

Introduction

- **Behavioral health (BH) integrated primary care (IPC)** improves patient relationships, access to mental health services and collaboration between healthcare providers.
- **Implementation challenges:** A BH IPC model requires psychologists to reserve time for same-day consultations, rather than exclusively pre-scheduled appointments, resulting in less predictable billable services and leadership hesitancy around model implementation.
- **Quality improvement (QI) initiative:** This quality improvement (QI) initiative represents the first phase of an effort to enhance behavioral health integration while assessing fiscal sustainability.
- **Study focus:** We examined billing revenue among psychologists at a colocated IPC clinic versus a clinic working to increase integration (QI clinic) within the same academic medical center.

Objectives

- Examine productivity growth during onboarding
- Evaluate clinical integration success based on same-day consultation rates

Methods

QI Project

- A needs assessment at the QI clinic identified primary care providers' preference for increased BH integration.
- Workflow modifications prioritized psychologist availability for same-day consults, follow-ups during medical visits, and shorter appointment durations (30-45 mins) to increase patient touchpoints.

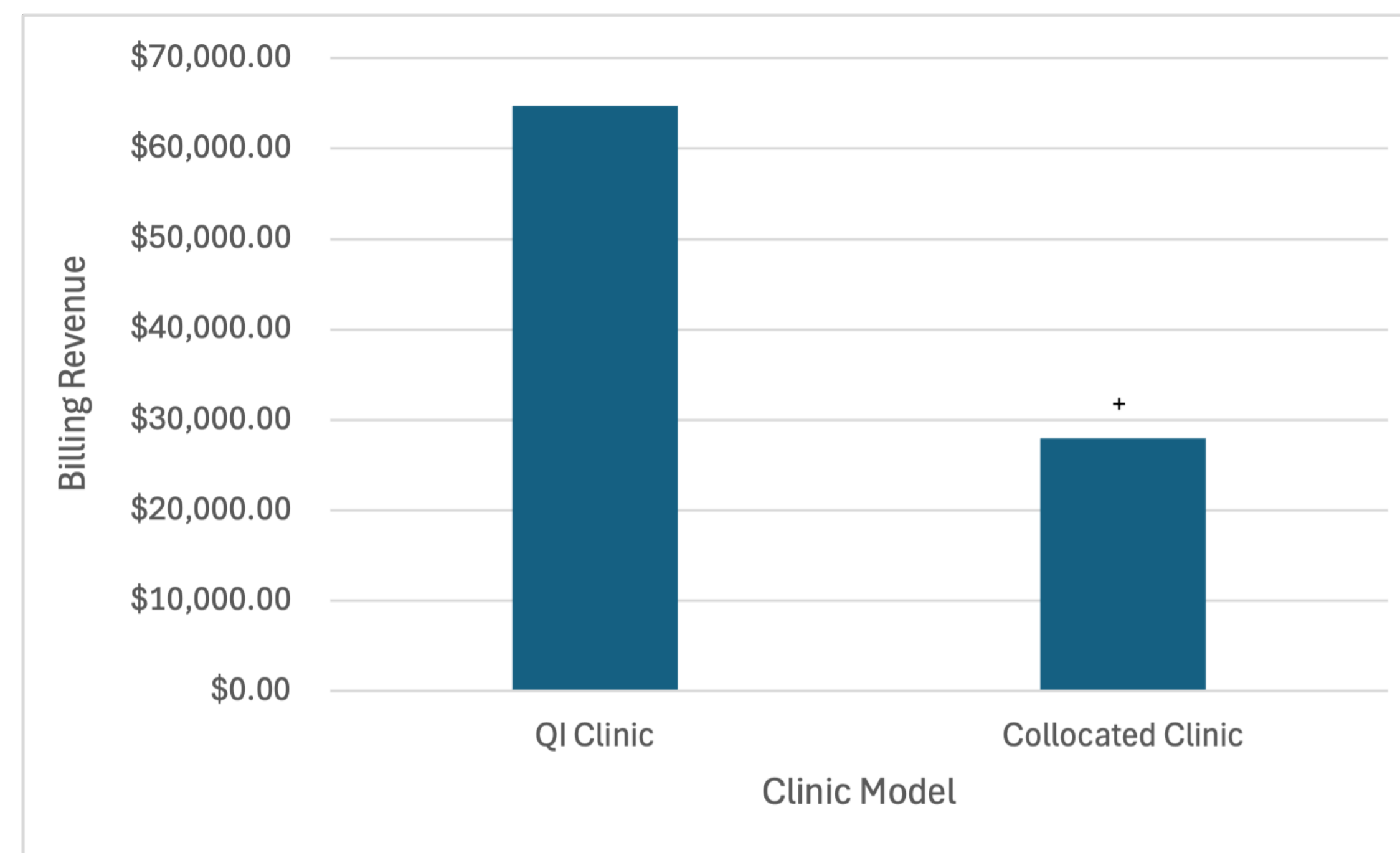
Data Analysis

- Analyzed 4 months of appointment data post-onboarding from five psychologists hired between March 2022 and December 2023 – two at the colocated clinic and three at the QI clinic.
- Primary outcomes included appointment type (same-day vs. scheduled) and billing revenue.

Results

Figure 1

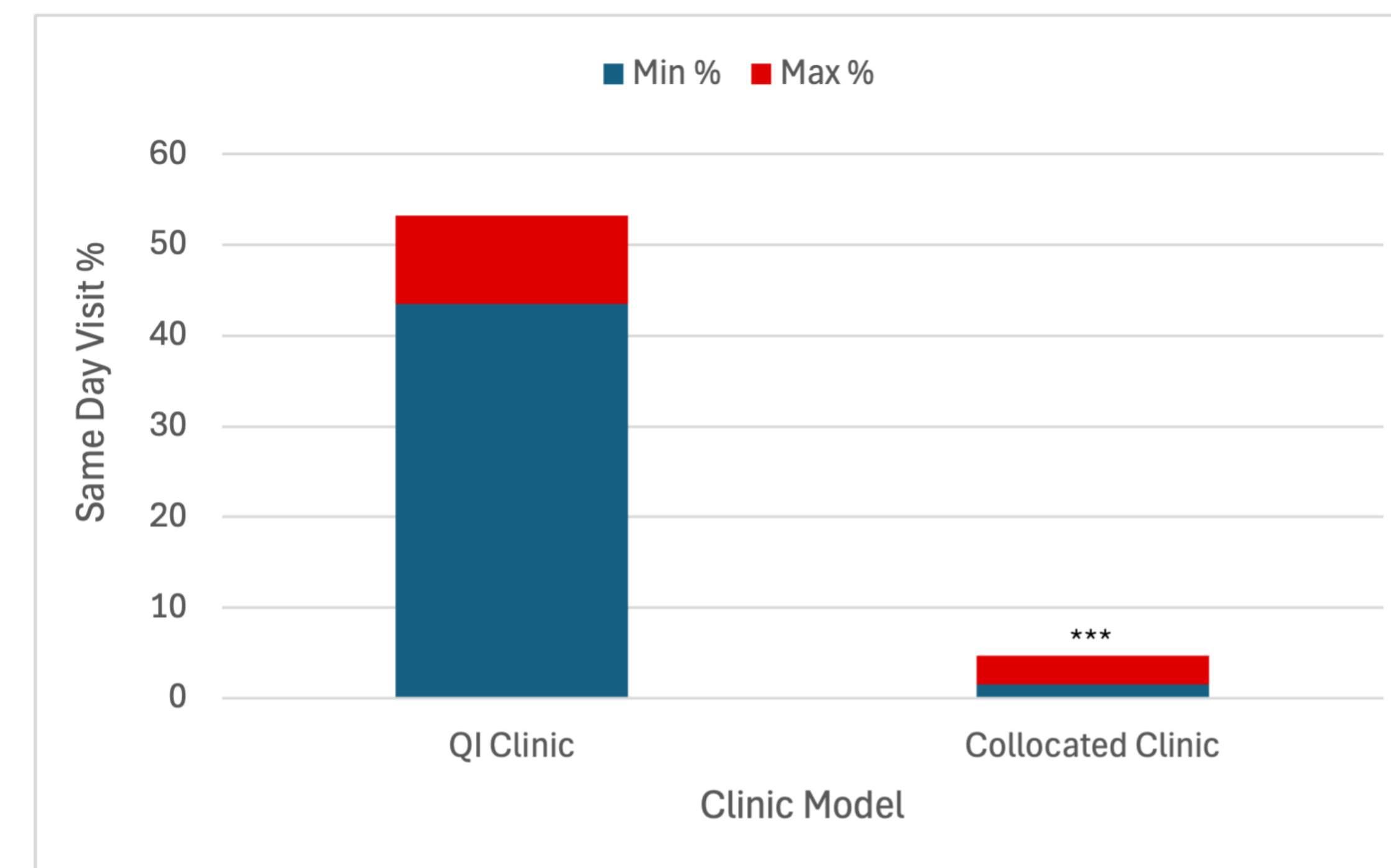
Billing Revenue (over 4 months)



Note. + $p = .079$. Within their first four months of onboarding, psychologists at the integrated clinic generated more than twice the billing revenue of those in the co-located clinic.

Figure 2

Same-Day Visit Rate by Clinic



Note. *** $p < .001$. Same-day behavioral health visits were significantly higher at the integrated clinic compared to the co-located site.

Discussion

Billing Revenue

- All psychologists built up a full caseload and met billing goals between month three and four of onboarding.
- Across our data set the most common appointment type billed by psychologists was 90832 – individual therapy for 30 minutes (55.2% of billing), followed by 90791 - intake (16.7% of billing) and 90847 – family with patient (8.7% of billing).
- Visit types varied across psychologists, such that most psychologists top billing code was 90832 with over half of their visits consisting of individual therapy for 30 minutes, typically used for same-day consults.
- Psychologists in the QI clinic built-up billing more efficiently than those at the colocated clinic, with differences trending towards significance (QI: \$64,700.67 vs. colocated: \$27,997.50, $p = .079$).

Same-Day Visit Rates

- QI clinic: 43.5-53.2% of psychology visits were same-day
- Collocated clinic: 1.5-4.8% of psychology visits were same-day
- QI clinic significantly increased integration as measured by same-day consults ($X^2(1,909) = 128.01$, $p < .001$).

Conclusion

- **Baseline model:** Prior to onset of this study, onboarding psychologists were in a co-located model that emphasized evaluation and scheduled follow ups, with limited same-day consultation availability.
- **Key finding:** Psychologists in highly integrated models can efficiently build up a caseload to meet hospital productivity goals, even when reserving time for same-day consults, reinforcing the sustainability of these models.
- **Fiscal impact:** Integrated model achieved similar, if not greater, fiscal sustainability than the colocated model during a 4-month provider onboarding period.
- **Next steps:** Future QI efforts will further evaluate care access, provider satisfaction, and long-term program viability.

References

Blackmore, M. A., Carleton, K. E., Ricketts, S. M., Patel, U. B., Stein, D., Mallow, A., Deluca, J. P., & Chung, H. (2018). Comparison of Collaborative Care and Colocation Treatment for Patients With Clinically Significant Depression Symptoms in Primary Care. *Psychiatric services* (Washington, D.C.), 69(11), 1184–1187. <https://doi.org/10.1176/appi.ps.201700569> [doi.org]

National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division, Board on Health Care Services, Committee on Implementing High-Quality Primary Care, Robinson, S. K., Meisner, M., Phillips, R. L. Jr., et al. (2021). *Implementing high-quality primary care: Rebuilding the foundation of health care*. National Academies Press. <https://www.ncbi.nlm.nih.gov/books/NBK571813/> [ncbi.nlm.nih.gov]

Vogel, M. E., Kanzler, K. E., Aikens, J. E., & Goodie, J. L. (2017). Integration of behavioral health and primary care: current knowledge and future directions. *Journal of behavioral medicine*, 40(1), 69–84. <https://doi.org/10.1007/s10865-016-9798-7> [doi.org]

Yogman, M. W., Betjemann, S., Sagaser, A., & Brecher, L. (2018). Integrated Behavioral Health Care in Pediatric Primary Care: A Quality Improvement Project. *Clinical pediatrics*, 57(4), 461–470. <https://doi.org/10.1177/0009922817730344> [doi.org]