

The Shifting Landscape: How technology and regulations have changed physician practice and retirement readiness

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1. Abstract

Medicine has been irrevocably altered by electronic medical records and the Affordable Care Act (ACA). This article describes the results of a national survey with 523 physicians of different ages who work in general internal medicine (22%); family practice (19%); medical specialty (10%); surgical specialties (12%); pediatrics (7%); OB/GYN (4%); and other specialty practice areas. The results show varying degrees of optimism about medical practice, retirement planning, and the future of medicine. The respondents' level of optimism ranged from very optimistic (11%) and somewhat optimistic (34%) to somewhat pessimistic (38%) and very pessimistic (18%). Respondents had mixed views about the future of the medical profession with 21% very pessimistic, 39% somewhat pessimistic, 30% somewhat optimistic, and 10% very optimistic. Respondents were ambivalent about recommending medicine as a career to their children: 53% would recommend medicine while 47% would not. Those employed by a hospital gave the ACA the highest average grade, while practice owners/partners the lowest. Respondents had diverse opinions about the impact of EMRs on patient care, efficiency, costs, and workload. The most pessimistic respondents were practice owners/partners, who were cynical about medicine's future, would not recommend medicine as a career, and cited the ACA's negative effects. Evolution of EMRs and the anticipated changes in health legislation will alter the landscape of medical practice in the future. These changes are certain to affect physicians' retirement planning efforts and their readiness to retire.

Key words: retirement, retirement readiness, physicians, medical practice, health insurance, electronic health records

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2. Introduction

"The patients definitely sense that we're a lot more stressed now. We're spending three hours more per day — and that's no exaggeration — just trying to get caught up."

These are the words of an American physician who is struggling to practice medicine in the shifting landscape of medical practice today. There is no doubt that medical practice has been irrevocably altered by the introduction of and adaptation to electronic medical records (EMRs) and the regulations associated with the passage of the Affordable Care Act (ACA) in 2010. This article presents an overview of EMRs in medical practice, a summary of the ACA's impact on medical practice, physician perspectives on the new practice landscape and their retirement readiness, and the results of a new national physician survey that offer insights into today's practice environment and medical practice in the future.

3. Electronic Medical Records

In 2005, Michael Leavitt, the then Secretary of the U.S. Department of Health and Human Services (1) said:

The time has come to put the medical clipboard out of business and replace it with the computer. In doing so, we can transform our health care system so that we achieve fewer medical mistakes, lower costs, better care, and less hassle. We all agree transformation must take place; now let's all agree to work together to do it.

That same year, a team of researchers from the RAND Corporation (2) boldly predicted that effective implementation of EMRs could save the country more than \$81 billion each year by improving the efficiency and enhancing the prevention and management

of chronic disease in the US. Eight years later, after millions of patient records have been transformed from color-coded, tattered paper files to e-files, RAND researchers Kellerman and Jones (3) reported that health care costs were rising in the US and the impact of technology on health care efficiency and safety was uncertain. Kellerman and Jones (3) attributed the disappointing performance of information technology in health care to the sluggish adoption of technology in health systems, the poor usability and interconnectedness of current EMR systems, and the failure of health care providers and institutions to adapt care processes in ways that could help them leverage the full benefit of EMRs.

In addition to the RAND Corporation's research, numerous national surveys have documented physicians' experience with EMRs and the general disappointment about the yet-to-be realized promise of EMRs to transform medical practice. In 2013, the American College of Physicians, in collaboration with American EMR Partners, released the results from a large survey of more than 4000 physicians, which was conducted between March 2010 and December 2012 (4). In the study sample, 71 percent of the physicians practiced in groups of 10 physicians or less, and 82 percent indicated that they planned to participate in the government sponsored "meaningful use" incentive programs (5). Highlights of the study included the increase in the physicians who were dissatisfied with the ease of EMR use (23% in 2010 to 37% in 2012); increase in the percentage of clinicians who would not recommend their EMR to a colleague (24% in 2010 to 39% in 2012); and an increase in the number of users who were "very dissatisfied" with the ability of their EMR to decrease workload (19% in 2010 to 34 percent in 2012). The

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American College of Physicians (4) concluded that physicians were finding it more difficult to return to their pre-EMR implementation productivity.

Survey data generated by the marketing and research firm MPI Group and *Medical Economics* revealed additional insights about the physician experience of integrating EMRs in medical practice. According to Verdon (2014), the *Medical Economics'* survey results (6), with responses from nearly 1,000 physicians, identified some practical benefits of EMRs such as ease of accessing patient data, availability of practice metrics, and e-prescribing convenience. However, the report found that almost 70% of the physicians in the survey believed that EMR systems "have not been worth it" - despite government incentives of nearly \$27 billion to digitize patient records (5).

The *Medical Economics* report (6) cited "poor EMR usability, time-consuming data entry, interference with face-to-face patient care, inefficient and less fulfilling work content, inability to exchange health information between EMR products, and degradation of clinical documentation as prominent sources of professional dissatisfaction." Physicians in the survey also expressed dissatisfaction with the high costs of implementation, staff training, annual licensing fees, computer hardware, and associated services. However, the report (6) noted that the most dramatic unanticipated costs were those "associated with the need to increase staff, coupled with a loss in physician productivity" (p. 2.)

Other research by Emani et al. in 2014 (7) identified physicians' negative beliefs about the benefits of EMRs. This survey of 967 physicians from academic medical centers found that only 23% and 27% of physicians agreed or strongly agreed

that meaningful use of the EMR helped them improve the care they personally deliver. Medical specialty did make a significant difference in the survey responses. The survey found that 35% of primary care physicians agreed or strongly agreed that meaningful use of EMRs would improve quality of care, as compared to 26% of medical specialists and 21% of surgical specialists (p=0.009).

Another 2014 study by Friedberg, Crosson, and Tutty (8) included physicians' descriptions of how EMRs changed their interactions with patients and their personal lives. The interviews revealed that physicians were not "Luddites, technophobes, or dinosaurs" and that they acknowledged the benefits from EMRs, especially the ability to access patient data remotely and to improve compliance with guideline-based care. However, the physicians identified many of the well-known negative effects of EMRs such as time-consuming data entry, interference with face-to-face patient care, overwhelming numbers of e-mails and alerts, and the requirement to complete tasks that could be completed by clerks or transcriptionists. The physicians also expressed great disappointment about the inability of EMRs to exchange health information electronically.

Despite the tsunami of negative reviews by physicians, adoption of EMRs in the US is increasing, according to the most recent data from the National Center for Health Statistics (9). The 2014 National Electronic Health Records Survey showed that from 2013 to 2014, the percentage of office-based physicians with a certified EMR system increased from 67.5% to 74.1%. The survey found the percentage of primary care physicians with certified EMR systems in 2013 (72.1%) and 2014 (78.6%)

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exceeded that for non-primary care specialists in both years, 63.1% and 70.3%, respectively. The adoption of EMRs in medical practice varied significantly by state, such as 58.8% in Alaska to 88.6% in Minnesota. These findings on regional differences conflict with Whitacre's 2015 report (10) that found EMR adoption rates to be significantly higher for practices in rural areas (56%) than those in urban areas (49%)($P < 0.001$).

The National Center for Health Statistics (9) also found that a small percentage of physicians shared information with behavioral health, long-term care, and home health providers, while a larger percentage of physicians shared information electronically with these providers if they also shared information with both ambulatory providers outside their group and unaffiliated hospitals.

4. Health Insurance Transformation

Passed into law in 2010, the Affordable Care Act offered the promise of expanded access of healthcare for millions of uninsured and under-insured Americans and restrained growth in health care costs in the US. Six years later, the ACA has achieved its goal of expanding access to healthcare for 10 million Americans, many of whom were young, low-income, uninsured and underinsured Americans, and slowing escalating healthcare costs. According to MedPanel (11), the ACA reduced costs by reducing CMS reimbursement for certain medical procedures.

In 2015, MedPanel (11) conducted a survey of 407 physicians across all specialties to understand their experience with the ACA. The findings suggest that physicians' experience with the ACA varies significantly by practice size and location. For example, it was anticipated that the

ACA would increase patient volume because more patients would seek care. The survey showed that patient volume increased as expected, although the gains were not equally shared among different types of physician practices.

According to the MedPanel results (11), more physicians practicing in hospitals or large health networks experienced increases in patient volume, while 32% of solo practitioners experienced a decrease in patient volume, which averaged 26% fewer patients or procedures. This finding suggests that in the future, there may be more consolidation of small practices into larger networks as the physician groups seek greater economies of scale.

Another anticipated finding was the ACA's direct effect on patient demographics. Although 30-40% of physicians reported no change in their patient mix, 25% of physicians in hospitals, large health networks, and large independent practices reported seeing more patients with medical insurance, and 30-50% reported having more patients with insurance with very high deductibles and co-pays, which were offered by the ACA. Approximately 10% reported that they were caring for more low-income, young, and young, and healthy patients who were seeking preventative care, while almost 20% were caring for more patients who were seeking treatment for conditions that were previously undiagnosed as pre-existing conditions.

Physicians in the MedPanel survey (11) also had differing opinions about whether the ACA had achieved the goal of expanding access to quality medical care. Of physicians in hospitals or larger health networks, 44% agreed that the ACA has expanded access to quality medical care, while 27% disagreed. The survey reported that when compared with only 16% of

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hospital or large health network physicians who completely disagree that the ACA has expanded access, 34% of small practice physicians and 46% of solo practitioners completely disagree with this central premise.

Assessment of whether the ACA has improved patient care also varied by practice size in the MedPanel survey (11). The majority of physicians in the survey did not believe that the ACA has improved the care their patients receive. According to MedPanel:

Larger patient volumes may certainly be a factor that leads physicians to feel like they have less time to spend with each patient. Likewise, the changes to reimbursement rates and the increase in high deductible/co-pay insurance plans may also be preventing physicians from getting approval from patients or practice managers to perform the diagnostic and therapeutic procedures they feel are appropriate. (p. 4)

Physicians in small or solo practices voiced more negativity about the impact of the ACA, and were more likely to disagree that the ACA has improved the care that patients receive.

The MedPanel survey (11) concluded that physicians working in hospitals and large practices are preferentially benefitting from the influx of new patients, and are much more likely to view the impact of the ACA favorably. Conversely, physicians in small or solo practices have seen substantial drops in patient and procedure volumes since the ACA went into effect, and tend to be very negative about the impact the ACA has had on the access and quality of care patients now receive. (p. 5) Thus, the ACA has achieved its goal of increasing access to health insurance for millions of underinsured and uninsured Americans,

although American physicians are less enthusiastic about the legislation's ability to influence access to quality patient care or to improve that care.

4.1 Physicians Respond

American physicians have not been silent about the new normal in which they are practicing medicine. Reportedly "feeling squeezed" by lower reimbursement rates and new requirements for keeping electronic medical records (12), many physicians are making plans to leave the profession via early retirement as their exit path. The report cited one physician who said that the "new world order brought on by the Affordable Care Act" along with the resulting "push back" from insurance companies and the "heft of EMR implementation" impaired his ability to see and treat patients. When his time with patients grew even more limited and coverage denials became "suffocating," this physician stopped practicing medicine and opted for an academic Board of Advisors position that allowed him to continue working until he could afford to retire (12).

Other research has provided some additional insights into physicians' responses to the dramatic changes in medicine today. In 2014, The Physicians' Foundation (13) conducted its biennial national survey of the practice patterns and perspectives of 20,000 American physicians in multiple specialties and from all 50 states. According to The Physicians' Foundation (2014), the survey results reflect "a mood among doctors that is still uncertain and sometimes dispirited, but which is evolving" (p. 7). Key findings from the study (13) include:

- 81% of physicians describe themselves as either overextended or at full capacity, up from 75% in the 2012 survey and 76% in 2008;

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- 69% believe that their clinical autonomy is sometimes or often limited and their decisions compromised;
- 46% give the Affordable Care Act a D or F grade, while 25% gave it an A or B;
- 59.3% of physicians said they were less positive about the direction and future of healthcare in America after the passage of the ACA in 2010;
- 44% plan to either reduce patient access to their service, such as cutting back on patients seen, retiring, working part-time, closing their practice to new patients, or seeking a non-clinical job;
- 85% have adopted EMRs, up from 69% in 2012; 46% said that EMRs have detracted from their efficiency while only 24% say it has improved their efficiency;
- 20% of physicians' time is now spent on paperwork; and
- 39 % indicated that they would be accelerating their retirement plans due to changes in the healthcare system. (pp. 10-11)

The 2014 Physicians' Foundation survey (13) showed that there was a diversity of perspectives within the physician community. Younger physicians, female physicians, and primary care physicians were somewhat more positive about the practice environment, while older physicians, male physicians, and medical specialists were quite discouraged and expressed doubts about the overall direction of the US healthcare system, the survey said (p. 11).

However, the debate continues about the Affordable Care Act and EMR implementation on physician plans to retire. Hyden reported in 2015 (14) that the Affordable Care Act has influenced physicians to opt for early retirement simply to avoid "all the challenges" (p. 1). The

Center for Health Journalism (15) found that "EMRs have not materialized as the great panacea that would streamline and improve health care" – that physicians had "felt the weight of EMRs" - were not happy - and "whether retiring or fleeing, doctors are leaving health care" (p. 1).

Similar findings had been found by the Deloitte Center for Health Solutions in its 2013 survey of American physicians' perspectives about health care reform and the future of the medical profession (16). The Deloitte survey found that most U.S. physicians were worried about the future of the medical profession because of lost clinical autonomy and compensation. The survey respondents identified recent market changes as major threats to the medical profession. Although most believed that the performance of the U.S. health care system was suboptimal, the physicians felt that the Affordable Care Act was a good start to addressing issues of access and cost.

In the Deloitte survey, the physician respondents appeared to be realists about "the new normal" which was forcing them to practice in different settings as part of a larger organization that integrates technologies and team-based models into patient care. The physicians were pessimistic about the future of medicine - saying that they believed that the practice of medicine was in jeopardy. The Deloitte survey found that six in 10 physicians (57%) said that many physicians - irrespective of age, gender, or medical specialty – plan to retire earlier than planned in the next one to three years. It appears that physicians are looking to early retirement as way out of the shifting, increasingly complex landscape of medical practice today. Whether today's physicians are prepared for that early retirement is another question (16).

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5. Retirement Readiness

The healthcare industry plays a vital role in the U.S. economy, employing almost 15% of all U.S. employed workers. Of this group, an estimated 2.5 million plan to retire over the next 15 years, including upwards of 45% of the 1+ million practicing physicians (17).

The staggering wave of baby boomers heading into retirement has changed the public discourse by introducing a new term into the lexicon: *retirement readiness* (18). Achieving retirement readiness requires considerable energy and attention in order to accumulate adequate savings sufficient to generate the requisite income necessary to support their lifestyle throughout retirement. In addition, the ever-increasing average lifespan requires the accumulation of added financial assets when compared to that required of past generations.

Research conducted by Fidelity suggests that there is an impending retirement preparation crisis unfolding within this industry (19, 20). According to Fidelity (20), physicians, the occupational group with the highest earning potential, have failed to adequately save for a financially secure retirement (p. 1) despite high compensation with average annual salary of \$299,000.

The retirement forecast for high-income physicians also predicts an uncertain future, recent research has found. The 2014 study by Fidelity with 5,100 physicians (20) found that many physicians, who are among the most highly compensated professionals in the health care industry, lack a strategy to replace at least 71% of their income, and ultimately to sustain their preferred lifestyles during retirement. Fidelity attributed the inadequate savings rate of physicians to a shorter savings horizon that results from the

long and expensive educational training, significant student debt from undergraduate and medical school, and busy work schedules that leave little time for financial planning. According to White (21), physicians may also experience pressure to live a certain lifestyle that includes expensive homes and cars. Despite this reality, a 2014 study by AMA Insurance (22) on the financial preparedness of American physicians concluded that retirement ranks as the number one financial concern of all physicians.

6. A new national physician survey

The current physician survey was conducted in October, 2016 with a national mailing to a list of mixed specialty physicians, provided by Jubilant Marketing Solutions. A total of 523 physicians responded to the survey.

6.1 Study sample. The distribution of ages among respondents showed a span of age groups, with the majority over age 46: <35/2%;36-45/20%;56-65/30%; and 66 and older/17%. The medical specialties represented in the study sample included general internal medicine (22%); family practice (19%); medical specialty (10%); surgical specialties (12%); pediatrics (7%); OB/GYN (4%); and other associated specialty practice areas (Dermatology, Optometry, Psychiatry, Radiology, Urology) (26%). The current professional status of the respondents was evenly distributed among practice/owner/partner/associate (28%); employed by hospital (30%); employed by medical group (26%); and other (16%).

6.2 Perspectives on medical practice. The respondents' level of optimism about the current state of their practice environment ranged from very optimistic (11%) and somewhat optimistic (34%) to somewhat pessimistic (38%) and

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very pessimistic (18%). Data on the current practice workload showed most respondents at full capacity (48%), with 33% overextended and 19% with time available to see additional patients. Respondents had mixed views about the future of the medical profession with 21% very pessimistic, 39% somewhat pessimistic, 30% somewhat optimistic, and 10% very optimistic. Respondents were ambivalent about recommending medicine as a career to their children: 53% would recommend medicine while 47% would not.

6.3 Views of the Affordable Care Act (ACA). Perspectives on the impact of the ACA on the overall quality of health care in the US also varied: 38% disagreed and 27% strongly disagreed that the ACA had improved the quality of health care, while 26% agreed and 9% strongly agreed the ACA had improved health care quality. The impact of the ACA on the respondents' practice also varied: 46% said the ACA has been negative, 19% positive, and 34% no effect on practice. Most respondents (72%) had not reduced their clinical hours because of the ACA, while 28% had. Respondents were also asked if the ACA had affected

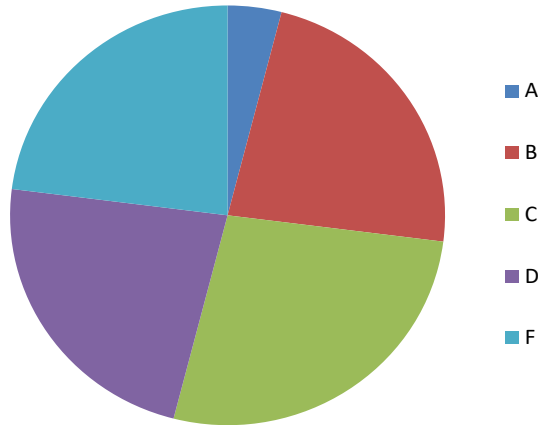
their annual income or their ability to save for retirement. Most (59%) said the ACA had no effect on their income; 34% said it decreased, and 7%, income increased. Most respondents (57%) had not changed their personal financial planning since the ACA was enacted, while 17% had made changes, and 16% were simply unsure about how to adjust their financial planning.

Most respondents (62%) said that the ACA had not changed their ability to save for retirement, while 29% noted that the ACA had decreased their ability to save, and 4% noted an increase in their retirement savings. A total of 57% of respondents have not changed their retirement plans since the advent of the ACA, while 19% are delaying retirement, 18% accelerating retirement, and 7% making no changes in their retirement plans.

As shown in Figure 1 below, physicians gave the ACA mixed grades ranging from A to F. Those employed by a hospital gave the ACA the highest average grade, while respondents who were practice owners/partners gave the ACA the lowest average grade.

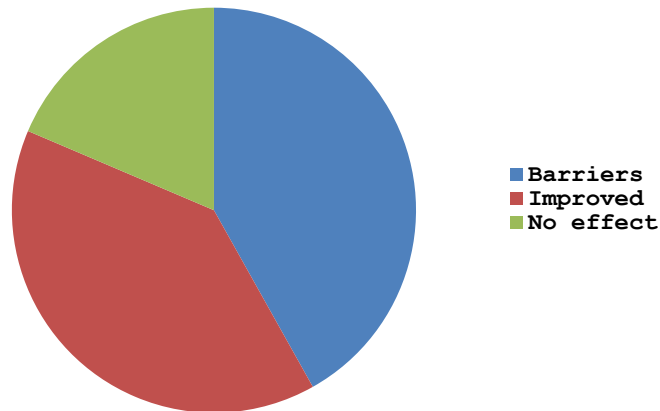
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Physicians grade the ACA



6.4 Effect of electronic medical records (EMRs). As shown in Figure 2 below, the impact of EMRs on the quality of patient care also prompted diverse reactions from the respondents – from no effect to improving patient care.

Effect of EMRs on Patient Care



In their assessment of the effect of EMRs on the efficiency of their practice, 38% of respondents felt that EMRs have increased their costs and workload; 32% cited reduced

efficiency; 23% cited improved efficiency; and 7%, no effect.

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6.5 Other responses – by age and specialty.

Of all ages represented in the survey, the 35 or younger group of physicians was only age group with a majority of respondents (68%) agreeing that the ACA has improved the overall quality of healthcare in the United States. Physicians from general surgery (65%), general medicine (60%), and family practice (60%) expressed above average pessimism about the current state of their medical practice environment. Physicians in family practice and general medicine reported being the most overworked and overextended, while physicians in family practice were the most pessimistic about the future of the medical profession and the most unlikely to recommend medicine as a career to their children or young people. Almost half of the physicians from general surgery and family practice reported decreased incomes as result of ACA and, as a result, had changed their retirement plans.

The most pessimistic group of respondents in the survey were the practice owners/partners, the majority of whom were pessimistic about the future of the medical profession, would not recommend medicine as a career, reported that the ACA had negative effects on their practice, their incomes, and their retirement plans.

7. Conclusion

The results of this new national study confirm that the inevitable integration of EMRs in medical practice has brought both new efficiencies and new challenges and that physicians have struggled to adjust to health informatics that support their work and improve the quality of care. As new and improved EMRs evolve, Zeng (23) suggested that physicians need to re-evaluate job roles within their practices because some jobs have become obsolete

and new job roles are emerging in the wake of the fully computerized medical practice. Zeng suggested that practice workflow and information management redesign specialists, clinical informaticians, and medical scribes can help physicians who are struggling to optimize the implementation of EMRs, while attempting to offer higher quality, patient-focused care, containing costs, and maintaining efficiency.

There is a growing body of research (23-24), that medical scribes can serve as physician extenders who help clinicians save time collecting and documenting data. According to Zeng (23), medical scribes can perform a variety of timesaving tasks such as responding to messages, locating information for review, and entering information into the EMR as directed by the clinician. This, said Zeng, is a cost-effective way to separate clerical duties from clinical work, and to give physicians more time for direct patient care. Schulz and Holstrom (24) also cited limited studies that suggest medical scribes have a positive impact on clinician satisfaction, productivity, efficiency, revenue, and patient-clinician interactions.

In 2014, Lovette (25) reminded physicians and their staff to remember that organizations must “thoroughly consider where, when, and how technology is used throughout the patient visit, ensuring the patient is at the core of all interactions” (p. 1). This, said Lovette, means “balancing cutting edge systems with preserving the patient experience” (p. 1). In addition, Lovette echoed the AMA recommendation that in the future, more physicians should be involved in the design of EMRs.

The results of this national survey also confirm that the impact of the Affordable Care Act on America’s physicians is difficult to generalize across

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physicians of all age groups and practice specialties. Some respondents in this survey reaped benefits from the legislation, while others suffered losses in income and erosion of their optimism about the future of the medical profession. Some physicians have reacted to working in the increasingly regulated practice environment of medicine today by opting for an early retirement, while others who suffered financial losses from the ACA have deferred their retirement plans.

In the most recent analysis of the ACA's long, complicated legislative and political trajectory, Draper (26) documents the challenges that lie ahead for the new administration as they fulfill the Republicans' long-standing promise to repeal and replace the ACA. Draper warned that the task of "repeal and replace" will be extremely challenging. Despite skyrocketing premiums, limited plan offerings in some states, and fewer young healthy enrollees than needed in the insurance pools, other data show that the ACA has accomplished more than its critics are willing to acknowledge, Draper said (26). These include the protection of 133 million Americans with pre-existing conditions; over 15 million poor or near-poor citizens receiving Medicaid benefits in the 31 states (and the District of Columbia) that opted for the expansion, and the 3 million young

adults under age 26 who now have insurance protection under their parent's plans (p. 52). Draper warned (26) that the administration's plan for repeal and replacement of the ACA will re-energize the many special interest groups that "spent close to \$273 million on lobbying during the height of the Obamacare debate" (p. 52).

Whether changes in the new health legislation are large and sweeping or small and incremental remains to be seen. What is clear from this new national survey of American's physicians is that the landscape of contemporary medical practice has become a high-tech, highly regulated, stressful work environment which will continue to change in the years to come. The impact of this changing landscape on physician preparation for retirement suggests that significant challenges await physicians who have yet to develop a solid retirement planning strategy. In the absence of such a strategy, many are faced with limited early retirement options and a diminished lifestyle when they reach retirement age. Significant healthcare industry pressures, rapidly changing technological requirements and long-standing physician commitment to preserving safe patient care challenge the medical profession and contribute to a rapid and potentially troublesome future.

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