The Oregon experiment re-examined: the need to bolster primary care

John Heintzman and colleagues use less publicized evidence from Oregon to argue that unless access to primary care is improved, the benefits of widening the eligibility for public health insurance on individual and population health will be limited.

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The health policy community in the United States is heatedly discussing the Affordable Care Act of 2010, especially the costs and benefits associated with expanding public health insurance. These debates have been informed by analyses of the randomized expansion of Medicaid insurance in Oregon. Highly publicized findings of this landmark study are being used to predict what might happen in other states that choose to expand Medicaid coverage. However, much of the evidence supporting the benefits of health insurance and access to primary care has been lost in this discourse.

We briefly review the published research findings of the Oregon experiment, highlighting two less publicized studies that support the importance of primary care for robust health systems. We argue that natural policy experiments that reform healthcare financing (for example, recent expansions of public health insurance in the US) must tackle access to, and quality of, primary care if they are to fully evaluate the effect of these changes on population health. Lessons learned from the Oregon experiment are relevant across the globe as national leaders look for ways to bolster their healthcare infrastructure and improve the health of their societies.

US public insurance programs

Medicaid and Medicare, the two major public insurance programs in the US, were created in 1965.¹ Medicare is available to all citizens and permanent residents aged 65 and older and to younger people who have disabilities or are in need of certain medical procedures (for example, kidney dialysis). Once obtained Medicare membership can be maintained continuously and is federally administered and funded through a general payroll tax.

Medicaid, on the other hand, provides health insurance coverage to low income populations within specific demographic categories (for example, mothers who have dependent children and who meet citizenship or residency requirements).² Coverage has to be renewed frequently, and people often “churn” on and off Medicaid as changes in their circumstances alter their eligibility.³ ⁴ Eligible people who fail to re-enroll within 6-12 months of initial enrollment can lose coverage; such churning is a substantial and costly problem.³ ⁴ Additionally, some healthcare providers refuse to see Medicaid patients or only see a small percentage,⁵ ⁶ often because overall reimbursement is low. Federally qualified health centers and similar facilities receive increased reimbursement for serving Medicaid patients.⁷ These health centers, however, are not available everywhere or to all patient populations. Further, these centers may not have enough staff to meet local demand for care. Thus many Medicaid patients may not have dependable access to a primary care clinician.⁸ ⁹

Medicaid is a federal program that is administered at the state level and paid for by both federal and state funds. The federal government establishes the minimum requirements for coverage in every state, but states can choose to expand coverage to more individuals or for additional services. States can also ask permission from the federal government to make innovative changes to their Medicaid programs.¹⁰

Expanding coverage of health insurance

One provision of the Affordable Care Act was for all states to expand their Medicaid programs (by increasing the eligibility income thresholds) to cover more uninsured people. Shortly after the act was passed the US Supreme Court ruled that such expansions were optional.¹¹ Twenty six states and the District of Columbia had enrolled an estimated 4.8 million people in expanded Medicaid programs by March 2014.¹² However, sustained enrollment, reduced churn, and a long term reduction in the number of uninsured people will require further improvements.¹³ The three states still deciding about expanding...
described the need for continuity in their relationship with a Medicaid enrollee in the Oregon experiment, interviewees of other analyses of the Oregon experiment could be misleading. Understanding the studies’ limitations or considering the results in a longitudinal fashion that could better examine utilisation of records would enable more precise measurement of utilisation and quality in a longitudinal fashion that could better examine the effects of insurance coverage and access to primary care on health outcomes.

A study by Baicker and colleagues, based on a subset of patients in the Portland metropolitan area, found no significant changes in health outcomes such as blood pressure, cholesterol concentration, and glycated hemoglobin after expansion. However, relatively few patients with these health problems were included in the study, which limited the power to detect significant changes in health status. In addition, data were collected at a single point in time, which prevented a longitudinal view of the effect of new coverage, and those who gained insurance during this expansion were not necessarily insured throughout the study period or at the time of data collection, complicating comparisons between groups. The study also failed to objectively evaluate access to primary care, instead using self reported data on care utilisation, access, and quality. A more objective evaluation of primary care utilization—direct review of medical records—would not be subject to the same recall and reporting biases as self reported data. A direct review of records would enable more precise measurement of utilisation and quality in a longitudinal fashion that could better examine the effects of insurance coverage and access to primary care on health outcomes.

The other high profile study, by Taubman and colleagues, showed an increase in visits to the emergency department for non-emergent conditions, and hospital admissions and greater use of other high cost resources. They reported that newly insured people showed an increase in visits to the emergency department by people who gained Medicaid, compared with those who remained uninsured. They reported that newly insured people made more visits to the emergency department for non-emergent conditions than those already insured, suggesting that primary care visits might have been more appropriate for these patients; however, access to, and previous use of, primary care were not assessed.

**Oregon experiment**

When Oregon announced plans to expand its Medicaid program in 2008 nearly 100 000 residents indicated their intent to apply for coverage. With resources to expand coverage to only 10 000 people, Oregon officials invited residents to put their names on a reservation list. People from this list were randomly selected to apply for insurance coverage. As this was the first randomized Medicaid expansion in the US, findings from the study entered the national spotlight and garnered substantial media attention. Two publications in particular were framed in the media as cautionary tales, suggesting that Medicaid expansions provide little direct health benefit and increase use of high cost healthcare. However, both of these studies have limitations, including the failure to adequately evaluate access to primary care.

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**Centrality of primary care**

Interpreting these highly publicized findings without understanding the studies’ limitations or considering the results of other analyses of the Oregon experiment could be misleading. Two less publicized studies suggest that access to primary care has an important influence on how Medicaid expansions affect previously uninsured patients.

In a qualitative analysis of a representative sample of new Medicaid enrollees in the Oregon experiment, interviewees described the need for continuity in their relationship with a primary care provider who could work with them over months—or years—to catch up on previously delayed healthcare needs and help coordinate necessary care. Baicker and colleagues’ finding that patients who gained Medicaid coverage reported few health improvements in the short term could be because they lacked access to primary care, because the follow-up period was too short to see the benefits of partnering with a primary care provider, or both. Indeed, many patients in Baicker et al’s study lost their new Medicaid coverage within six months, giving them little time to establish such partnerships and work towards achieving long term health gains.

Another study, however, showed that when patients retain coverage they eventually use primary care services at rates similar to other insured patients. This study, by Gold and colleagues, used electronic health record data from 67 federally qualified health centers in Oregon to study how patients used primary care medical services one year before and one year after gaining Medicaid. Gold and colleagues found a sharp increase in the use of primary care services by newly insured patients immediately after coverage began. This suggested pent-up demand for primary care among uninsured patients. However, within three months the level of use among newly insured patients fell to the level of other insured patients. Those who remained uninsured throughout the study period continued to receive fewer primary care services than those with coverage.

This study also showed that patients who were registered with a federally qualified health center before getting Medicaid coverage sought more primary care services from this same health center after they gained coverage. This suggests that for those with existing access to a primary care clinician, gaining public insurance coverage facilitates the utilization of primary care, and it does so in a pattern equivalent to other insurance types with similar primary care access. The association between new Medicaid coverage and increased use of emergency departments reported by Taubman and colleagues was likely mitigated (or not significant) for those receiving good primary care services—it has been demonstrated in many settings that adequate availability of primary care reduces visits to the emergency department and hospital admissions and that insurance coverage and primary care availability are interdependent in improving outcomes and providing services. Indeed, a recent editorial in The BMJ highlighted that in Massachusetts insurance expansion alone did not reduce hospital readmissions, possibly because it was not accompanied by expanded access to primary care. In summary it is unwise to analyse coverage expansion without considering (and, ideally, controlling for) how access to, and quality of, primary care affects study outcomes. The importance of a high quality primary care infrastructure, coupled with adequate insurance coverage, cannot be overstated. Oregon has made significant progress since the 2008 expansions: the introduction of coordinated care organizations and a renewed focus on population health, primary care, and Medicaid payment changes are associated with significant reductions in emergency department visits and hospital admissions and greater use of primary care.

**Where do we go from here?**

International evidence indicates that a robust primary care infrastructure must accompany coverage expansions in order to maximize individual and population health gains. Yet the US faces a critical shortage of primary care clinicians, which is associated with overuse of emergency departments, hospitals, and other high cost resources. As millions of American
people obtain new coverage, primary care shortages may grow more painful—a system unable to meet current demand will struggle even more as that demand rapidly expands. Thus achieving the US Institute for Healthcare Improvement’s triple aims of improving population health, improving the experience of care, and lowering the cost of care25 requires people to have both insurance coverage and adequate primary care.

The Affordable Care Act will help people obtain insurance, but where will they go for primary care? We suggest several measures. Education of medical graduates (largely funded by US taxpayers) must be matched to the population’s healthcare needs. This will require the creation of new systems to regularly assess needs, prioritize resources, and develop new support programs to train the necessary primary care workforce. The accountability of this workforce to society has been emphasized recently in a report from the Institute of Medicine of the National Academies, which called for greater transparency in the US graduate medical education system.30 Alternative payment structures must also be developed to better support and incentivize primary care clinicians and patient centered medical homes to meet the needs of newly insured patients. Current pilot programs should be rigorously evaluated and replicated if they prove effective.11,22 Public healthcare dollars should be allocated based on the value of primary care. Finally, new research methods are needed to study the process, outcomes, and complexity of primary care. The fields of complexity science, multilevel evaluation and intervention, dissemination and implementation, and others must help build understanding of how to most effectively deliver and evaluate primary care.

Conclusion
If primary care isn’t bolstered other efforts to improve the US healthcare system may fail. Health reform efforts that do not enhance primary care infrastructure can only tackle part of the population’s true needs. Oregon is now seeing early signs of success from combining insurance reform and expansions with the reorganization of primary care.26 We hope that these early signs and the lesson that primary care infrastructure is a necessary companion to insurance expansions—in the US and in any healthcare system—are not lost among the attention paid to more politically provocative research findings.

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Key messages

Findings from the Oregon experiment that expanding insurance coverage in the United States may not improve health outcomes were highly publicized.

Less publicized research indicates that adequate primary care resources are a key factor in the success of insurance provision to a population.

For good population health, US policymakers should increasingly direct resources towards the trainees, workforce, and study of primary care.