Diabetes Management in the Age of National Health Reform

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HISTORICAL BACKGROUND—National health care policy is a relatively new concept in the U.S. with a rather tortured and painful past (1). President Theodore Roosevelt’s initial efforts to establish national health insurance in 1912 failed. Twenty-three years later, his cousin Franklin Roosevelt incorporated Maternal and Child Health Grants into the original Social Security Act passed in 1935 in the midst of the New Deal. His successor, Harry Truman, attempted to extend medical care to the poor through grant authorization to the states, but met opposition from the American Medical Association, and both Senate and House versions of the bill foundered.

Until recently, the Medicare and Medicaid programs signed into law by Lyndon Johnson in 1965 were the most significant legislation addressing health care delivery and financing in the U.S.—extending care to the elderly, the disabled, and the poor. Since then, many have tried to establish national coverage, but neither the Republicans nor the Democrats have had success. Richard Nixon’s Comprehensive Health Insurance Plan in 1972 was very controversial that the bill was never even brought to the floor of either chamber for a vote. The Patient Protection and Affordable Care Act (PPACA) of 2010 is clearly the most sweeping revision of health care delivery and finance since the introduction of Medicare and Medicaid. The questions surrounding it are numerous, and its impact remains to be seen; however, it is worthwhile to examine why health reform is necessary.

NATIONAL HEALTH CARE EXPENDITURES AND OUTCOMES—Independent of the source of payment, per capita health care expenditures in the U.S. rose over the last 30 years from approximately $1,000 to $7,000 (adjusted for inflation) (Fig. 1) (2). In 2010, health care expenditures accounted for over 17% of our national gross domestic product (GDP). Whether that is an appropriate amount to be spent on health care is certainly debatable—however, two issues must be considered. First, to the extent that we are spending resources on health care, we recognize opportunity costs as we limit expenditures in other areas such as education, transportation infrastructure, or defense. The U.S. national health expenditure has risen from 5 to 17.7% of GDP since 1960 compared with a change from 3.8 to 9% of GDP in countries composing the rest of the developed world (Fig. 2). Even if we choose to spend a substantial portion of our GDP on health care, its annual growth rate of 5.2% since 1960 is clearly unsustainable. Reining in the growth of health care expenditures is imperative for the continued prosperity of the American economy.

Second, we clearly want to insure that we are receiving quality for our money. The perception of most Americans is that our health care is the best in the world (3). Perhaps so, but only for those with access and coverage (4). However, in 2006, 18% of those under the age of 65 years were uninsured (5). With the great recession of 2008, these numbers have climbed, and now over 50 million people are uninsured (6). Additionally, many of those with insurance find that their coverage is inadequate leading to a state of being “underinsured” (7). Measuring the consequences of underinsurance is difficult, whereas the impact of uninsurance is easier to measure. Those without insurance coverage for the entire year receive only 60% of the recommended screening and preventive services compared with those with coverage for the entire year. Those with coverage for a portion of the year fall in between with a clear dose-dependent relationship. In looking at diabetics specifically, the uninsured have almost twice the prevalence of A1C values greater than 9% compared with those with insurance (37 vs. 19%, respectively) (8). The impact of obtaining insurance through Medicare at age 65 years is a natural experiment in the U.S. Uninsured adults with diabetes, hypertension, heart disease, or stroke between the ages of 55 and 65 have both a lower summary health score than those with insurance and a more rapid decline with age. However, at the age of 65, when Medicare coverage can be obtained, health scores for the previously uninsured rapidly stabilize, and those with prior insurance continue their age-related decline at the same slope (9). Hospital admissions for the uninsured with diabetes or cardiovascular disease are lower than for those with insurance up until the age of 65, when the previously uninsured enter Medicare and quickly jump well above the levels of those with continuous insurance (10). This suggests that the uninsured delay necessary medical care until such time as a critical event occurs and then present in more serious condition and at a higher rate.

Basic diabetes care including a foot and eye exam and measurement of A1C and lipids is acknowledged by the American Diabetes Association Standards of Care (11); however, a recent international survey shows that only 43% of U.S. subjects with diabetes received all four compared with 67, 59, and 55% for the U.K., the Netherlands, and New Zealand, respectively (12). When examining national mortality figures due to disorders amenable to health care (including diabetes, heart disease, stroke, and bacterial infection), the U.S. currently ranks 19th in the...
developed world. Perhaps equally disconcerting is the observation that we fell from 15th in 1998 to our present position (13). This has occurred despite our growth in health expenditures well beyond those of the comparison countries. Perhaps we have not spent our health care dollars as wisely as our neighbors.

**PATIENT PROTECTION AND AFFORDABLE CARE ACT**—Over a year of vigorous debate and discussion produced PPACA of 2010 (14)—a process that angered many and resulted in a law that satisfies few. Those on the Right consider it to be intrusive for the individual mandate requirement for health insurance and excessively costly, whereas those on the Left decry the absence of either a public option insurance plan or a single payer.

Reforms are being initiated along a prolonged timeline, but several of the provisions serve to benefit people with diabetes this year. The insurance reform prohibits preexisting condition exclusion for children with diabetes and allows them to remain on their parents insurance to age 26 years. Lifetime limits on the dollar value of coverage are prohibited, and annual caps on coverage are to be determined by the Secretary of Health and Human Services. Rescission of policies is now restricted to cases of fraud. Plans must provide preventive services as defined by the U.S. Preventive Services Task Force, without co-pay.

For those without insurance currently, Medicaid is expanded to include childless adults as well as those with incomes above current limits but below 133% of federal poverty levels. Federal cost-sharing to the states is provided to offset the increased expenditures for expanded coverage. As many as 30 million individuals nationwide are expected to qualify. High-risk insurance pools are established at either the state or national level to provide coverage for adults with preexisting conditions such as diabetes and those who were previously uninsurable. This provision will terminate in January 2014, when plans will be prohibited from excluding or increasing premiums on such individuals. These policies expand the universe of those covered by insurance and limit their co-pays for established preventive services.

Changes in Medicare for 2010 include rebates for prescription drugs under Part D (closing the donut hole), with eventual elimination of the gap in coverage by 2020. In addition, Medicare payments to primary care physicians in health professional shortage areas may receive a 10% bonus payment in 2011. The creation of an Innovation Center within the Centers for Medicare and Medicaid Services in 2011 is charged with encouraging novel health delivery and payment models such as the Patient-Centered Medical Home or Accountable Care Organizations; approaches quite beneficial to the management of people with diabetes. Treatment guideline development and establishment of standards of care should be facilitated by the creation of the Patient-Centered Outcomes Research Institute that will prioritize and fund comparative effectiveness research to identify what works, for whom, and under what circumstances. An original $1.1 billion investment in the stimulus bill significantly targeted diabetes and obesity, and future funding should provide as much as $600 million annually over and above the National Institutes of Health (NIH) allocations for research (15).

In 2011, the National Prevention, Health Promotion and Public Health Council is tasked to develop a national strategy to improve America’s health with a major focus on obesity, nutrition, and exercise. Wellness, comprehensive health risk assessment, and personalized
prevention plans are integrated into both Medicare and Medicaid, but also supported within the workplace through grants to small businesses. Diabetes care planning is perfectly consistent with this approach and should be easily integrated into this paradigm. Transparency is a major component, with chain restaurants required to post nutritional content of their foods to assist in self-management. Success in addressing diabetes and prediabetes will be assessed biennially by the Centers for Disease Control and Prevention, preparing a "National Diabetes Report Card" including aggregate health outcomes data relating to preventive care practices, quality of care, risk factors, and outcomes.

The expansion of coverage to as many as 30 million individuals previously uninsured is certain to tax the current health delivery system. A Community-Based Collaborative Care Network program will coordinate and integrate health care services for the currently uninsured and underinsured, along with $11 billion supporting community health centers over the next 5 years. Federally supported state grants are intended to assist health care professionals willing to work in medically underserved areas, and a loan repayment plan is established to encourage health professionals to enter into primary care practices. Integrated diabetes care could become the paradigm for operation of these centers and practices because a large percentage of the clientele will require this care.

**IMPACT AND SUMMARY**—The development of a national health care policy has been contentious for almost 100 years. PPACA has generated enormous debate, with many believing that it does far too much at an unacceptable cost, whereas others object that it fails to go far enough (16). Compromise to that extent may reveal a relatively balanced approach. No single article can present all of the components of a 906-page document, and obvious controversies such as the individual mandate, minimum benefit packages, and tax implications have been omitted from this one. The current epidemic of obesity and diabetes, however, is significantly driving the unsustainable health care costs in the present system, and the need for change should be apparent. The immediate expansion of coverage to a significant percentage of individuals with diabetes should allow them to receive preventive and therapeutic services that will improve health and decrease costs associated with hospitalization. Support for comparative effectiveness research in diabetes may provide new information to improve our therapeutic decisions and care, minimizing treatment failure or side effects. Increasing the number of primary care providers and support for community health centers will increase access to care, and new delivery systems may improve the efficiency of that care. A new focus on wellness with screening, preventive services, nutrition labeling, and workplace implementation will hopefully stem the development of diabetes moving forward. Only time and the implementation of these new policies will expose the benefits and pitfalls of this new law, but our current health care situation demands change. We cannot allow perfect to become the enemy of good.

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**References**

1. History of health reform. Available from http://healthreform.kff.org/flash/health-reform-new.html?CFID=23699599&CTOKEN=70507600&sessionid=60307747e2a2bfe1d21a9157f794f30175. Accessed 1 September 2009
2. Anderson GF, Frogner BK. Health spending in OECD countries: obtaining value per dollar. Health Aff (Millwood) 2008; 27:1718–1727
3. Davis K, Schoen C, Stremikis K. How the Performance of the U.S. Health Care System Compares Internationally 2010 Update. The Commonwealth Fund, June 2010. Available from http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2010/ Jun/Mirror-Mirror-Update.aspx?page=3. Accessed September, 2009
4. Reid TR. The Healing of America. NY, Penguin Press, 2009
5. Fronstin P. Health insurance coverage of individuals ages 55–64, 1994–2007. Employee Benefit Research Institute 2009;30:1–10
6. Medicaid Enrollment: December 2009 Data Snapshot. Menlo Park, CA, Kaiser Family Foundation. Available from http://www.kff.org/. Accessed 12 October 2010
7. Committee on Health Insurance Status and Its Consequences. America’s Uninsured Crisis: Consequences for Health and Health Care. Washington, DC, National Academies Press, 2009
8. Schoen C, Davis K, How SKH, Schoenbaum SC. U.S. Health System Performance: A National Scorecard (Web Exclusive). Health Affairs 2006;25:W457–W475
9. McWilliams JM, Meara E, Zaslavsky AM, Ayanian JZ. Health consequences of uninsurance among adults in the United States: recent evidence and implications. JAMA 2007;298:2886–2894
10. McWilliams JM, Meara E, Zaslavsky AM, Ayanian JZ. Use of health services by previously uninsured Medicare beneficiaries. N Engl J Med 2007;357:143–153
11. American Diabetes Association. Standards of medical care in diabetes—2010. Diabetes Care 2010;33(Suppl. 1):S1–S61
12. Schoen C, Osborn R, How SKH, Doty MM, Peugh J. In chronic condition: experiences of patients with complex health care needs, in eight countries, 2008. Health Aff (Millwood) 2009;28:w1–w16
13. Nolte E, McKee CM. Measuring the health of nations: updating an earlier analysis. Health Aff (Millwood) 2008; 27:58–71
14. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, §10409, 124 Stat. 119, 978, 2010
15. Committee on Comparative Effectiveness Research Prioritization. Initial National Priorities for Comparative Effectiveness Research. Washington, DC, National Academies Press, 2009
16. Views on Health Reform Remain Divided [Slide Online], 2010. Menlo, CA, Kaiser Family Foundation. Available from http://facts.kff.org/chart.aspx?ch=1456. Accessed 12 October 2010