

Financial sustainability of an integrated medical-behavioral primary care practice

Steve Melek, FSA, MAAA
Katie Matthews, ASA, MAAA
Alexandra Weaver, ASA, MAAA



The state of Colorado has implemented integrated behavioral healthcare in primary medical care settings under a Centers for Medicare and Medicaid Services State Innovation Model award.

This program includes about 325 primary care practices across the state and four community mental health centers where physical healthcare is being integrated into their mental health practices. One of the key challenges of this initiative is the financial sustainability of the integrated care practices after the federal support ends. This paper presents a payment model that we believe would support the sustainability of integrated care practices while also helping payers to control healthcare costs. We first look at commercial payer spending on primary care and outpatient behavioral healthcare services; then we examine the costs of building and maintaining an integrated primary care practice from the providers' perspective. While the Colorado State Innovation Model (SIM) includes commercially insured, Medicaid, and Medicare beneficiaries, we chose a commercial population for this modeling because of the available detailed data from our Milliman Health Cost Guidelines™ for commercially insured populations.

PRIMARY CARE COSTS TO A PAYER IN A COMMERCIAL POPULATION

We used the 2019 Milliman commercial Health Cost Guidelines (HCGs) to develop average per member per month (PMPM) costs of primary physical healthcare and outpatient behavioral healthcare in the United States. The HCGs include healthcare costs across detailed healthcare service categories, which are further segmented by provider specialty type for professional services. For primary physical healthcare, we included costs for services provided by family practice physicians, internal medicine physicians, and pediatric physicians. For behavioral healthcare, we included costs for services provided by psychiatrists, psychologists, and social workers. Other types of primary physical healthcare providers and behavioral healthcare providers are not separately segmented in the HCGs.

The HCGs include healthcare utilization and costs for loosely managed (little-to-average use of care management protocols) and well-managed (comprehensive and consistent use of care management protocols) care delivery systems. We assumed that the average of the loosely managed and well-managed healthcare utilization and cost scenarios would represent our illustrative payer managed healthcare scenario. We also assumed that the average payment rate for the primary physical healthcare and behavioral healthcare providers for this illustrative commercial population would be at 115% of Medicare allowable levels. Adding up the PMPM costs for these primary physical healthcare and behavioral healthcare services produces an average allowed healthcare cost of approximately \$45.40 PMPM before insured member out-of-pocket costs. We assumed an aggregate 2019 paid-to-allowed ratio of 83.3%,¹ which results in an average payer cost of \$37.80 PMPM for our integrated primary care services.

INTEGRATED PRIMARY CARE PRACTICE STAFFING AND COSTS

We built our integrated primary care practice using a "teamlet" approach. This is a team structure in which a clinician and medical assistant "teamlet" forms the core of a larger team. The larger team comprises a few teamlets supported by other clinical personnel, and patients are empaneled to a particular teamlet. Clinicians working in stable teamlets, with the same medical assistant every day, generally experience less burnout than clinicians working with different medical assistants on different days.²

Our integrated primary care practice design also addresses the primary care physician shortage (expected to reach 33,000 by 2035³) by adding a nurse practitioner and physician assistant to the integrated primary care practice. We also include medical assistants and licensed practical nurses to complete the medical team. Figure 1 shows the makeup of our illustrative integrated primary care practice by type of professional.

¹ Chris Girod, Sue Hart, & Scott Weltz (May 2018). 2018 Milliman Medical Index, The paid-to-allowed ratio represents the percentage of total allowed costs that are paid by the insurer after member out-of-pocket costs.

² Thomas Bodenheimer & Rachel Willard Grace (January-February 2016). Teamlets in primary care: Enhancing the patient and clinician experience, *JABFM*.

³ Petterson, S.M., Liaw, W.R., Tran, C, & Bazemore, A.W. (2015). Estimating the residency expansion required to avoid projected primary care physician shortages by 2035. *Ann Fam Med* 13:107-14.

FIGURE 1: INTEGRATED PRIMARY CARE PRACTICE STAFFING LEVELS

STAFF POSITION	FULL-TIME EQUIVALENTS (FTE)
MD - FAMILY PRACTICE	2.00
MD - PSYCHIATRIST	0.25
PHD - PSYCHOLOGIST	1.00
MSW/LCSW - SOCIAL WORKER	1.00
NURSE PRACTITIONER	1.00
PHYSICIAN ASSISTANT - MEDICAL	1.00
MEDICAL ASSISTANT	2.00
LICENSED PRACTICAL NURSE	2.00
CLINIC RECEPTIONIST	1.00

The staffing of our integrated medical-behavioral practice is designed to give patients access to the medical and behavioral providers that they may need on any given primary care visit. The psychiatrist would primarily be used as a consultant to the primary medical care providers to help with effective prescription drug use for patients with a need for psychotropic drugs. The psychologist and social worker would help with the daily behavioral aspects of integrated healthcare services.

We selected 2,300 as the panel size for each of the primary care physicians, based on the average U.S. panel size according to a national physician survey.⁴ We also assumed that the nurse practitioner and physician assistant could each increase the panel size of the practice by 1,200 patients, resulting in a total panel size of 7,000 for our integrated primary care practice, assuming two full-time equivalent (FTE) employees for the primary care physicians. When combined with the average PMPM costs developed from the HCGs, this results in projected annual revenues to the integrated primary care practice of \$3,813,600⁵ (with \$3,175,200 coming from the commercial health plans and \$638,400 coming from member out-of-pocket payments). Figure 2 shows the 50th-percentile and 75th-percentile salary and benefit costs, as well as the total staffing cost, of our integrated primary care practice.⁶

FIGURE 2: INTEGRATED PRIMARY CARE PRACTICE STAFFING COSTS

STAFF POSITION	SALARY AND BENEFIT COSTS PER FTE		TOTAL STAFFING COSTS	
	50 TH %TILE	75 TH %TILE	50 TH %TILE	75 TH %TILE
MD - FAMILY PRACTICE	\$271,987	\$312,147	\$543,974	\$624,294
MD - PSYCHIATRIST	\$295,078	\$330,083	\$73,770	\$82,521
PHD - PSYCHOLOGIST	\$139,411	\$156,567	\$139,411	\$156,567
MSW - SOCIAL WORKER	\$89,160	\$98,765	\$89,160	\$98,765
NURSE PRACTITIONER	\$145,305	\$157,849	\$145,305	\$157,849
PHYSICIAN ASSISTANT - MEDICAL	\$143,391	\$158,089	\$143,391	\$158,089
MEDICAL ASSISTANT	\$52,124	\$56,285	\$104,248	\$112,570
LICENSED PRACTICAL NURSE	\$69,087	\$77,354	\$138,174	\$154,709
CLINIC RECEPTIONIST	\$52,071	\$57,142	\$52,071	\$57,142

⁴ Altschuler, J., Margolius, D., Bodenheimer, T., & Grumbach, K. (September-October 2012). Estimating a reasonable patient panel size for primary care physicians with team-based task delegation. *Ann Fam Med*. Vol 10, No. 5.

⁵ Calculated as \$45.40 PMPM x 7,000 lives x 12 months = \$3,813,600.

⁶ Results from salary.com, May 2018.

The total staffing cost of our primary care practice is projected to be approximately \$1,429,500 using the 50th-percentile salaries and benefits (which include the cost of base salary, bonuses, disability, Social Security, retirement, healthcare, pension, and paid time off benefits). According to Medical Group Management Association (MGMA) reports, the median overhead for primary care practices is 59.5% of revenue,⁷ which amounts to \$2,269,100 given the estimated panel size of our practice. Adding the staffing and overhead costs together amounts to \$3,698,600 in total integrated care practice expenses. When compared to the projected revenue from commercial payer and member out-of-pocket costs, the practice would be able to pay for all staffing and overhead costs at the 50th-percentile level, and have a projected gain of \$115,000 during the year.

OPTIONS FOR PAYMENT MODEL REFORM

The projections above reflect the projected revenues and costs of an integrated primary care practice on a fee-for-service (FFS) basis. These projections can also be adjusted to reflect a fully capitated integrated primary care practice approach. Assuming that the payer developed capitation rates that matched its expected fee-for-service costs, total practice costs would change due to savings arising from eliminating the cost of processing healthcare claims. Using Milliman's HCGs, we estimate that this integrated primary care practice would save the cost of processing 22,200 health insurance claims per year. If each insurance claim cost the practice \$10 to process (some estimates are as high as \$20 per claim), the practice would, conservatively, save about \$222,000 per year in overhead costs, which would increase its 50th-percentile bottom line to about \$337,000 per year in surplus funds.

What happens if the practice cannot recruit its needed integrated care staff at the 50th-percentile level for salaries and benefits—what if the practice needed to pay at the 75th-percentile level to attract the necessary staff? That would amount to a little over \$173,000 in additional staffing costs, which is fully covered by the savings in administrative costs due to the use of a capitation arrangement.

The additional staffing cost could also be covered by revenues from a risk-sharing or gain-sharing arrangement (if effective integrated primary care services result in reduced healthcare costs to the commercial payer outside of integrated primary care services). Studies have shown that such healthcare cost savings are achievable, concluding that an estimated 5% to 10% of total healthcare expenditures for those with behavioral conditions may be eliminated through effective medical-behavioral integration.⁸ As an example, we estimate that non-primary care costs for a commercial payer with payment levels at 130% of Medicare-allowable levels would total approximately \$300.00 PMPM.⁹ If the risk/gain-sharing arrangement passed just 10% of all non-primary care gains or losses to the primary care practice, and effective integrated primary care services resulted in a 5% reduction in all other nonintegrated primary care costs, the practice would gain another \$126,000.¹⁰ This arrangement would allow the practice to fund staffing at the 75th-percentile level when combined with the claim processing savings described above.

CONCLUSION

A teamlet approach has proven to be effective in providing primary care services to an insured population. Integrated medical-behavioral healthcare is being pursued on a broader basis around the country. Can the commercial payment models for such integrated primary care practices support the expense levels of running these integrated care practices? Our projections for the chosen illustrative integrated care model serving a commercially insured population provide support that the costs of primary care practices can be covered by capitation arrangements and supplemented by risk/gain-sharing provisions. The development of such payment models would likely lead to more practice efforts to staff teamlets in an integrated approach to primary medical and behavioral services, allowing for administrative cost savings and more effective care delivery.

Other integrated care staffing models would result in different financial results, including those that serve Medicaid and Medicare populations. Additional research into the staffing and costs of integrated care practices serving a blend of insured lives from various lines of business would be a valuable addition to the developing research regarding integrated care models.

⁷ LiveClinic (February 16, 2017). What Are the Average Physician Overhead Rates in 2017? Retrieved May 29, 2019, from <https://liveclinic.com/blog/physician-overhead-rates-2017/>.

⁸ Melek, S., Norris, D., et al. (January 2018). Potential Economic Impact of Integrated Medical-Behavioral Healthcare: Updated Projections for 2017. Milliman Research Report. Retrieved May 29, 2019, from <http://www.milliman.com/uploadedFiles/insight/2018/Potential-Economic-Impact-Integrated-Healthcare.pdf>.

⁹ This estimate relies on allowed cost assumptions by service category according to Milliman's Health Cost Guidelines. We also used an 83.3% paid-to-allowed ratio assumption to project total paid costs for the insurer.

¹⁰ Calculated as \$300.00 PMPM x 5% cost reduction x 10% shared savings x 7,000 members x 12 months.

CAVEATS AND LIMITATIONS

This paper presents an illustrative example of an integrated care model serving a commercially insured population. Our simplified example relies on a variety of assumptions outlined in this paper, including that capitation rates are appropriately set to match expected fee-for-service healthcare costs, and that no additional administrative expenses are incurred by the practice when moving from fee-for-service to a capitated payment arrangement. The illustrative example was modeled based on our experience working with integrated care practices, and presents one of many approaches to integrated medical-behavioral care. Integrated care delivery models differ widely in complexity, and we do not suggest or endorse any particular care delivery strategy.

We relied upon the 2019 Milliman commercial Health Cost Guidelines™ (HCGs) to develop average per member per month (PMPM) costs of primary physical healthcare and outpatient behavioral healthcare in the United States. The commercial HCGs represent comprehensive benchmark expected claim costs and healthcare utilization for commercially insured populations developed through ongoing research by Milliman. They are updated annually to incorporate recent trends and regulatory issues.

Milliman did not receive any external funding for this analysis. Any opinions or views expressed in this report are those of the authors, not of Milliman.

The authors would like to thank Anne Jackson for her helpful input and peer review of this material.



Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

Steve Melek, FSA, MAAA
Principal & Consulting Actuary
steve.melek@milliman.com

Katie Matthews, ASA, MAAA
Associate Actuary
katie.matthews@milliman.com

Alexandra Weaver, ASA, MAAA
Associate Actuary
ally.weaver@milliman.com