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# Physician Satisfaction With Integrated Behavioral Health in Pediatric Primary Care: Consistency Across Rural and Urban Settings

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## Abstract

As the benefits of integrated behavioral health care services are becoming more widely recognized, this study investigated physician satisfaction with ongoing integrated psychology services in pediatric primary care clinics. Data were collected across 5 urban and 6 rural clinics and demonstrated the specific factors that physicians view as assets to having efficient access to a pediatric behavioral health practitioner. Results indicated significant satisfaction related to quality and continuity of care and improved access to services. Such models of care may increase access to care and reduce other service barriers encountered by individuals and their families with behavioral health concerns (ie, those who otherwise would seek services through referrals to traditional tertiary care facilities).

## Keywords

access to care, children, pediatrics, primary care, physician satisfaction

Within primary care, use of an integrated delivery model is on the rise as being the optimal method of providing mental/behavioral health (BH) services.<sup>1</sup> This is due to the high demand of BH services within primary care settings<sup>2</sup> and the concerning number of patients who are lost to follow-up once being referred to external community BH providers.<sup>3</sup> Primary care physicians in rural areas are faced with similar challenges as their urban counterparts; however, these challenges are more significant as the majority of children and adolescents with BH needs in rural areas (80%) live in counties that do not have mental health centers.<sup>4</sup>

Even though the reasons for addressing BH services in primary care are well documented,<sup>5,6</sup> primary care providers still play a key role in the acceptance of health care delivery models in general and they must indicate “buy-in” for an integrated BH system to be successful. Furthermore, provider satisfaction with a model new to their clinic will affect the dissemination of the model in general.<sup>7,8</sup> Thus, successful establishment of this type of service delivery model requires assessment of contributing favorable factors.

Overall, few studies have examined physician satisfaction of integrated BH service delivery models, especially within pediatric populations. Evidence does exist, however, that suggests family physicians who have on-site BH providers are more satisfied with the BH services their

clinic is able to deliver.<sup>9</sup> In their assessment of patient satisfaction within an integrated family practice, Chomienne et al<sup>10</sup> reported that the significant majority of physicians within their study agreed that having access to a psychologist resulted in earlier diagnoses and management of BH problems and that the ability to refer patients for rapid assessment and intervention had a major positive impact on their practice. Further noted improvements included better access to care, knowledge of psychological principles, improved quality of care, more free time, and quality of work, life, and office atmosphere. Chomienne et al<sup>10</sup> reported that the majority of patients seen during this research were between 25 and 64 years old; thus, further research is needed to assess pediatricians' satisfaction with similar services for their young patients. This study also builds on Chomienne et al by including a larger number of clinics (both urban and rural) as well as more providers (both medical health and BH).

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The current study aims to add to the understanding of the dynamics relevant to successful integrated service delivery models. This study extends current research by investigating the specific factors that physicians view as assets to having a pediatric BH practitioner integrated within rural and urban pediatric primary care settings.

## Method

### Participants and Setting

Data were collected at 6 rural pediatric primary care clinics and 5 urban clinics in 2011 as part of general program evaluation. These clinics were included in this study because of their partnership with the state's academic health sciences center (University of Nebraska Medical Center [UNMC]). In each clinic, children and adolescents were referred by a medical provider for services with an integrated on-site BH provider. The BH providers were faculty or postdoctoral fellows and all had specific training in working with children in primary care. During the time frame of the survey, all BH providers remained consistent for the academic year. Collaboration with medical providers included progress notes, hallway consultations, in-session consultations, and in-person introductions at the time of referral. Medical providers in each clinic comprised of pediatricians and mid-level providers (eg, nurse practitioners). Only pediatricians were surveyed in this study as a large majority of BH referrals across clinics came directly from the pediatrician.

### Measures

The survey was created and designed as a part of general program evaluation procedures by UNMC BH psychologists used for quality improvement purposes. Surveys were mailed to all physicians at affiliated pediatric clinics via United States Postal Delivery in 2011 (approximately 45 surveys). Providers were informed that the survey was part of program evaluation procedures for the UNMC Psychology Department. If surveys were not returned, resources were not available to provide reminder calls or letters. Surveys included a 1- to 5-point Likert-type scale assessing physicians' attitudes and satisfaction with BH services. Information collected included physician satisfaction with (a) the therapist providing BH services to referred families (eg, courteous, pleasant, and genuinely interested in helping families), (b) the BH services meeting the needs of the referred families, (c) the quality of services the therapist provides, (d) the therapist's ability to communicate with physicians and staff at the primary care clinic, and (e) the pediatric BH services overall. Physicians were also asked their level of agreement with statements regarding whether integration of BH providers in primary care (a) improves the quality of care for patients, (b) improves the

**Table 1.** Physician Respondent Characteristics.

Characteristic	n (%)
Pediatrician location	
From urban clinic	14 (52)
From rural clinic	13 (48)
Duration pediatrician located at clinic	
1-4 years	16 (59)
5-9 years	3 (11)
10+ years	8 (30)
Duration of behavioral health provider integration	
1-12 months (up to 1 year)	7 (26)
13-36 months (1-3 years)	7 (26)
37-60 months (3-5 years)	10 (37)
61+ months (5+ years)	3 (11)

continuity of health care, (c) reduces time that is normally spent on BH concerns while freeing up time that can be spent on other medically related issues, (d) reduces added health care costs, (e) increases follow up for referred families compared with external community referrals, (f) increases their ability to identify and manage the BH concerns of their patients, and (g) decreases stigma that is often associated with BH services. Physicians were also provided the opportunity to provide qualitative data regarding how to improve the BH services at their clinic and their opinion of the strengths of the model.

A chi-square analysis was performed to examine the relation between physician ratings according to clinic location (eg, rural vs urban). To facilitate interpretation of survey data in this analysis, improvement and satisfaction ratings were recoded into 2 categories: (a) Agree–Strongly Agree and (b) Neutral–Disagree–Strongly Disagree. Regression analyses were also completed to determine if physician/clinic characteristics (eg, duration pediatrician located at clinic, duration of BH integration) predicted improvement/satisfaction ratings.

## Results

Twenty-seven physicians returned the survey (60% response rate). Physician respondent characteristics are provided in Table 1. Approximately 48% of physician's involved in the study practiced in rurally located clinics. The average duration that a pediatrician had been located at their clinic site was reported to be approximately 6 years ( $M = 6.07$  years,  $SD = 4.71$ ) and BH services had been integrated for an average of 3 years ( $M = 36.19$  months,  $SD = 25.38$ ).

The physician satisfaction and improvement ratings across clinics are summarized in Table 2. Physicians overwhelmingly agreed that integration with BH in the pediatric clinic improved overall quality of care (96% of physicians). Specific areas of the practice that improved varied and

**Table 2.** Physicians Who Rated Statement as “Agree” or “Strongly Agree.”

	Urban, n (%)	Rural, n (%)	Combined, n (%)
<i>Satisfaction with . . .</i>			
Therapist providing behavioral health services	13 (93)	13 (100)	26 (96)
Services meeting needs of the families	13 (93)	13 (100)	26 (96)
Quality of services	13 (93)	13 (100)	26 (96)
Therapist’s ability to communicate with physician	13 (93)	13 (100)	26 (96)
Overall pediatric behavioral health services	13 (93)	13 (100)	26 (96)
<i>Integration of behavioral health therapist in primary care . . .</i>			
Improved quality of care	14 (100)	12 (92)	26 (96)
Improved continuity of care	14 (100)	11 (85)	25 (93)
Freed physicians time for more medically related care	14 (100)	9 (64)	23 (85)
Decreased added medical costs	12 (86)	7 (54)	19 (70)
Increased physical health care follow-up	12 (86)	11 (85)	23 (85)
Increased physician ability to manage behavioral concerns	13 (93)	10 (77)	23 (85)
Decreased stigma surrounding behavioral health	12 (86)	9 (64)	21 (78)

included (a) improved continuity of care (93%), (b) allowed physicians more free time (85%), (c) decreased cost (70%), (d) increased physical health follow-up (85%), (e) increased physician ability (85%), and (f) decreased stigma surrounding BH (78%).

Regarding differences between physicians located in rural or urban clinics, physicians generally had only slight variations across items, with answers mostly ranging from “satisfied” to “highly satisfied.” There were multiple items, however, where only 1 rural physician indicated any dissatisfaction/neutrality, while urban clinics unanimously rated satisfaction. Chi-square analyses revealed that physicians in rural clinics were more equally split in agreement ratings for perceived decreased costs while urban clinics largely agreed in this benefit ( $\chi^2 = 3.28, P = .07$ ). Analyses did not reveal any other significant differences between groups. Furthermore, regression analyses did not reveal any predictors of item responses based on physician or clinic characteristics (eg, duration of BH integration was not a significant predictor of response ratings).

## Discussion

Past research has established the value of integrated BH services within primary care; however, as with any significant organizational change, getting buy-in from organizational leaders is essential. In the case of integrated BH care within primary care practices, buy-in can be conceived as consisting of physicians’ confirmed positive attitudes and perceived levels of improvement regarding the services provided within their clinic. Based on the findings of this study, physicians demonstrated satisfaction and optimism for this model across both rural and urban clinics.

While this study is relatively small in scope, these data speak to the importance of (a) continued integration of BH

into primary care, (b) training BH providers to work in these settings, and (c) increasing medical providers’ own comfort level and ability in treating BH concerns. This study adds to the growing support for integrated medical homes and may include a cause for action for more sophisticated integration of related services. For instance, BH services can be further enhanced by the integrated provider consulting with medical providers during routine appointments and encouraging medical providers to assess and treat common BH concerns.<sup>11</sup> Furthermore, with increased use of telemedicine to assess and treat a wide range of behavioral and medical problems, BH and primary care may become more integrated as ease of access and consultation is increased. This would also be the case for other specialized services, including psychiatric care<sup>12</sup> and other adjunct services (eg, social work). A combination of integrated primary care and telemedicine would indeed allow greater access to services within both medical and personal homes, especially for rural families.

Since these data are from routine program evaluation, overall conclusions inherently include some limitations. A primary limitation to the study is the relative lack of variability in the satisfaction data. Similar to this limitation is the overall small number of clinics and providers that were surveyed. Ideally, we would like to increase the rating points for each clinic and include mid-level providers, but in some cases only one medical provider was able to complete the survey. If the sample sized is increased, and possibly the variability of the data, we may find more widespread satisfaction with integrated services or at least be able to gain more insight into the relationships amongst target variables. Additionally, a limitation includes the use of subjective ratings of satisfaction and future research should focus on the objective operationalization of these ratings.

Furthermore, all BH providers were either products of, or trainees within, the same training program at UNMC. This program has long been established as providing high-quality integrated BH services in both rural and urban settings.<sup>13,14</sup> Thus, consistent training and oversight from an established program (eg, American Psychological Association-approved internships, postdoctoral fellowships, and university-approved practicum experiences) might affect the satisfaction among providers and this model. Integrating a BH provider without this level of training or experience may result in different outcomes. Future research should compare satisfaction ratings within integrated settings to nonintegrated clinics or BH providers not trained within the model available at UNMC. Future research might also evaluate the specific qualities sought out by medical providers in regard to BH providers within both urban and rural settings. Operationalization of these qualities (eg, understanding of health care systems, rapid clinical assessment of common primary care conditions, interprofessional collaboration, ethical and legal issues, professionalism) can be used to better structure training programs interested in integrating psychology within pediatric primary care.

Overall, these findings add to the current literature showing overall perceived improvements in practice and patient care when BH services are integrated within the medical home. Provider satisfaction and perceived benefits are important with any organizational change. These findings suggest that with continued favorable views of integrated BH, increased acceptance and integration of these services (and thus improved patient care) can be further realized.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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### Author Biographies

**Jeffrey F. Hine**, PhD, is an assistant professor of Pediatrics at the Vanderbilt University School of Medicine and the Vanderbilt Kennedy Center for Research on Human Development. His research interests include integration of behavioral health services into primary care practices, early identification and treatment of autism spectrum disorders within primary care, and use of telemedicine to enhance treatment and support for children with behavioral-health concerns and their families.

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**Joseph H. Evans**, is a professor of Psychology at the Munroe-Meyer Institute and at the University of Nebraska Medical Center. With training funds from the Health Resources and Services Administration, he has developed an "integrated behavioral health in pediatric primary care model" that is now being used in 32 rural and urban sites across Nebraska and that is being replicated in two additional states. Dr. Evans specializes in training psychology interns and post-doctoral fellows in methods to integrate behavioral services into patients' primary care "medical homes."