The NEW ENGLAND JOURNAL *of* MEDICINE

Perspective

FEBRUARY 10, 2011

The States' Next Challenge — Securing Primary Care for Expanded Medicaid Populations

Leighton Ku, Ph.D., M.P.H., Karen Jones, M.S., Peter Shin, Ph.D., M.P.H., Brian Bruen, M.S., and Katherine Hayes, J.D.

In the coming years, the United States must address both an expansion of Medicaid coverage and an expected shortage of primary care physicians.[1] Under the Patient Protection and Affordable Care Act (ACA), the Medicaid eligibility threshold for nonelderly adults will rise to 133% of the federal poverty level (about $30,000 for a family of four) in 2014. States with restrictive Medicaid eligibility requirements and high rates of uninsured residents will expand coverage substantially, while programs in states with higher current Medicaid eligibility thresholds and fewer uninsured residents will grow less. However, since many of the states with the largest anticipated Medicaid expansions are also the ones that have less primary care capacity, they could face surging demand from the newly insured without having sufficient primary care resources available. These gaps could affect access to care not only for newly eligible Medicaid beneficiaries but also for others who depend on a state's existing supply of clinicians.

To examine the potential gaps between demand and capacity, we computed measures of potential Medicaid expansion and current primary care capacity in each state and the District of Columbia. To determine the size of each state's Medicaid expansion, we calculated the number of nonelderly adults who, according to census data for 2008–2009, are uninsured and eligible under the 2014 Medicaid criteria and who, according to estimates from the Urban Institute, might enroll in Medicaid under the ACA.[2] To determine each state's primary care capacity, we calculated the number of primary care providers (physicians in general, family, or internal medicine, pediatrics, or obstetrics–gynecology as of late 2008, plus adjusted estimates for nurse practitioners and physician assistants) and the number of patients who were served at federally qualified health centers (FQHCs) in 2009. We focused on FQHCs because a majority of patients at such centers are Medicaid beneficiaries or are uninsured. (Data and estimation processes are described in the Supplementary Appendix, available with the full text of this article at NEJM.org.)

A composite "Medicaid expansion index" and a "primary care capacity index" were computed for each state; all indexes were standardized for state population and set to average 100 across the states. We then computed what we called an access-challenge in-

The New England Journal of Medicine
Downloaded from nejm.org on September 26, 2011. For personal use only. No other uses without permission.
Copyright © 2011 Massachusetts Medical Society. All rights reserved.

Access-Challenge Index Scores for States, According to Rank.*

State	Rank	Access-Challenge Index	State	Rank	Access-Challenge Index
Average		100.0	North Dakota	26	97.1
Oklahoma	1	212.6	New Mexico	27	92.0
Georgia	2	190.7	New Hampshire	28	90.9
Texas	3	187.1	New Jersey	29	89.4
Louisiana	4	177.5	California	30	88.8
Arkansas	5	158.6	Maryland	31	86.8
Nevada	6	154.3	Iowa	32	86.6
North Carolina	7	144.5	South Dakota	33	83.3
Kentucky	8	140.4	Arizona	34	81.8
Alabama	9	129.3	Montana	35	81.6
Ohio	10	128.2	Wisconsin	36	79.7
South Carolina	11	126.1	Alaska	37	79.1
Indiana	12	125.3	Illinois	38	78.0
Wyoming	13	125.0	Colorado	39	77.4
Mississippi	14	123.7	Pennsylvania	40	75.6
Virginia	15	120.7	Hawaii	41	64.7
Florida	16	117.9	Delaware	42	62.7
Utah	17	116.9	West Virginia	43	58.7
Oregon	18	115.0	Washington	44	57.8
Michigan	19	114.8	Connecticut	45	48.8
Tennessee	20	112.1	Rhode Island	46	46.0
Kansas	21	110.8	New York	47	43.4
Nebraska	22	108.8	Maine	48	37.2
Missouri	23	108.2	District of Columbia	49	28.1
Idaho	24	103.8	Vermont	50	17.0
Minnesota	25	100.2	Massachusetts	51	15.2

* Access-challenge index scores were calculated as the ratio of Medicaid expansion to primary care capacity in each state, with an average score of 100. States with access-challenge scores above 100 are predicted to have higher-than-average Medicaid expansions relative to their current primary care capacity.

dex, by dividing the Medicaid expansion index by the primary care capacity index and set this index to average 100 as well. States with access-challenge scores exceeding 100 have higher-than-average Medicaid expansions relative to their current primary care capacity, so they will face a larger challenge.

Eight states — Oklahoma, Georgia, Texas, Louisiana, Arkansas, Nevada, North Carolina, and Kentucky — face the greatest challenges (see table). These states are expected to have large Medicaid expansions yet now have weak primary care capacity. In the absence of additional efforts, the demand for care by newly insured patients could outstrip the supply of primary care providers in these states. Seventeen other states with access-challenge scores above 100, most of which are in the South or the Midwest, could also face problems. Massachusetts, Vermont, the District of Columbia, Maine, New York, Rhode Island, and Connecticut have scores below 50, indicating that they have greater capacity relative to the size of their expansions.

Our analysis underscores the fact that the Medicaid expansions — a crucial dimension of health care reform — will affect states' primary care systems in varying ways. Of course, actual circumstances could be more complicated. Access to care is determined in local service areas, not at the state level. Access problems could be more severe in rural or inner-city areas than in suburban communities, for example. Moreover, even states with low access-challenge scores could face difficulties if, for example, many physicians will not accept Medicaid patients even after Medicaid's fee levels for primary care are increased. Although we focused on primary care, patients also need specialty care services, and states

The New England Journal of Medicine
Downloaded from nejm.org on September 26, 2011. For personal use only. No other uses without permission.
Copyright © 2011 Massachusetts Medical Society. All rights reserved.

could face problems with access at the specialty and subspecialty levels. And we cannot be certain of the actual size of each state's Medicaid expansion nor of the future number of primary care providers; our numbers are estimates extrapolated from current data.

All states and communities need to consider the potential effects of expansions of both Medicaid and private insurance coverage through the new health insurance exchanges. Newly insured populations will demand more primary care services. If the new demand exceeds the supply of care, the result could be increased waiting times and access barriers. This pressure on services could affect not only Medicaid patients but also privately insured and Medicare patients, since each community is served by a limited pool of providers. Patients who cannot get timely primary care in health centers or physicians' offices may spill over into more expensive emergency rooms or experience delays that result in otherwise avoidable hospitalizations for conditions that could be treated in ambulatory care settings.

We found that high rates of uninsured residents were correlated with lower primary care capacity. One reason that some states, such as Oklahoma, Georgia, and Texas, have so few primary care physicians may be that high rates of uninsured residents and poverty make it harder for them to attract and retain practitioners. In the long run, expanded insurance coverage should support more primary care practices in undersupplied areas and eventually help to level out disparities in primary care capacity. But the insurance expansions do not begin until 2014, and it could take considerable time for capacity to balance out on its own.

The ACA makes important new investments in FQHCs and the National Health Service Corps, and the capacity of FQHCs is expected to double in the coming years.[3] The federal government could implement a ramp-up strategy focused on the most affected states and communities. The ACA provides federal funding for increasing Medicaid's fees for primary care to 100% of Medicare rates in 2013 and 2014, which should make Medicaid more attractive to primary care practitioners. The law also calls for strengthening plans for development of the health care workforce at both national and state levels.

The interstate differences in Medicaid expansions and primary care capacity underscore the importance of state-specific plans to strengthen that capacity. Of course, these plans should include efforts to train, attract, and retain primary care physicians. In addition, initiatives to train and deploy more nurse practitioners and physician assistants may work more quickly and be less expensive in the short run. Many of the highly challenged states have a lower-than-average ratio of advanced practice clinicians to primary care physicians, so are less able to utilize efficient team-based care. Many also have limiting scope-of-practice laws that restrict nonphysician clinicians in places where their skills are most needed, as the Institute of Medicine has recently noted.[4] Finally, state Medicaid agencies should carefully monitor the ratio of clinicians to enrollees, both in managed-care plans and fee-for-service programs, to ensure that primary care capacity is adequate to serve their beneficiaries.

The ACA takes a fundamental first step toward improving access to care by expanding insurance coverage. It also bolsters federal resources to help meet the heightened demand for health care services. Addressing the goals of health care reform will take a combined federal, state, and local strategy involving resource deployment and actions designed to expand the available short-term and long-term supply of well-trained primary care professionals who are ready and willing to serve the newly insured. Ensuring access to care will depend on our ability to achieve smart growth in both insurance coverage and primary care capacity.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the Department of Health Policy, George Washington University, Washington, DC.

This article (10.1056/NEJMp1011623) was published on January 26, 2011, at NEJM.org.

1. Bodenheimer T, Pham HH. Primary care: current problems and proposed solutions. Health Aff (Millwood) 2010;29:799-805.
2. Holahan J, Headen I. Medicaid coverage and spending in health reform: national and state-by-state results for adults at or below 133% FPL. Washington, DC: Kaiser Commission on Medicaid and the Uninsured, May 2010. (http://www.kff.org/healthreform/upload/Medicaid-Coverage-and-Spending-in-Health-Reform-National-and-State-By-State-Results-for-Adults-at-or-Below-133-FPL.pdf.)
3. Ku L, Richard P, Dor A, Tan E, Shin P, Rosenbaum S. Strengthening primary care to bend the cost curve: the expansion of community health centers through health reform. Washington, DC: Geiger Gibson/RCHN Community Health Foundation Research Collaborative, June 30, 2010. (http://www.gwumc.edu/sphhs/departments/healthpolicy/dhp_publications/pub_uploads/dhpPublication_895A7FC0-5056-9D20-3DDB8A6567031078.pdf.)
4. Institute of Medicine. The future of nursing: leading change, advancing health. Washington, DC: National Academies Press, 2010.

Copyright © 2011 Massachusetts Medical Society.

The New England Journal of Medicine
Downloaded from nejm.org on September 26, 2011. For personal use only. No other uses without permission.
Copyright © 2011 Massachusetts Medical Society. All rights reserved.