

**SPECIAL COMMUNICATION**

# Heeding the Call for Urgent Primary Care Payment Reform: What Do We Know about How to Get Started?

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**The COVID-19 pandemic has added further urgency to the need for primary care payment reform. Fee-for-service payments limit the flexibility of practices to respond to crises and leave practices without sufficient revenues when visit volumes decrease. Historic fee-for-service payments have been inadequate, and prior implementations of prospective payments have encountered challenges; there is a need to bring forward the best available evidence on how to design prospective payments for payers and policymakers. Evidence suggests setting primary care investment at 10% to 12% of the total cost of care, *approximately* translating to an average \$85 per member per month, with significant variation based on age and adjustment for medical and social measures of risk. Enhanced investment in primary care should be aligned across payers and support practice transformation to advanced models of care. (J Am Board Fam Med 2021;34:424–429.)**

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Primary care is the foundation of a robust health care system, shown to lead to better health outcomes, decreased inequities,<sup>1</sup> higher quality of care, and lower costs.<sup>2</sup> Despite this evidence, primary care in the United States has been chronically underfunded and predominantly paid for via a flawed model. In the fee-for-service (FFS) model, practices code and bill for delivering specific services, collect applicable copays from patients, and are reimbursed by payers. This model is flawed because it is retroactive and transactional in nature, limiting flexibility in care design and incentivizing an increased volume of services. Further, billable services do not encompass all of the care provided in primary care,<sup>3</sup> and services may be billable only by certain provider types, constraining team-based care.

The COVID-19 pandemic has further revealed the weaknesses of FFS for primary care: the loss of visit-based revenue has led to practice furloughs, layoffs, and closures. As of late July, nearly 1 in 4 primary care clinicians reported recent layoffs or furloughs, and 1 in 5 were uncertain of the financial viability of their practice going forward.<sup>4</sup> Increased supply of primary care physicians per 10,000 people has been linked to lower mortality rates, longer life expectancy, better self-reported health, and reduced rates of low birth weight.<sup>1,5</sup> Higher proportions of primary care physicians have also been associated with reduced emergency department visits and hospitalizations.<sup>6</sup> Closures and loss of staffing in primary care practices place the health of communities at risk.

In the ongoing efforts to move away from FFS, policy experts and primary care providers are increasingly calling for the use of a global payment for primary care services, typically paid as a per-member, per-month (PMPM) amount. To facilitate this movement, an important question must be answered: how do we design an optimal primary care PMPM? Efforts to use capitation in the past failed in part because historic FFS reimbursements were used to determine the amount of payment in a PMPM. These amounts were not risk adjusted

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sufficiently to account for variation in patient needs and did not increase the overall investment in primary care to enable care transformation. As a result, payments were insufficient, and primary care practices faced unmanageable levels of financial risk. We consider several sources of data that can be used to inform the discussion of an appropriate PMPM for primary care with regard to its amount, risk, scope, and implementation.

## Amount

### *Percent Primary Care Spend*

One source of data to inform primary care PMPM rate setting is the literature on primary care spend as a proportion of the total cost of care. Estimates of current levels of spending on primary care generally range from 5.8% to 7.7% of the total cost of care.<sup>7</sup> One study estimated the current primary care spending on Medicare beneficiaries is even lower at 2.12% or 4.88% of the total cost of care, depending on definition used.<sup>8</sup> Both state-level<sup>9</sup> and country-level<sup>1</sup> comparisons demonstrate improved cost and quality outcomes with higher levels of financial support for primary care. Based on this evidence, experts have suggested primary care spend targets around double the current rates, on the order of 10% to 12%.<sup>10</sup>

Medicaid and Medicare's annual budgets total approximately \$1348 billion.<sup>11</sup> Designating 10% to primary care would create a Centers for Medicare & Medicaid Services (CMS) primary care budget of \$134.8 billion. With 60 million Medicare<sup>12</sup> and 72 million Medicaid<sup>13</sup> beneficiaries in the country, that amount is equivalent to an *average* \$85 PMPM.

### *Health Care Disrupters*

A second source of data comes from an innovative primary care company, Iora Health. Iora builds on the idea of increased primary care investment by setting primary care payment at 10% of the prior year's total health care spending, or using risk-adjusted global payments similar to this amount.<sup>14</sup> (Note that while Iora primarily contracts with insurers, they have also opened a few direct primary care practices.) With this increased investment and freedom from FFS, Iora has developed a care delivery model that employs health coaches and a self-created health information technology platform. As a result, Iora reports rates of hypertension control, diabetes control, and patient satisfaction higher

than the national average as well as decreases in inpatient admissions and emergency department visits.<sup>15</sup>

### *Direct Primary Care*

A third source of data are the membership rates used by direct primary care (DPC) practices. DPC practices charge patients or self-insured employers a monthly membership fee for all their primary care and do not bill third-party insurers. These practices report PMPM fees averaging \$40 for children, \$65-80 for adults up to age 65, and \$85 for adults 65 and older.<sup>16</sup> Approximately 10% of DPC practices include a small per-visit fee as well. DPC practices use this alternative financing to maintain smaller than traditional patient panels, enhance patient access to care, and have longer appointment times. There are limited data on outcomes in the DPC model, but 1 evaluation of an employer-paid DPC model found lower emergency department usage.<sup>17</sup> The same evaluation also reported nearly all DPC physicians surveyed felt they had better professional satisfaction and relationships with their patients under the model.

### *Calculated Breakeven Rates*

A study of midsize pediatric practices estimated the average primary care PMPM for practices to break even would be \$24 (80% of practices would break even at an aggregated rate of \$35 PMPM).<sup>18</sup> Age-adjusted, sex-adjusted, and risk-adjusted rates ranged from \$14 to \$66 PMPM. Enhanced staffing in line with advanced primary care models increased this amount by \$3 to \$5.50 PMPM. Such calculations could establish a floor for primary care PMPMs for pediatric populations. Similar studies in primary care practices serving adults or both adult and pediatric populations would help to establish an adult PMPM floor. Estimates for the start-up and ongoing costs of supporting advanced medical home capabilities in adult and mixed primary care practices could then be added to this floor.<sup>19</sup>

### *Risk and Scope*

While some have voiced concerns that PMPMs may lead to inappropriate underdelivery of services or "cherry picking" healthier patients, the evidence does not clearly suggest this.<sup>20</sup> Such concerns ignore physicians' intrinsic motivation to provide the best care for their patients. Several design

features of a primary care PMPM will also mitigate incentives to cherry pick and inappropriately underdeliver services: limiting financial risk to what is more directly under primary care physicians' control, risk adjustment of PMPMs based on individual and community-level characteristics, and mechanisms to cover unpredictably high costs.

PMPMs can be designed to cover all primary care, all outpatient services, or the total cost of care. Limiting the PMPM to primary care narrows financial risk for primary care practices to what is more directly under their control. Experts have recommended such a comprehensive primary care PMPM would replace all encounter-based payments, salaries, and infrastructure necessary for a practice to serve as an advanced medical home.<sup>21</sup> Notably, this should not be limited to physical health services but inclusive of behavioral health care, connections to social services, and coordination with public health. PMPMs have the potential to overcompensate clinicians with a narrower scope of practice and undercompensate those with a broader scope of practice.<sup>22</sup> More nuanced questions as to how this PMPM would appropriately reflect comprehensiveness of care and if certain services should be carved out merit rapid cycle evaluation and adjustments.

The right amount for a primary care PMPM is not the same for everyone. Without risk adjustments, PMPM payments will be insufficient for patients with greater health care needs. CMS uses the hierarchical condition category (HCC) system for risk adjustment of payments to Medicare Advantage plans (the private option for Medicare, also called Medicare Part C) and for PMPMs in demonstration projects. There are 79 HCCs, based on thousands of ICD-10 diagnostic codes for medical conditions. Combined with demographic factors (age, sex) and disability status, HCCs are used to assign a risk adjustment factor score to predict costs. This model improves the matching of PMPM amounts to patient needs but only to a limited extent: the model explains less than 15% of variation in future medical expenses.<sup>23</sup>

Other risk adjustment models have been developed for use in primary care, including the primary care activity levels (PCAL) model.<sup>24</sup> This model uses the resources spent on other types of care to estimate funds needed to deliver comprehensive primary care services. In one study, PCAL explained 57% of total health spending.<sup>24</sup>

Incorporating individual and community-level measures of social risk improves the predictive power of risk models and better matches payment to need.<sup>25</sup> Deprivation indices are available to use as measures of community-level risk.<sup>26</sup> These indices include components related to education, employment, poverty, and housing.

Additional mechanisms can be employed to mitigate financial risk to practices when patients experience unpredictably high costs.<sup>27</sup> Reinsurance covers individual costs that exceed a specified threshold. Risk corridors create a threshold for aggregate spending above which insurers cover costs. As a part of these arrangements, payers and practices also share in savings if spending is less than the total of the global payments.

### **Attribution**

Use of primary care global payment requires attributing patients to the appropriate primary care provider. There is not a single accepted standard method for claims-based and encounter-based attribution, and approaches must balance simplicity and feasibility with accuracy. Best practices in patient attribution include encouraging patient selection of their assigned primary care provider, using claims-based or encounter-based data if patient attestation is not available, and ensuring transparency of information on attribution to both patients and providers.<sup>28</sup>

### **Implementation**

The inertia of the status quo is powerful. Many clinicians view FFS as the “devil you know” and feel apprehensive about shifting to an entirely different payment model. Stepwise shifts of increasing PMPM amounts and decreasing FFS could make the complete transition to global payment less daunting for practices, but this would also delay the ability for more significant practice change and continue the significant cost and administrative burden associated with billing for specific services.<sup>29</sup> As Rushika Fernandopulle, the founder of Iora Health has stated, “As long as you do any FFS, you still need the old coding and administrative systems, and it is very difficult to truly change the processes, technology, and culture. The sort of care one delivers to optimize comprehensive payment is not a little different from the sort of care to optimize FFS—it is completely different and sometimes diametrically opposed.”<sup>14</sup> Simulation models suggest at least 63% of practice

payments need to be global payments to enable significant practice transformation.<sup>30</sup>

The idea that billing for any FFS payments compromises the ability to make significant practice changes also underscores the need for payment reform aligned across payers. A given practice receives multiple methods of payment with different requirements from a variety of payers. While 1 payer implementing PMPMs with a practice will provide useful upfront funds, it will not enable wide-scale practice change.

The Payment Tactic Team of Family Medicine for America's Health, an initiative of several family medicine organizations, developed a comprehensive primary care payment calculator that can be used as a starting point for estimating PMPMs for a practice.<sup>31</sup> The calculator builds on the evidence detailed in this brief with added adjustments for quality, efficiency, and infrastructure, with 5 total components:<sup>32</sup>

1. Base rate, intended to approximate 10% to 15% of the total cost of care and using the primary care activity levels model.
2. Population adjustment for the social determinants of health.
3. Quality adjustment for a primary care measure set.
4. Efficiency adjustment for comprehensiveness of care and avoidable use rates.
5. Infrastructure adjustment for transformation to team-based, outcome-oriented care.

### Connecting Payment and Care Delivery

Simply increasing payment does not guarantee enhancements in care delivery and improved outcomes. Tying increased investment to advanced primary care models and the foundational pillars of primary care links the investment to its intended aims. Models of advanced care delivery such as the patient-centered medical home<sup>33–36</sup> and pillars of primary care including continuity<sup>37–39</sup> and comprehensiveness<sup>40</sup> have been generally shown to increase patient satisfaction, improve quality measures, and lower costs and unnecessary use.

Practices and payers frequently encounter a chicken-egg conundrum: practices need flexible, increased support for care transformation; payers want to see evidence of advanced care delivery to justify increased payments. Support required for advanced care delivery can be separated into start-up

and ongoing costs. A potential solution to this conundrum could be to require a well-developed and feasible plan for care transformation to justify start-up funds, with higher levels of ongoing support contingent on achieving care transformation targets.

### Conclusion

The current state of primary care demands urgent payment reform. Fueled by FFS, practices must see high volumes of patients to maintain revenues, limiting their ability to flexibly design optimal care and contributing to burnout. The lack of ability to shift how care is provided during the COVID-19 pandemic is threatening the collapse of primary care. With significant proportions of primary care practices losing staff and facing possible closures, payers and policymakers should take action immediately, using the best evidence available and planning for continuous evaluation and adjustments.

Key takeaways:

- Current primary care funding is inadequate; basing global payments in historic FFS amounts will not solve the problem of insufficient primary care investment.
- The best available evidence suggests setting primary care investment at 10% to 12% of the total cost of care. This likely translates to a PMPM amount around \$85 on average, with significant variation by age and medical and social predictors of need.
- Risk adjustment must be done to ensure adequate funds to meet the needs of patients with more complex health conditions and social situations. Risk adjustment should incorporate social measures of individual and community-level risk.
- More research is needed to improve upon risk adjustment methods, refine the scope of services considered under a primary care PMPM, and assess the care changes and outcomes enabled by global payments and increased primary care investment.
- With the current added financial stress of the pandemic on primary care practices, the risk of not pursuing significant payment reform is likely greater than the risk of using the incomplete evidence that exists and planning for continuous improvements as lessons are learned.

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## References

- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457–502.
- Starfield B, Shi L. Policy relevant determinants of health: an international perspective. *Health Policy* 2002;60:201–18.
- Chen MA, Hollenberg JP, Michelen W, Peterson JC, Casalino LP. Patient care outside of office visits: a primary care physician time study. *J Gen Intern Med* 2011;26:58–63.
- Larry A. Green Center and the Primary Care Collaborative. Quick COVID-19 primary care survey. 2020. Available from: <https://www.green-center.org/s/C19-Series-17-National-Executive-Summary.pdf>. Accessed August 12, 2020.
- Basu S, Berkowitz SA, Phillips RL, Bitton A, Landon BE, Phillips RS. Association of primary care physician supply with population mortality in the United States. *JAMA Intern Med* 2019;179:506–14.
- Kravet SJ, Shore AD, Miller R, Green GB, Kolodner K, Wright SM. Health care utilization and the proportion of primary care physicians. *Am J Med* 2008;121:142–8.
- Bailit MH, Friedberg MW, Houy ML. Standardizing the measurement of commercial health plan primary care spending. July 2017. *Milbank Memorial Fund Report*.
- Reid R, Damberg C, Friedberg MW. Primary care spending in the fee-for-service Medicare population. *JAMA Intern Med* 2019;179:977–80.
- Jabbarpour Y, Greiner A, Jetty A, Coffman M, Jose C, Petterson S. Investing in primary care: a state-level analysis. July 2019. The Patient-Centered Primary Care Collaborative and the Robert Graham Center.
- Phillips RL, Bazemore AW. Primary care and why it matters for U.S. health system reform. *Health Aff (Millwood)* 2010;29:806–10.
- Centers for Medicare & Medicaid Services. NHE fact sheet. March 24, 2020. Available from: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet>. Accessed August 12, 2020.
- Kaiser Family Foundation. Total number of Medicare beneficiaries. Available from: <https://www.kff.org/medicare/state-indicator/total-medicare-beneficiaries/>. Accessed August 12, 2020.
- Rudowitz R, Hinton E, Diaz M, Guth MTM. Medicaid enrollment & spending growth: FY 2019 & 2020. October 18, 2019. Available from: <https://www.kff.org/medicaid/issue-brief/medicaid-enrollment-spending-growth-fy-2019-2020/>. Accessed August 12, 2020.
- Fernandopulle R. Breaking the fee-for-service addition: let's move to a comprehensive primary care payment model. *Health Affairs blog*. August 17, 2015. Available from: <https://www.healthaffairs.org/doi/10.1377/hblog20150817.049985/full/>. Accessed August 12, 2020.
- Iora Health. Real results. 2017. Available from: <https://www.iorahealth.com/real-results/>. Accessed August 12, 2020.
- 2019 Direct Primary Care Research Study, American Academy of Family Physicians. May 2020. Available from: <https://www.dpcare.org/actuaries-report>. Accessed August 14, 2020.
- Busch F, Grzeskowiak D, Huth E. Direct primary care: evaluating a new model of delivery and financing. Society of Actuaries. May 2020. Available from: <https://www.dpcare.org/actuaries-report>. Accessed August 14, 2020.
- Farmer SA, Shalowitz J, George M, et al. Fully capitated breakeven rate for a mid-size pediatric practice. *Pediatrics* 2016;138:e20154367.
- Martsolf GR, Kandrack R, Friedberg MW, Briscoe B, Hussey PS, LaBonte C. Estimating the costs of implementing comprehensive primary care: a narrative review. *Health Serv Res Manag Epidemiol* 2019;6:2333392819842484–6.
- Kantarevic J, Kralj B. Risk selection and cost shifting in a prospective physician payment system: evidence from Ontario. *Health Policy* 2014;115:249–57.
- Goroll AH, Berenson RA, Schoenbaum SC, Gardner LB. Fundamental reform of payment for adult primary care: comprehensive payment for comprehensive care. *J Gen Intern Med* 2007;22:410–5.
- Robinson JC. Theory and practice in the design of physician payment incentives. *Milbank Q* 2001;79:149–77.
- Centers for Medicare & Medicaid Services. Report to Congress: risk adjustment in Medicare advantage. December 2018. Available from: <https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/RTC-Dec2018.pdf>. Accessed August 2020.
- Ash AS, Ellis RP. Risk-adjusted payment and performance assessment for primary care. *Med Care* 2012;50:643–53.
- Ash AS, Mick EO, Ellis RP, Kiefe CI, Allison JJ, Clark MA. Social determinants of health in managed care payment formulas. *JAMA Intern Med* 2017;177:1424–30.
- Department of Medicine, University of Wisconsin School of Medicine and Public Health. Neighborhood atlas. Available from: <https://www.neighborhoodatlas.medicine.wisc.edu/>. Accessed August 12, 2020.
- Goodson JD, Bierman AS, Fein O, Rask K, Rich EC, Selker HP. The future of capitation: the physician role in managing change in practice. *J Gen Intern Med* 2001;16:250–6.
- Health Care Payment Learning and Action Network. Accelerating and aligning population-

- based payment models: patient attribution. White paper. 2016.
29. Tseng P, Kaplan RS, Richman BD, Shah MA, Schulman KA. Administrative costs associated with physician billing and insurance-related activities at an academic health care system. *JAMA* 2018;319:691–7.
  30. Basu S, Phillips RS, Song Z, Bitton A, Landon BE. High levels of capitation payments needed to shift primary care toward proactive team and nonvisit care. *Health Aff (Millwood)* 2017;36:1599–605.
  31. FMAHealth Comprehensive Primary Care Payment Calculator User's Guide. 2018. Prepared by Health Data Decisions. Available from: [https://www.aafp.org/dam/AAFP/documents/about\\_us/initiatives/calculator/fmah19-calculator-user-guide.pdf](https://www.aafp.org/dam/AAFP/documents/about_us/initiatives/calculator/fmah19-calculator-user-guide.pdf). Accessed August 12, 2020.
  32. George A, Sachdev N, Hoff J, et al. Development, value, and implications of a comprehensive primary care payment calculator for family medicine. *Fam Med* 2019;51:185–92.
  33. Grumbach K, Grundy P. Outcomes of implementing patient-centered medical home interventions: a review of the evidence from prospective evaluation studies in the United States. 2010. Available from: <http://www.cms.org/uploads/GrumbachGrundy2010OutcomesPCPCC.pdf>.
  34. Nielsen M, Langner B, Zema C, Hacker T, Grundy P. Benefits of implementing the primary care patient-centered medical home: a review of cost & quality results. 2012. Patient-Centered Primary Care Collaborative.
  35. Nielsen M, Gibson A, Buelt L, Grundy P, Grumbach K. The patient-centered medical home's impact on cost and quality: annual review of evidence. 2015. Patient-Centered Primary Care Collaborative.
  36. Jabbarpour Y, DeMarchis E, Bazemore A, Grundy P. The impact of primary care practice transformation on cost, quality, and utilization: a systematic review of research published in 2016. 2017. Patient-Centered Primary Care Collaborative.
  37. Saultz JW, Albedaiwi W. Interpersonal continuity of care and patient satisfaction: a critical review. *Ann Fam Med* 2004;2:445–51.
  38. De Maeseneer JM, Lutgarde De P, Gosset C, Heyerick J. Provider continuity in family medicine: does it make a difference for total health care costs? *Ann Fam Med* 2003;1:144–8.
  39. Bazemore A, Petterson S, Peterson LE, Bruno R, Chung Y, Phillips RL. Higher primary care physician continuity is associated with lower costs and hospitalizations. *Ann Fam Med* 2018;16:492–7.
  40. Bazemore A, Petterson S, Peterson LE, Phillips RL, Jr. More comprehensive care among family physicians is associated with lower costs and fewer hospitalizations. *Ann Fam Med* 2015;13:206–13.