and add to national discourse in a substantial way.

This survey of UPenn physicians is clearly not representative of the nation, but we do not yet know whether or how UPenn deviates from the national workforce. First, how do academic physicians' opinions about health care reform differ from those of private practice physicians and hospitalists? Given that physicians who advise on research and policy tend to be concentrated in academic medical centers, it's important to understand how their point of view differs from that of the majority of physicians. Second, how do specialists differ from primary care doctors? Third, how do regional differences affect preferences for reform? Finally, how do political affiliations drive opinions on health care delivery? Answering these questions can help inform state Medicare and Medicaid policies as well as drive understanding of the practical implications of national policy implementation.

Nevertheless, this survey is a necessary first step in determining what reforms physicians want to undertake, for two reasons. First, although listening to the individual opinions of the more than 800,000 professionally active physicians in the US [21] is not possible, sampling different groups of physicians on major health care issues creates an opportunity for physicians to proactively inform regional and national health policy. Secondly, although the issues raised by the UPenn physicians are not new—in fact, the ACA touched on many of these, like cost transparency, cost control, and boosting the primary care workforce—it is unclear whether or not these problems were *appropriately* addressed by the ACA. As in the case of EMRs, solutions created without physician input can be suboptimal. It behooves the federal government to consult physicians so that its resources are used in the most practical way.

Despite UPenn's position as a hospital system at the forefront of policy recommendations and research with an Innovation Center dedicated to involving physicians, many of those polled communicated that this was the first time they had been asked to think about what *they* wanted to change about health care. In such a high-stakes debate, the lack of input by physicians at such an institution is troubling. First, the government and the AMA should systematically and comprehensively investigate how US physicians in different regions, specialties, and practices across the nation feel about a variety of important health care issues. Second, policymakers should make a concerted effort to proactively work with physicians to craft bills that successfully solve issues they

identify as important. The cost of health care is a massive drain on our economy and our families—not taking into account or understanding the views of such a main player in the industry significantly hinders progress and needs to change.

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July 2015, Volume 17, Number 7: 689-711

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ISSN 2376-6980

American Medical Association Journal of Ethics

July 2015, Volume 17, Number 7: 712-714

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ISSN 2376-6980