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The health care 'iron triangle' and the Patient Protection and Affordable Care Act

Health care economists have long understood that the Patient Protection and Affordable Care Act (PPACA) could never function as intended. The reasoning behind this bold statement is simple. The PPACA aspires toward an end point that no law, system, or intervention has been able to accomplish: breaking the health care "iron triangle."

According to the concept of the health care iron triangle, health care is a tightly interlocked, self-reinforcing system of three vertices—access, quality, and cost—and improvement in two vertices necessarily results in a worsening in the third.[1] Interventions in health care inherently require trade-offs, which prevent simultaneous improvement in all three components.

The PPACA is explicitly designed to disrupt this paradox, ambitiously aiming to increase access and improve quality while lowering costs.[2] Emerging evidence suggests, however, that the practical implementation of the PPACA will trump its intended benefits. Though there are numerous ways in which the PPACA could paradoxically decrease access to care, lower the quality of care, or raise costs, the outcome is almost certain that the PPACA may bend—but will never break—the health care iron triangle.

CONSTRAINING ACCESS

The PPACA seeks to increase health care access through four mechanisms: mandating that virtually all Americans obtain health insurance or pay a tax; expanding Medicaid to individuals earning less than 138% of the federal poverty level; requiring employers who have 50 or more employees to provide adequate health insurance or pay a fine; and preventing insurers from denying coverage based on preexisting medical conditions.[3] Of these initiatives, only preexisting coverage requirements are a guaranteed outcome of the PPACA's efforts to improve access.

Young adults are historically underinsured, for several reasons: they are generally in good health, tolerate greater risk, have higher unemployment levels, and are less likely to be able to afford insurance on an open market.[4] With the threat of being denied insurance on the basis of preexisting conditions eliminated, this demographic may elect to pay a penalty and forgo insurance until it is needed. This not only decreases the number of insured Americans, but also deprives insurers of low-cost consumers that subsidize higher users, thus raising premiums and forcing participants out of private markets.

In 2012, the US Supreme Court largely upheld the PPACA, except that states retain jurisdiction over the decision to expand Medicaid. Nearly half of the states will keep their Medicaid programs as they are, for reasons ranging from financial (states bear 10% of the cost of this new population beginning in 2020) to ideological (partisan dislike of the PPACA).[5] Irrespective of the rationale for nonexpansion, millions of Americans will not have access to Medicaid as written in the PPACA.

Employers, mindful of the expenses they face as a result of the law, may shield their

There is no way to increase access, improve quality, and decrease costs at the same time

doi:10.3949/ccjm.82a.14035

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financial liabilities as health insurance providers. At present, approximately half of all Americans obtain insurance through an employer, though that proportion could diminish if employers reorganize their businesses to avoid PPACA requirements.[6] For example, businesses with fewer than 50 employees are exempt from offering insurance and could restrict payroll size to 49 employees or fewer to avoid the $2,000 penalty. Since the employer mandate of the PPACA only applies to full-time employees—defined as those working at least 30 hours a week—larger employers may switch hiring patterns toward more part-time employees. The nonpartisan Congressional Budget Office (CBO) recognizes this phenomenon and projects that the number of total hours worked in the United States will decline between 1.5% and 2% through 2024 as a result of PPACA implementation. Ultimately, the decline in full-time employment resulting from the PPACA will lead to "some people not being employed at all and other people working fewer hours" and will disproportionately impact "lower-wage workers."[7]

Paradoxically, the PPACA could decrease access, worsen quality, and raise costs

The CBO analysis predicts that the equivalent of 2 to 2.5 million full-time jobs will be lost as a result of the PPACA's implementation over the next 10 years. Employers and employees responding to financial disincentives perpetuate a cycle in which increased rates of unemployment and underemployment lead not only to fewer insured Americans, but also to fewer Americans insured by their employers.[8]

DIMINISHED QUALITY

If the PPACA improves access at constrained cost, quality of care may suffer from the increased strain on the most finite (and most demanded) resource in health care—a provider's time. Much as a car factory that increases production without appropriate expansion may turn out poorer quality vehicles, tasking a finite number of providers with caring for more patients may lead to poorer patient care. Not only has the PPACA increased the number of patients seeking care, it also has increased the administrative components of practicing medicine. Both outcomes lead to delays in care and increased out-of-pocket expenditures for patients.[9]

The PPACA also fails to address the mismatch between the supply of physicians and the increased demand for their services. First, the law provides no new funding for training or expanding the physician workforce. Second, the PPACA may expedite the retirement of physicians daunted by changes in the new health care environment, thus decreasing both patient and peer access to those with a career's worth of knowledge.[10] Adding insult to injury, the known shortage of primary care physicians (estimated to exceed 25,000 before the PPACA's enactment) is predicted to worsen by an estimated 5,000 because of increased demand, further stretching an already thin workforce.[11]

Patients may also experience a decrease in quality if their access to the best health care is in name only. There is no requirement that providers accept the insurance plans of those who gain coverage through the PPACA.[12] This is particularly relevant to the 11 million individuals projected to obtain coverage through Medicaid, as existing Medicaid participants routinely confront access issues when they need to see a specialist or, increasingly, a primary care provider.[13]

Quality declines if a change in insurance fails to cover existing necessary benefits or provides those benefits at increased cost. Federal taxing of "Cadillac" insurance plans, employers offering relatively less-generous coverage plans, and individuals opting for lower-tiered (eg, "bronze" or "silver") plans in the health insurance marketplace when previously insured under higher-tiered ("gold" or "platinum") plans all either diminish quality by decreasing the breadth of coverage or make obtaining coverage more expensive.[14,15]

RISING COSTS

The PPACA is hardly an unfunded mandate. The federal government estimates spending $1.168 billion over 10 years on the insurance coverage provisions of the Act.[13] While Congress' pay-as-you-go rules require the PPACA to reduce federal expenditures, states (through new Medicaid enrollees) and individuals (through individual mandate penalties and

the aforementioned "Cadillac" tax) will confront higher net costs.[16–18]

Early indicators suggest that implementing the cost-reducing portions of the law may not be as feasible as intended. In a recent pilot of the PPACA's accountable care organization concept, 32 organizations participated in the Pioneering Accountable Care Organization Model. While the Center for Medicare and Medicaid Services says that 13 of these organizations produced savings of $87.6 million in 2012, overall costs for these participants still increased 0.3% (albeit less than the 0.8% growth observed outside the model).[19] Additionally, 7 organizations intend to switch out of the Pioneering model to a program in which they bear less financial responsibility, and 2 will leave the program altogether, suggesting that health systems are hesitant about care-management models that threaten a financial bottom line.

The recent decision to delay the employer mandate by 1 year will result in $12 billion of lost tax revenue and additional charges, largely through the loss of $10 billion in penalties to employers.[20] Out-of-pocket spending caps on deductibles and copayments, due to take effect in 2014, were also pushed back 1 year, which will increase costs for some with expensive or chronic illnesses.[21] The medical device tax is a similarly unpopular (but revenue-generating) component that could yield to political pressure, further increasing the cost of the PPACA.[22] And it remains to be seen whether the Independent Payment Advisory Board, which has theoretical control over expenditures for the sickest patients, will retain the authority to rein in costs.

AS IRONCLAD AS EVER

The PPACA is a game-changing law, one that will revolutionize the practice and delivery of health care. Some argue that its implementation has already succeeded in bending the cost curve (ie, reducing the rate of health care expenditures), though critics counter that the reduction may have been a byproduct of the Great Recession and did not actually lower costs.[23] Others contend that the PPACA is responsible for a renewed interest in practice redesign and rethinking of the ways in which medicine is delivered. While interest in reducing costs appears to be at an all-time high, and while such enthusiasm may succeed in reducing per capita costs of care, a long-term absolute reduction in the amount spent on care as a result of these efforts will remain conspicuously absent.

The reality remains that the PPACA is an ambitious law that cannot overcome economic realities. Almost certainly, it will succeed in decreasing the number of uninsured Americans, who have two new avenues to obtain insurance: Medicaid expansion and the health insurance marketplace. Both can absorb applicants who lose employer-subsidized insurance plans. In addition, patients, providers, and politicians will readily reject compromises to quality. While the permutations of potential threats are nearly infinite, any observed decrease in the quality of care resulting from the PPACA will prompt brisk legislative action by lawmakers to rectify perceived deficiencies.

To assuage short-term concerns about access and quality, the path of least resistance will be to delay cost-containing measures and to spend money to remedy perceived deficiencies of the PPACA. Such delays have already occurred—as seen with the spending caps on deductibles and copays—and may potentially be extended to the individual mandate itself. Given lawmakers' well-documented inability to constrain the powers of the purse, the Achilles' heel of the PPACA will be a never-ending spiral of rising costs. The health care iron triangle remains as ironclad as ever. ■

The PPACA is an ambitious law that cannot overcome economic realities

***ACKNOWLEDGMENT**: The author would like to recognize Devdutta Sangvai, MD, MBA, for his assistance in reviewing this manuscript, as well as his work as associate program director of the Management and Leadership Pathway for Residents training program.*

REFERENCES

1. **Kissick WL**. The past is prologue, in medicine's dilemmas: infinite needs versus finite resources. New Haven, CT: Yale University Press; 1994.
2. **US Department of Health and Human Services**. Key features of the Affordable Care Act by year. www.hhs.gov/healthcare/facts/timeline/timeline-text.html. Accessed December 2, 2014.
3. **US Government Printing Office**. Public Law 111-148. The Patient Protection and Affordable Care Act. http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-

111publ148.pdf. Accessed December 2, 2014.
4. **The Commonwealth Fund**. Young, uninsured, and in debt: why young adults lack health insurance and how the affordable care act is helping—Findings from the Commonwealth Fund Health Insurance Tracking Survey of Young Adults, 2011. www.commonwealthfund.org/publications/issue-briefs/2012/jun/young-adults-2012. Accessed December 2, 2014.
5. **The Henry J**. Kaiser Family Foundation. Status of state action on the Medicaid expansion decision, 2014. http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/. Accessed December 2, 2014.
6. **United States Census Bureau**. Employment-based health insurance: 2010. www.census.gov/prod/2013pubs/p70-134.pdf. Accessed December 2, 2014.
7. **Congressional Budget Office**. The budget and economic outlook: 2014 to 2024. www.cbo.gov/sites/default/files/cbofiles/attachments/45010-breakout-AppendixC.pdf. Accessed December 3, 2014.
8. Review & outlook: ObamaCare and the '29ers.' The Wall Street Journal. February 26, 2013. http://online.wsj.com/news/articles/SB10001424127887324616604578304072420873666. Accessed December 2, 2014.
9. **Gold J**. Kaiser Health News. New ACA insurance causes headaches in some doctors' offices. www.kaiserhealthnews.org/stories/2014/february/25/new-aca-insurance-causes-headaches-in-some-doctors-offices.aspx. Accessed December 2, 2014.
10. **Deloitte Center for Health Solutions**. Deloitte 2013 survey of US physicians: physician perspectives about health care reform and the future of the medical profession. http://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-lshc-deloitte-2013-physician-survey-10012014.pdf. Accessed December 2, 2014.
11. **Howard P, Feyman Y**. Rhetoric and reality. The Obamacare evaluation project: access to care and the physician shortage. www.manhattan-institute.org/pdf/mpr_15.pdf. Accessed December 2, 2014.
12. **Ollove M**. Kaiser Health News. Are there enough doctors for the newly insured? www.kaiserhealthnews.org/Stories/2014/January/03/doctor-shortage-primary-care-specialist.aspx. Accessed December 2, 2014.
13. **Congressional Budget Office**. Estimates for the insurance coverage provisions of the Affordable Care Act updated for the recent Supreme Court decision. www.cbo.gov/sites/default/files/cbofiles/attachments/43472-07-24-2012-CoverageEstimates.pdf. Accessed December 2, 2014.
14. **Health Policy Briefs**. Excise tax on "Cadillac" plans. http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=99. Accessed December 2, 2014.
15. **McKinsey Center for US Health Care Reform**. Exchanges go live: early trends in exchange dynamics. www.mckinsey.com/~/media/McKinsey/dotcom/client_service/Healthcare%20Systems%20and%20Services/PDFs/Exchanges_Go_Live_Early_Trends_in_Exchange_Filings_October_2013_FINAL.ashx. Accessed December 2, 2014.
16. **Elmendorf DW**. Letter to the Honorable Harry Reid. www.cbo.gov/sites/default/files/cbofiles/ftpdocs/113xx/doc11307/reid_letter_hr3590.pdf. Accessed December 2, 2014.
17. **Deloitte Center for Health Solutions**. The fiscal impact to states of the Affordable Care Act: comprehensive analysis. http://www.statecoverage.org/files/DeloitteFisca_ImpacttoStatesACA.pdf. Accessed December 2, 2014.
18. **Congressional Budget Office**. CBO releases updated estimates for the insurance coverage provisions of the Affordable Care Act. www.cbo.gov/publication/43080. Accessed December 2, 2014.
19. **Centers for Medicare & Medicaid Services**. Pioneer accountable care organizations succeed in improving care, lowering costs. www.cms.gov/Newsroom/MediaReleaseDatabase/Press-Releases/2013-Press-Releases-Items/2013-07-16.html. Accessed December 2, 2014.
20. **Congressional Budget Office**. Analysis of the administration's announced delay of certain requirements under the Affordable Care Act. www.cbo.gov/publication/44465. Accessed December 2, 2014.
21. **Pear R**. A limit on consumer costs is delayed in health care law. The New York Times. August 13, 2013. www.nytimes.com/2013/08/13/us/a-limit-on-consumer-costs-is-delayed-in-health-care-law.html?pagewanted=all&_r=0. Accessed December 2, 2014.
22. **Rubin R, Hunter K**. Republicans push medical-device tax in US Senate. Bloomberg. May 13, 2014. www.bloomberg.com/news/2014-05-14/republicans-push-medical-device-tax-repeal-in-u-s-senate.html. Accessed December 2, 2014.
23. **Blumenthal D, Stremikis K, Cutler D**. Health care spending—a giant slain or sleeping? N Engl J Med 2013; 369:2551–2557.

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