

DAY ONE PROJECT

Rethinking Payment for Prevention in Healthcare

Maria Alva

January 2021

The Day One Project offers a platform for ideas that represent a broad range of perspectives across S&T disciplines. The views and opinions expressed in this proposal are those of the author(s) and do not reflect the views and opinions of the Day One Project or its S&T Leadership Council.

Summary

Prevention plays a crucial and underappreciated role in our health system. To improve health outcomes and bring down costs, it will be important to establish a better balance between preventive measures and drug treatments. The next administration should provide incentives to healthcare providers that scale up—and reduce costs of delivering—preventive interventions with demonstrated efficacy. Currently, the U.S. Department of Health and Human Services (HHS) sets broad standards regarding managed care contracts. But states have considerable latitude. States can set income eligibility criteria, define services, and set alternative payment methods with Managed Care Organizations (MCOs). And in just the last few decades, Medicaid programs have been almost fully privatized: MCOs now cover over 85% of the Medicaid population. Because of the existing patchwork of insurance programs and state rules, it is important that regulations set minimum national standards to ensure that health care is accessible and affordable for those who need it the most. Particularly important to this effort are non-distortionary prices and reimbursement policies.

For a few decades, policymakers have, with bi-partisan consensus, moved away from a fee-for-service (FFS) system whereby providers are paid for service delivery and toward capitation and pay for performance (p4p) models.¹ While these models offer significant improvements over FFS models, each involves risks of incentivizing non-optimal care and expenditures if they are not structured carefully. When paying capitation rates, bonuses adjusting for population risk alone should be avoided as this incentivizes an increase in diagnoses without necessarily improving care. Either all health care payments should be p4p, or a p4p component should be added to the capitation base. Pharmacological interventions should also be included in the overall provider reimbursement structure to align reimbursement incentives with health outcomes. Healthcare providers will then determine the right mix of services. Furthermore, while p4p is generally a good idea (i.e., hospitals and MCOs are rewarded for decreasing the number of avoidable hospital readmissions), if this metric is not applied homogeneously across all services, this payment structure significantly hampers the provision of preventive services.

Challenge and Opportunity

The cost of healthcare is one of our nation's biggest challenges. Medicare and Medicaid represent 25% of the entire federal budget. Private health insurance is as expensive. We spend twice as much on medical care as other OECD countries while having a lower life expectancy.

Chronic conditions are the leading driver of healthcare costs in the U.S. Highly recommended preventive services, which are proven to reduce the incidence and disability associated with chronic conditions, are severely underutilized because we do not support their coverage, which requires continuity of engagement and a relatively long time horizon to generate savings.

¹ See FAQ #4 for more on capitation.

Traditionally, coverage for preventive services has been less generous than acute care coverage. Medications are paid for at the point of prescription and delivery, and payers do not condition reimbursement on adherence or achieved changes in targeted clinical measures. Some behavioral change programs however are structured as p4p interventions despite studies showing these have greater efficacy compared to pharmacological interventions in head-to-head trials and pragmatic community trials proving their cost-effectiveness.^{2,3} This discrepancy in reimbursement favors the pharmaceutical industry and distorts the types of prevention services that are offered. Different prevention services have different payment structures, and this inconsistency results in misallocation of efforts. Gaps between costs to deliver an intervention and the amount reimbursed for delivery, as well as the high administrative costs to recover compensation for services with disparate payment mechanisms and verification requirements are all disincentives that further reduce the supply of preventive services.

While Medicare and Medicaid have not historically had a strong focus on prevention, the Centers for Medicare & Medicaid Services (CMS) have been moving in that direction by using innovation funding (\$10B over ten years for the Center for Medicare and Medicaid Innovation) and waiver authorities to test innovative payment models that lead to better health outcomes at the same or lower cost to taxpayers. However, decades of evidence-based programs have failed to scale up. The Diabetes Prevention Program (DPP), Diabetes Self-Management Education (DSME), Medical Nutrition Therapy (MNT), Intensive Behavioral Therapy (IBT) are just a few examples of programs that have shown significant and clinically meaningful health improvements. The return on investment for some of these programs is as high as \$2.2 to every \$1 spent.⁴ Yet despite these excellent results, the reach of these programs has remained very limited.

Budgetary and system constraints hinder the dissemination of evidence-based approaches to improve health that could also save money. In particular, the existence of different payment mechanisms for prevention programs creates biases and skew incentives. Some programs are poorly reimbursed in a fee-for-service manner (e.g., the Medicare reimbursement for 30 minutes of group education and training for 5 to 8 patients is \$10 per patient).⁵ Others use pay-for-performance mechanisms (e.g., providers are reimbursed only if patients lose 5% of their body weight).⁶ When not applied uniformly, p4p could exacerbate health disparities because p4p models penalize health professionals that serve lower-income, minority, and high-need populations that tend to have poorer treatment outcomes; as such, p4p incentivizes "cherry-picking" behaviors in which providers turn down individuals whom they expect to have less-optimal outcomes. There are also time limits on the use of preventive services. Medicare

² Knowler WC, Fowler SE, et al. 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study. *Lancet*, 374 (2009):1677-86.

³ Ali, M.K., Echouffo-Tcheugui, J.B., and Williamson, D.F.: How effective were lifestyle interventions in real-world settings that were modeled on the Diabetes Prevention Program? *Health Aff*. 31, no1 (2012): 67-75

⁴ Alva ML, Hoerger TJ, Jeyaraman R, Amico P, Rojas-Smith L., "Impact of the YMCA of the USA diabetes prevention program on Medicare spending and utilization." *Health Aff (Millwood)*. 36, no3 (2017):417-24.

⁵ CMS, Medicare Diabetes Prevention Program (MDPP) Expanded Model <https://innovation.cms.gov/innovation-models/medicare-diabetes-prevention-program>. Accessed on 10/14/2020.

currently places a once-in-a-lifetime limit on reimbursement for programs like DPP, DSME, MNT, and IBT, even though evidence shows that follow-ups are likely to improve the sustainability of behavioral change and outcomes.⁷ Some programs also limit their duration (IBT lasts for as little as 15 minutes, for example). In contrast, there are no time-limits on reimbursement for drugs, mostly since it is well-established that the positive effects of drugs are likely to disappear after discontinuation.

Addressing payment and quality of care requires monitoring and a coding standardization, an infrastructure that supports quality data collection and sharing. Currently we have considerable data fragmentation and lags in data availability (several months for Medicare and vital statistics and years for Medicaid).

Plan of Action

To better understand the distortionary effects and unintended consequences of different payment models, and to address fairness considerations around coverage and payment for services and treatments, the proposed plan of action has three broad steps:

1. The next administration should convene a multidisciplinary study group that includes Medicare and Medicaid beneficiaries, healthcare practitioners and billing staff, insurance companies, drug companies, state health departments, Managed Care Organizations (MCOs), economists, and public health researchers. Their aims should be to promote a shared understanding of the nation's goals (price containment and quality of care), recognize potential tensions across different stakeholders aims, and ensure that evidence-based medicine informs policymaking. After collecting, considering, and analyzing different stakeholders' input, the study group should recommend optimal price mechanisms that are simple and non-distortionary, have a low administrative cost burden, and would be appropriate in outpatient settings across all types of interventions (pharmacological and non-pharmacological). The study group could be housed within the HHS structure,²⁴ operate as a White House committee, or take the form of an independent, bipartisan decision-making institute with authority to develop guidance on treatment assessments and reimbursement guidelines.²⁵ There are, of course, tradeoffs and an inverse relationship between the degree of independence a group might enjoy and the degree of power it might have to enact change.

⁷ Michie S, Johnston M, Abraham C, Lawton R, Parker D, Walker A: Making psychological theory useful for implementing evidence-based practice: A consensus approach. *Qual Saf Health Care*. 14 (2005): 26-33.

²⁴ The Agency for Healthcare Research and Quality is an agency within HHS that supports collecting information on health care spending and use through the Healthcare Cost and Utilization Project (HCUP) and Medical Expenditure Panel Survey (MEPS). Overtime, their mandate and funding has been reduced.

²⁵ One such institute already exists, created through the 2010 Patient Protection and Affordable Care Act called The Patient-Centered Outcomes Research Institute (PCORI). PCORI is government-sponsored and charged with funding comparative effectiveness research that assists consumers, clinicians, purchasers, and policymakers in making informed decisions to improve health care.

2. Following the study group's guidance, HHS should provide guidelines to contracts between states and MCOs and between MCOs and providers. The study group should also provide technical assistance to states in the implementation of these guidelines, specifically about prioritization and appraisals. This technical assistance process should be rooted in systematic reviews and economic models and be developed in consultation with multiple stakeholders and external reviewers.
3. Following its initial deliberations, the group should adopt an iterative review process. At the end of each fiscal year, the study group and/or a designated committee on healthcare payment would monitor adherence to and engagement with the guidelines and evaluate whether the most cost-effective evidence-based-interventions (EBIs) are indeed the most used. Over time, to decide reimbursements and prioritize which treatment effectiveness evaluations to review, the group or committee will operate by consensus and based on suggestions from stakeholders. MCOs and healthcare providers would then be asked to implement the recommendations within a pre-specified period from the date the guidance was issued or demonstrate that their existing practices are cost-neutral and more effective relative to the guidelines. To close the gap between research EBIs and routine clinical practice, better data integration is required at the national level between claims data (containing billing information) and electronic medical records (containing quality-of-care markers via vital signs and lab results).²⁶ Data integration is already supported in a localized manner by the Centers for Medicare & Medicaid. Expanding this effort nationally would advance care management and facilitate the monitoring and uniformity of care quality.

Conclusion

It is essential to address fairness around coverage and reimbursement and to have a consistent payment mechanism, at a minimum within Medicare and Medicaid plans and the same health conditions. Failing to address the imbalance of payment across interventions will permit continued uncontrolled growth in healthcare expenditures and misallocation of resources. Physicians have financial incentives to favor high-payment and low-cost patients, especially when capacity is scarce. A uniform payment model reduces risk exposure and disincentivizes cherry-picking patients. It also reduces the incentives to favor the supply of interventions that might not lead to health improvements. Though a p4p system offers solutions to many of these issues, p4p requires a uniform and efficient data system to collect quality assessments. Missing outcome data should not be ignored. To incentivize data collection, missing outcomes could be considered as negative outcomes and therefore results in lower payments. The American

²⁶ Significant improvements have already been made to the Transformed Medicaid Statistical Information System (T-MSIS). The lag in T-MSIS's reporting went from 4 to 2 years, but that is still a large gap. Apart from sporadic projects like Million Hearts, there is virtually no data integration to monitor care quality.

DAY ONE PROJECT

Recovery and Reinvestment Act of 2009 and current public health emergencies provide a strong rationale for moving forward with national standard Health IT systems. Clear guidelines from HHS and uniformity of reimbursement mechanisms in state contracts with MCOs (under the guidance of CMS) across treatment options are critical for price containment, quality of care, and to ensure no conflict in priorities between providers and beneficiaries.

Frequently Asked Questions

1. Why are chronic diseases so difficult to treat?

Our health system remains primarily designed to treat people with acute problems and often provides fragmented care. Yet 75% of the nation's health expenditure goes to treat chronic conditions. Heart disease, cancer, and diabetes are the leading causes of death and disability in the U.S. Diabetes, for example, affects more than 25 percent of Americans over 65. The estimated economic cost of diagnosed diabetes is \$245 billion a year. One important modifiable factor at the root of many chronic conditions is obesity. Patients often find it hard to implement the lifestyle modification changes required to prevent such chronic conditions. Treatment of chronic conditions typically falls to busy primary care physicians, who don't have enough time to provide patients with the counseling and life-coaching that treatment of these conditions often requires.

2. Are there specific examples of better management of chronic diseases through preventive care?

We have strong evidence from trials of structured lifestyle intervention programs (e.g., the Diabetes Prevention Program (DPP)) showing that half of the new diabetes cases could be avoided if persons with prediabetes changed their lifestyle habits to lose a modest amount of body weight. Moreover, the DPP has been successfully translated into cost-effective community-based prevention interventions, but nationally, these evidence-based interventions (EBIs) are not being used sufficiently. To scale up the implementation of diabetes prevention EBIs, we need to address the challenges of getting organizations to adopt EBIs. The cost of offering preventive care often does not match the reimbursement amounts proposed by CMS. For example, the cost of providing lifestyle intervention programs in North Carolina has been shown to be higher than the CMS proposed reimbursement amount (\$10 per person for 30 mins in group settings). The average minimum price per person per month for a local health department or community health center to offer the programs was \$79 if led by a registered professional, \$49 if led by a community health worker, and \$57 if administered online.³⁶

3. What is the evidence on p4p?

In primary care settings, the impact of p4p has been outstanding. Relatively small monetary incentives per patient, given to doctors, have significantly improved biomarkers. However, the way p4p has been implemented lacks the uniformity needed not to distort incentives and creates biases across groups, conditions, and settings. The evidence is considerably more mixed in more complex settings, like hospitals.³⁷ The first comprehensive evaluation of p4p in the US started in

³⁶ ML Alva, CD Samuel-Hodge, D Porterfield, T Thomas, J Leeman, A Feasibility Study of Supply and Demand for Diabetes Prevention Programs in North Carolina, PCD, 2017, Accessed via: https://www.cdc.gov/pcd/issues/2017/16_0604.htm

³⁷ A.K. Jha, K.E. Joynt, E.J. Orav, A.M. Epstein, The long-term effect of premier pay for performance on patient outcomes, N. Engl. J. Med. 366 (2012): 1606–1615.

2013 when Vermont was awarded a \$45 million State Innovation Model (SIM) grant from the federal Centers for Medicare and Medicaid Innovation (CMMI). The resulting effort, known as the Vermont Health Care Innovation Project (VHCIP), has worked on testing innovative payment and delivery system reform models throughout the state—more than half of the state's eligible population participated in payment reform activities. Vermont's example has highlighted that to motivate improvements, recognition bestowed for top performances is as important as adequate compensation.

4. What is the evidence on capitation?

Capitation is a fixed payment per patient per month irrespectively of the amount of health care services provided. There has been a significant amount of research regarding the impact of switching from FFS to capitation, although that research has been primarily focused on health care utilization and costs rather than on health outcomes. The conclusion on savings has been mixed. The conclusion on outcomes (where there is, however, less evidence) seems to be negative but also has been concentrated on very specific disease areas/populations. For example, some research shows that capitation payment to MCOs serving pregnant women in CA was associated with higher rates of low birth weight, greater prematurity, and higher neonatal deaths,³⁸ and that a mandated change from Medicaid FFS to Medicaid MCO between October 2007 and May 2008 in SC was associated with about a third more Medicaid children being diagnosed for ADHD and asthma.³⁹ These studies have careful identification strategies and focus on mandated changes so as to avoid the issue of self-selection (e.g., some states have had voluntary rather than mandatory changes, which makes evaluations more complicated). The main argument seems to be that due to the incentives created by the risk adjustment in capitation, it makes sense for organizations to diagnose more by increasing the risk profile of patients and hence per capita reimbursement but at the same time keep costs down by reducing healthcare utilization because if the MCOs spends less, they keep the difference. This implies that there is no long-run investment because, due to churning in the Medicaid population, a provider is not guaranteed to capture the benefits of their primary care/preventive investments. An interesting question is whether the adoption of MMCOs changes the use of appropriate preventive medical care, particularly if there are proven benefits (even if long-term) from preventive health.

5. Why has uniformity in reimbursement across treatments not been done before?

The United States has had historically little appetite for regulations and methodologies that would put a price tag on performance. Furthermore, several committees in the House and the Senate have domain over health policy. The chairs of those committees often do not share the

³⁸ Anna Aizer & Janet Currie & Enrico Moretti. "Does Managed Care Hurt Health? Evidence from Medicaid Mothers," *The Review of Economics and Statistics*, MIT Press, vol. 89 no.3 (August 2007): 385-399.

³⁹ Anna Chorniy & Janet Currie & Lyudmyla Sonchak. "Exploding Asthma and ADHD Caseloads: The Role of Medicaid Managed Care," *Journal of Health Economics*, 60 (July 2018): 1-15.

legislative vision of the president or other chairs.⁴⁰ Yet, the impetus does exist to develop guidance and set targets to monitor interventions' health effects and improve outcomes.

In 2010, Congress passed legislation to establish a community preventive services task force within the Centers for Disease Control and Prevention.⁴¹ This task force as well as a number of prior groups offer valuable evidence-based guidelines but do not have the authority to set prices. Several attempts have also been made to evaluate the benefits and costs savings of interventions through p4p or broad quality initiatives. These efforts have been limited to states willing to participate and have had short durations because they lacked the authority to implement policy after the demonstration period.

Independent organizations seeking to improve healthcare value, like the Institute for Clinical and Economic Review or the Center for Health Care Strategies, have offered assessments like those of the National Institute for Clinical Excellence in the United Kingdom. They have come under criticism from drug makers, who compete and undergo these same assessments abroad. Many European countries, as well as Canada and Australia, among other countries, use cost-effectiveness reviews to determine which interventions qualify for reimbursement and at what prices. These assessments always compare new treatments to existing ones. Past proposals to do the same in the United States have generated negative media coverage in some outlets and faced intense pressure from lobbyists who do not welcome competition.

6. Why should the administration take this issue now?

COVID-19 should remind us not only about the importance of chronic conditions as predictors of morbidity and mortality but also about how their prevalence is unequally distributed across racial and economic groups. We do not yet have a complete picture of the health system vulnerabilities during and post-pandemic or what might be the impact of the decline in demand for prevention services due to fear of contagion and loss of employer-based insurance. As the Great Depression was an important catalyst for the Social Security Act of 1935, the coronavirus experience may generate and consolidate much needed reforms in the healthcare system, starting with low hanging fruits like uniformity in reimbursement across treatments.

⁴⁰ Marmor T, Oberlander J. The patchwork: Health reform, American style. *Soc Sci Med.* 72, (Jan 2011):125-8.

⁴¹ Public Law 111–148. March 23, 2010. <https://www.congress.gov/111/plaws/publ148/PLAW-111publ148.pdf>

About the Author



Maria Alva is a health economist with over a decade of research experience. Maria is an Assistant Research Professor at the Massive Data Institute at Georgetown University. Before that, she worked as a federal contractor for the IMPAQ International Health Division as a Senior Research Associate and RTI International as a health economist. Maria's work has involved impact evaluations of programs addressing chronic disease prevention at the state and local levels. Maria started her career at the University of Oxford, where her research focused on economic analyses of the United Kingdom Prospective Diabetes Study—a landmark trial of policies to improve type 2 diabetes management. Maria's work has had a significant policy impact. For example, spending estimates from the evaluation of the YMCA DPP informed CMS' policy—Medicare included the Diabetes Prevention Program as a covered benefit in 2018. Maria's work has been published in leading field journals such as Health Affairs, Health Economics, Health Services Research, American Journal of Preventive Medicine, and Diabetic Medicine.



About the Day One Project

The Day One Project is dedicated to democratizing the policymaking process by working with new and expert voices across the science and technology community, helping to develop actionable policies that can improve the lives of all Americans, and readying them for Day One of the next presidential term. For more about the Day One Project, visit dayoneproject.org.