Characteristics of Family Physicians Practicing Collaboratively With Behavioral Health Professionals

Sebastian T. Tong, MD, MPH[1]
Zachary J. Morgan, MS[2]
Kari A. Stephens, PhD[1]
Andrew Bazemore, MD, MPH[2]
Lars E. Peterson, MD, PhD[2,3]

[1]University of Washington, Department of Family Medicine, Seattle, Washington

[2]American Board of Family Medicine, Lexington, Kentucky

[3]Department of Family and Community Medicine, University of Kentucky, Lexington, Kentucky

MORE ONLINE
www.annfammed.org

VISUAL ABSTRACT

Conflicts of interest: authors report none.

CORRESPONDING AUTHOR

Sebastian T. Tong
University of Washington, Department of Family Medicine
Box 354696
Seattle, WA 98195-4696
setong@uw.edu

ABSTRACT

Integrating behavioral health into primary care can improve access to behavioral health and patient health outcomes. We used 2017-2021 American Board of Family Medicine continuing certificate examination registration questionnaire responses to determine the characteristics of family physicians who work collaboratively with behavioral health professionals. With a 100% response rate, 38.8% of 25,222 family physicians reported working collaboratively with behavioral health professionals, with those working in independently owned practices and in the South having substantially lower rates. Future research exploring these differences could help develop strategies to support family physicians implement integrated behavioral health to improve care for patients in these communities.

Ann Fam Med 2023;21:157-160. https://doi.org/10.1370/afm.2947

INTRODUCTION

The complexity of patients presenting in primary care continues to grow with an estimated 1 in 3 adults in the United States presenting with multiple chronic conditions.[1] The parallel rise in mental health conditions and substance use disorders contributes to the poor control and growing rates of physical health conditions.[2] Behavioral health care access often remains limited. The COVID-19 pandemic has worsened this situation with many patients delaying care for multiple chronic conditions while deaths from suicide, alcohol, or other drugs increase.[3]

Family physicians (FPs) play an essential role in managing not only physical but also mental health conditions. Studies suggest that between 30% and 80% of primary care visits include a mental health complaint with this proportion increasing in the past few years.[4]

The National Academies of Sciences, Engineering, and Medicine has called for greater behavioral health integration into primary care as a way to increase behavioral health services access and manage multimorbidity.[5] Integrated behavioral health is blended care in one setting for medical conditions and related behavioral health factors as a part of whole-person health through the collaboration of medical and behavioral health professionals.[6] Integrated behavioral health has been shown to improve mental health and overall outcomes, patient care experience, and clinician satisfaction, while reducing health care utilization and costs.[7]

As a first step to understanding how to overcome the multiple barriers challenging the implementation of integrated behavioral health, more information is needed on the prevalence of behavioral health integration in primary care and the characteristics of FPs who have adapted integrated behavioral health. Prior work has focused on colocation using claims data rather than integration or focused on limited settings.[8]

In our study, we examined the prevalence of FPs working collaboratively with behavioral health professionals (BHPs) and described the associated demographic, practice, and geographic characteristics.

METHODS

Using a cross-sectional design, we analyzed 2017-2021 data collected from the American Board of Family Medicine's Continuing Certification Examination Registration Questionnaire, which is a required component of registration for

board-certified FPs to continue certification. The questionnaire asked FPs if they worked collaboratively with each of psychiatrists, psychiatric nurse practitioners, licensed social workers, psychologists, and/or other BHPs. Questionnaire details can be found here.[9] Family physicians who were not providing continuity care, practiced outside the United States, or had missing geographic data were excluded. We performed χ^2 tests to determine associations between working collaboratively with any BHP and demographic, practice, and geographic variables (see Supplemental Appendix for these results). We then used logistic regression to calculate odds ratios and CIs controlling for differences noted by year. Analyses were completed using SAS Version 9.4 (SAS Institute Inc). State level variations were then mapped in R (R Foundation for Statistical Computing). The American Academy of Family Physicians Institutional Review Board approved this study.

RESULTS

The response rate was 100%. Of 34,949 respondents, we excluded 2,440 because they did not provide direct patient care, 6,957 for not providing outpatient continuity care, and 330 who either practiced outside the United States or had incomplete geographic data. The remaining sample included 25,222 respondents. Of these, 38.8% reported working collaboratively with any BHP; 13.4% working with psychiatrists, 5.6% with psychiatric nurse practitioners, 26.9% with licensed social workers, and 27.2% with psychologists and/or other BHPs. The mean age was 50.32 years with 46.1% identifying as female and 70.3% as White. The proportion of FPs working collaboratively with any BHP increased from 34.8% in 2017 to 43.0% in 2021 (P <0.001).

Physician characteristics significantly associated with increased odds of BHP collaboration were identifying as female (OR = 1.09) and working as core/salaried faculty (OR = 2.32 when compared with not being faculty). The strongest practice variable was working in a federal practice site and the strongest negative association was working in an independently owned practice. For geographic associations, working in the South was associated with decreased odds of BHP collaboration. Working in a county with more psychiatrists was also associated with higher likelihood of BHP collaboration. Other non-significant associations can be found in Table 1.

Prevalence of BHP collaboration by state ranged from 17.6% in Mississippi to 78.0% in Vermont. The 5 states with the lowest BHP collaboration were all located in the South while the 5 states with highest collaboration were distributed across the Midwest, Northeast, and West (Figure 1).

Table 1. Adjusted Associations Between Demographic, Practice, and Geographic Characteristics in Family Physicians Working Collaboratively With Behavioral Health Professionals, 2017-2021

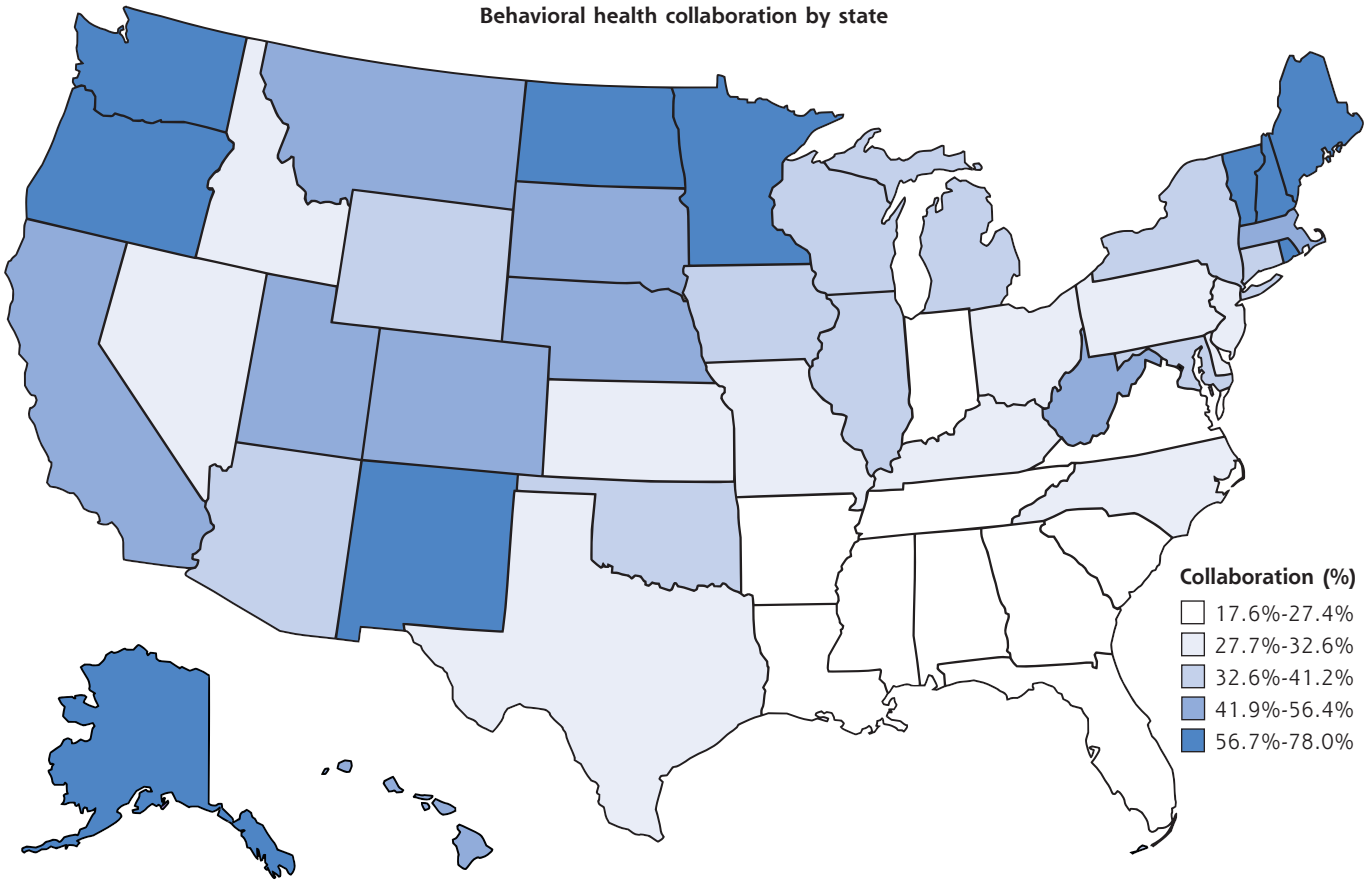
Characteristic	Odds Ratio (95% CI)
Physician characteristics	
Age (per year increase)	0.99 (0.99-1.00)
Female (reference = male)	1.09 (1.01-1.17)
Degree type: DO (reference = MD)	0.77 (0.69-0.86)
IMG	0.78 (0.71-0.86)
Race (reference = White)	
American Indian or Alaska Native Asian	0.78 (0.53-1.15)
Asian	0.90 (0.81-1.00)
Black or African American	0.82 (0.70-0.96)
Native Hawaiian or Other Pacific Islander	0.72 (0.46-1.13)
Other	0.80 (0.68-0.93)
Ethnicity: Hispanic/Latine vs non-Hispanic/Latine	0.72 (0.63-0.84)
Faculty (reference = not faculty)	
Core/salaried faculty	2.32 (2.01-2.67)
Volunteer/clinical faculty	1.35 (1.24-1.46)
Practice characteristics	
Practice site (reference = hospital/health system owned medical practice)	
Independently owned medical practice	0.34 (0.31-0.37)
Managed care/HMO practice	2.64 (2.31-3.03)
Academic health center/faculty practice	4.71 (3.96-5.60)
Federally qualified health center or look alike	7.52 (6.32-8.94)
Rural health center	1.29 (1.05-1.58)
Indian health service	7.36 (4.43-12.23)
Government, non-federal	6.41 (4.79-8.57)
Federal (military, Veterans Affairs)	26.10 (20.77-32.81)
Work site clinic	0.83 (0.65-1.06)
Other	2.24 (1.89-2.66)
Vulnerable Population (reference = <10%)	
10% to 49%	1.46 (1.35-1.58)
>50%	2.41 (2.17-2.69)
US geographic characteristics	
Rurality: rural (reference = urban)	1.01 (0.90-1.13)
Region (reference = South)	
Midwest	2.08 (1.89-2.29)
Northeast	2.12 (1.89-2.38)
West	2.73 (2.49-3.01)
Mental health care HPSA (reference = not HPSA)	
Partial county HPSA	1.06 (0.92-1.21)
Whole county HPSA	0.94 (0.81-1.10)
Psychiatrists per 100,000 county population (per unit increase in psychiatrist)	1.02 (1.02-1.03)

DO = doctor of osteopathy; HMO = health maintenance organization; HPSA = health professional service area; IMG = international medical graduate; MD = medical doctor; US = United States

DISCUSSION

Although the overall proportion of FPs practicing collaboratively with BHPs increased over the past few years, significant

Figure 1. State-level variation of family physicians who work collaboratively with behavioral health professionals, 2017-2021.



differences exist for certain settings, notably for those working in independently owned practices and in the South. One possible reason for lower rates in the South is the overall lower number of psychiatrists, psychologists, and psychiatric nurse practitioners practicing in the South.[10] Work is needed on the barriers that independent practices and practices in the South face with integrated behavioral health implementation and on how to support overcoming these barriers.

Potential novel methods to provide increased access to behavioral health include the use of behavioral telehealth services that could overcome issues with geographic variations in workforce and promote the use of shared BHP resources between practices.[11] Models from settings with higher rates of integration, like the federally run Veterans Affairs System and the Indian Health Service could be adapted to other settings. Because family physicians who are core/salaried faculty are more likely to work with behavioral health professionals, family medicine residencies, which are mandated by the Accreditation Council for Graduate Medical Education to integrate behavioral health into their programs, could serve as integrative behavioral health models.[12] A variety of innovative models in both the federal health care settings[13-16] and residency settings[17-20] have been previously described in the literature.

Several limitations exist. First, since the questionnaire is cross-sectional in nature, no causality can be established between the variables and working with BHPs. Second, physicians could have responded with different conceptions of what it means to be "working collaboratively with you at their principal practice site" and may have different conceptions of "integrated care." Third, "working collaboratively" with a BHP may not align directly with "integrated care."

Integrating behavioral health into primary care can improve behavioral health and overall health outcomes, decrease costs and utilization, and improve both patient and clinician satisfaction. Despite increases over the past few years in prevalence of integrated behavioral health in primary care, significant disparities remain. Understanding why these disparities exist and exploring how to best support behavioral health integration in these settings could help improve behavioral health access for patients in these settings and improve overall patient outcomes.

Read or post commentaries in response to this article.

Key words: behavioral medicine; integration of care; mental health services; primary health care

Submitted June 24, 2022; submitted, revised, November 15, 2022; accepted December 1, 2022.

Funding support: Dr Tong's time was supported by the American Board of Family Medicine Foundation.

Supplemental materials

REFERENCES

1. Bierman AS, Wang J, O'Malley PG, Moss DK. Transforming care for people with multiple chronic conditions: Agency for Healthcare Research and Quality's research agenda. *Health Serv Res*. 2021;56(Suppl 1)(Suppl 1):973-979. 10.1111/1475-6773.13863
2. Schafer KM, Lieberman A, Sever AC, Joiner T. Prevalence rates of anxiety, depressive, and eating pathology symptoms between the pre- and peri-COVID-19 eras: a meta-analysis. *J Affect Disord*. 2022;298(Pt A):364-372. 10.1016/j.jad.2021.10.115
3. Woolf SH, Masters RK, Aron LY. Effect of the covid-19 pandemic in 2020 on life expectancy across populations in the USA and other high income countries: simulations of provisional mortality data. *BMJ*. 2021;373:n1343. 10.1136/bmj.n1343
4. Wodarski JS. The integrated behavioral health service delivery system model. *Soc Work Public Health*. 2014;29(4):301-317. 10.1080/19371918.2011.622243
5. National Academies of Sciences, Engineering, and Medicine. *Key Policy Challenges and Opportunities To Improve Care For People With Mental Health and Substance Use Disorders: Proceedings of a Workshop*. The National Academies Press; 2020.
6. The Academy for Integrating Behavioral Health and Primary Care. What is integrated behavioral health? Accessed Apr 6, 2022. https://integrationacademy.ahrq.gov/about/integrated-behavioral-health
7. Breslau J, Sorbero M, Kusuke D, et al. Primary and behavioral health care integration program: impacts on health care utilization, cost and quality. Published Mar 28, 2019. Accessed Apr 11, 2022. https://aspe.hhs.gov/reports/primary-behavioral-health-care-integration-program-impacts-health-care-utilization-cost-quality-0
8. Miller BF, Petterson S, Brown Levey SM, Payne-Murphy JC, Moore M, Bazemore A. Primary care, behavioral health, provider colocation, and rurality. *J Am Board Fam Med*. 2014;27(3):367-374. 10.3122/jabfm.2014.03.130260
9. Peterson L, Fang B, Phillips R Jr, Avant R, Puffer J. The American Board of Family Medicine's data collection method for tracking their specialty. *J Am Board Fam Med*. 2019;32(1):89-95. 10.3122/jabfm.2019.01.180138
10. Andrilla CHA, Patterson DG, Garberson LA, Coulthard C, Larson EH. Geographic variation in the supply of selected behavioral health providers. *American Journal of Preventive Medicine*. 2018/06/01/ 2018;54(6, Supplement 3):S199-S207. 10.1016/j.amepre.2018.01.004
11. Ratzliff A, Sunderji N. Tele-behavioral health, collaborative care, and integrated care: learning to leverage scarce psychiatric resources over distance, populations, and time. *Acad Psychiatry*. 2018;42(6):834-840. 10.1007/s40596-018-0984-5
12. Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in family medicine. Revised Jul 1, 2020. Accessed Apr 11, 2022. https://www.acgme.org/globalassets/PFAssets/ProgramRequirements/120_FamilyMedicine_2020.pdf
13. Pomerantz AS, Sayers SL. Primary care-mental health integration in healthcare in the Department of Veterans Affairs. *Fam Syst Health*. 2010;28(2):78-82. 10.1037/a0020341
14. Zeiss AM, Karlin BE. Integrating mental health and primary care services in the Department of Veterans Affairs health care system. *J Clin Psychol Med Settings*. 2008;15(1):73-78. 10.1007/s10880-008-9100-4
15. Hays H, Carroll M, Ferguson S, Fore C, Horton M. The success of telehealth care in the Indian Health Service. *Virtual Mentor*. 2014;16(12):986-996. 10.1001/virtualmentor.2014.16.12.stas1-1412
16. Pomerville A, Gone JP. Behavioral health services in urban American Indian health organizations: a descriptive portrait. *Psychol Serv*. 2018;15(1):1-10. 10.1037/ser0000160
17. Berge JM, Trump L, Trudeau S, et al. Integrated care clinic: creating enhanced clinical pathways for integrated behavioral health care in a family medicine residency clinic serving a low-income, minority population. *Fam Syst Health*. 2017;35(3):283-294. 10.1037/fsh0000285
18. Hall J, Cohen DJ, Davis M, et al. Preparing the workforce for behavioral health and primary care integration. *J Am Board Fam Med*. 2015;28(Suppl 1)(Suppl 1):S41-S51. 10.3122/jabfm.2015.S1.150054
19. Landis SE, Barrett M, Galvin SL. Effects of different models of integrated collaborative care in a family medicine residency program. *Fam Syst Health*. 2013;31(3):264-273. 10.1037/a0033410
20. Oakley C, Moore D, Burford D, Fahrenwald R, Woodward K. The Montana model: integrated primary care and behavioral health in a family practice residency program. *J Rural Health*. 2005;21(4):351-354. 10.1111/j.1748-0361.2005.tb00106.x