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Closing the gap in access to child mental health care: provider feedback from the Wisconsin Child Psychiatry Consultation Program

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Abstract

Background Mental illnesses are common among children and negatively impact wellbeing during childhood as well as later in life. However, many children with these conditions are not able to access needed mental health care. The Wisconsin Child Psychiatry Consultation Program (WI CPCP) was created to reduce gaps in access to care by providing primary care providers with referral resources, access to behavioral health consultations, and training on mental health topics.

Objectives The purpose of this study was 1) to assess the effectiveness of the WI CPCP in Milwaukee County, providing specific insights into provider's ability to care for child mental health, and 2) identify challenges Milwaukee PCPs faced in providing mental health care to child patients and contextualize these challenges in a conceptual framework of access to health care.

Methods A cross-sectional mixed-methods secondary data analysis was conducted using data collected from online baseline and nine-month follow-up surveys completed by providers participating in the program practicing in Milwaukee County from 2014 to 2022. Provider confidence and skill in providing mental health care was analyzed quantitatively using Two-sample Wilcoxon rank-sum (Mann–Whitney) tests (baseline vs. follow-up survey responses) and descriptive statistics (follow-up survey only). Provider challenges to providing mental health care were analyzed qualitatively using a thematic analysis research approach.

Results Results from quantitative analyses showed that provider confidence and skill in treating childhood anxiety and depression improved from baseline to follow-up. Results from qualitative analyses were categorized by factors within and beyond the scope of WI CPCP. Within the scope of WI CPCP, providers reported a lack of knowledge of referral options and a lack of training in mental health care as well as a lack of knowledge in assessing and treating mental disorders. Still, many barriers to mental healthcare access persist that are beyond the scope of WI CPCP, such as long wait times and a lack of insurance coverage.

Conclusions This study supports the effectiveness of the program to improve access to care for children. However, there is a need for additional solutions such as better reimbursement for mental health professionals and expanded insurance coverage.

Keywords Primary care, Access, Mental health care, Child, Consultation

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Background

Unfortunately, mental illnesses are common among children [1]. For example, about one in three high school students reported experiencing poor mental health often during the COVID-19 pandemic [2]. Furthermore, childhood mental illnesses not only impact wellbeing during childhood, but are also associated with worse health, social, and economic outcomes in adulthood [3]. However, approximately one in five children with any need for mental health care do not receive it [4]. With the shortage in child mental health providers, multisectoral solutions are needed to creatively fill these gaps including fellowship stipends, expansion of telehealth, expansion of prescriptive authority, integrated behavioral health, and training primary care providers in mental health care [5].

Wisconsin's Child Psychiatry Consultation Program (WI CPCP) was developed to address the mental health workforce shortage [6] by assisting primary care providers (PCPs) in addressing their patients' mild to moderate mental health concerns [7]. Health care providers in the primary care setting often take on the burden of mental health care where mental health professionals are scarce [7]. Physicians, Nurse Practitioners, Physician Assistants, and Residents in primary care settings are eligible to receive WI CPCP services. Through this program, PCPs can receive consultation from child psychiatrists, child psychologists, and resource and clinical coordinators for their patients' mental health needs [7]. PCPs also receive skills training in pediatric mental health through curriculum developed by child and adolescent psychiatrists and psychologists [7]. Finally, WI CPCP provides information about mental health resources to refer patients and their families [7]. CPCP resource consultants can share referral information with PCPs over the phone, though most often this is done through a personalized email. The program accesses multiple databases to identify resources, including an internal database with information regarding hours of operation, insurance taken, ages seen, languages spoken, etc. Through these efforts, WI CPCP increases availability, accessibility, and awareness of mental health care for providers and patients [8].

WI CPCP was created in 2014 with donations by the Kubly family in collaboration with the Medical College of Wisconsin [6]. This program was funded by the State of Wisconsin Act 127, passed in 2014, and funding was expanded in the 2017–2019 Biennial Budget, resulting in a total of 26 counties serviced in Wisconsin [9]. Since then, WI CPCP coverage has fully expanded into all counties of Wisconsin [10]. By June 2022, there were 1,794 providers participating in the program and 7,925 consults provided [11]. Between July 2021 and June 2022, the most common conditions for which consults were requested include depression (41% of consults), ADHD (37%), anxiety (37%), and disruptive behavior (20%) [11]. The most common medication-related questions for which consults were requested were related to initiation of a new medication (42% of consults), dosage of a new medication (32%), side effect profile (31%), and switching medications (22%) [11]. In 2017, almost half of PCPs felt confident in meeting the mental health needs of their patients and 79% felt that they could receive a consultation in a reasonable amount of time, 9–12 months after agreeing to participate in WI CPCP vs. 21% and 17% at the time of initiation of participation, respectively [9]. In fact, most providers received a response from the mental health specialist within 30 min [7].

The success of WI CPCP aligns with that of other child psychiatry consultation programs that provide similar resources [12]. For example, an evaluation of the Massachusetts Child Psychiatry Access Project reported significant improvements in adequate access to child psychiatry for patients and ability for primary care providers to meet needs of children with psychiatric problems and receive consults in a timely manner at follow-up when compared to baseline [13]. An evaluation the Washington State Partnership Access Line found that PCPs also reported high satisfaction including that the program helped increase their skill in mental health care and helped them better manage their patient's care [14]. Overall, children in states with child psychiatry consultation programs available in all counties are more likely to receive mental health care than children in states without such programs [15].

The first aim of this study was to quantitatively investigate the association between WI CPCP participation and PCP confidence and skill in providing mental health care, and specifically provide care for children with anxiety and depression. We were particularly interested in understanding provider confidence and skill with treating anxiety and depression, as anxiety and depression are among the most common childhood mental illnesses [1, 16]. Also, children with internalizing disorders are less likely to be identified and referred to mental health care than those with externalizing disorders [17]. The research question for this aim was "What is the association between WI CPCP participation and PCP confidence and skill in mental health care?" (Research Question 1). The second aim of this study was to use a qualitative, pragmatic approach to better understand PCP challenges to providing mental health care. We specifically examined these factors in Milwaukee County, which was of particular interest to the study team due to eleven designated Health Professional Shortage Areas (HPSAs) for mental health in the county [18]. Milwaukee County PCPs were eligible to participate in WI CPCP since the program began in 2014. The two research questions were "What

are the biggest challenges for PCPs in finding mental health specialist resources for child patients?" (Research Question 2) and "What are the biggest challenges that PCPs face in providing mental health assessment and treatment for child patients?" (Research Question 3).

Methods

This study used data from the Wisconsin Child Psychiatry Consultation Program (WI CPCP) database collected between August 2014 and December 2022. PCPs participating in the program completed a baseline survey before starting the program, and nine months later they completed a follow-up survey (see the Supplementary File for survey items used for this study). Participants had the opportunity to enter a lottery for a $100 gift card once per quarter. Both surveys were anonymous, so responses could not be individually linked from baseline to follow-up. This study has been approved for human subjects research by the Medical College of Wisconsin Institutional Review Board.

A cross-sectional mixed-methods secondary data analysis was developed to address the two study aims. The first research question quantitatively examined Milwaukee PCP confidence in diagnosing childhood behavioral health disorders as well as confidence and skill in providing mental health care for child patients who have anxiety or depression. The following survey items were included in this analysis (Likert scale response options can be found in the Figs. 1, 2, 3, 4, 5 and 6): 1) I feel confident in accurately diagnosing childhood behavioral health disorders, 2) I feel confident in my ability to provide mental health management for my child patients with anxiety, 3) I feel confident in my ability to provide mental health management for my child patients with depression, 4) Please rate your clinical skill level with the management and treatment of anxiety disorders, 5) Please rate your clinical skill level with the management and treatment of depressive disorders, and 6) How helpful have you found WI CPCP-provided educational services on pharmacological management of depression and anxiety? Distributions of baseline and follow-up survey responses for items were compared at $\alpha < 0.05$ using Two-sample Wilcoxon rank-sum (Mann–Whitney) tests for all items except item number six. Item number six is only available in the follow-up survey, thus descriptive statistics were used for analysis. Survey data was collected

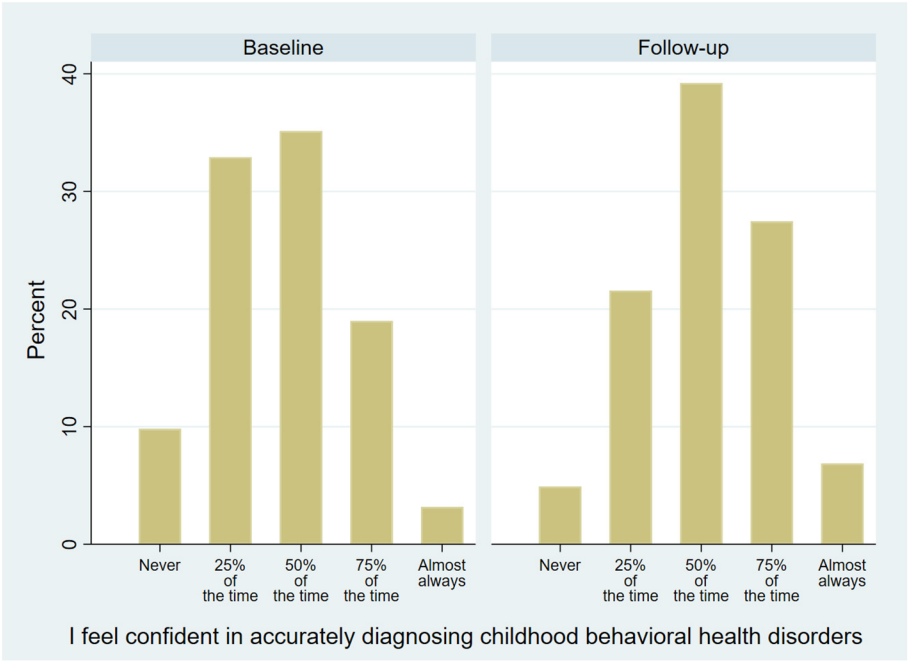

Fig. 1 Primary Care Provider's confidence in accurately diagnosing childhood behavioral health disorders

Two-sample Wilcoxon Rank-sum (Mann-Whitney) Test ($N_{baseline}$=316, $N_{follow\text{-}up}$=102):

Baseline Rank Sum=62890, Baseline Expected=66202

Follow-up Rank Sum=24682, Follow-up Expected=21369

p=0.0011

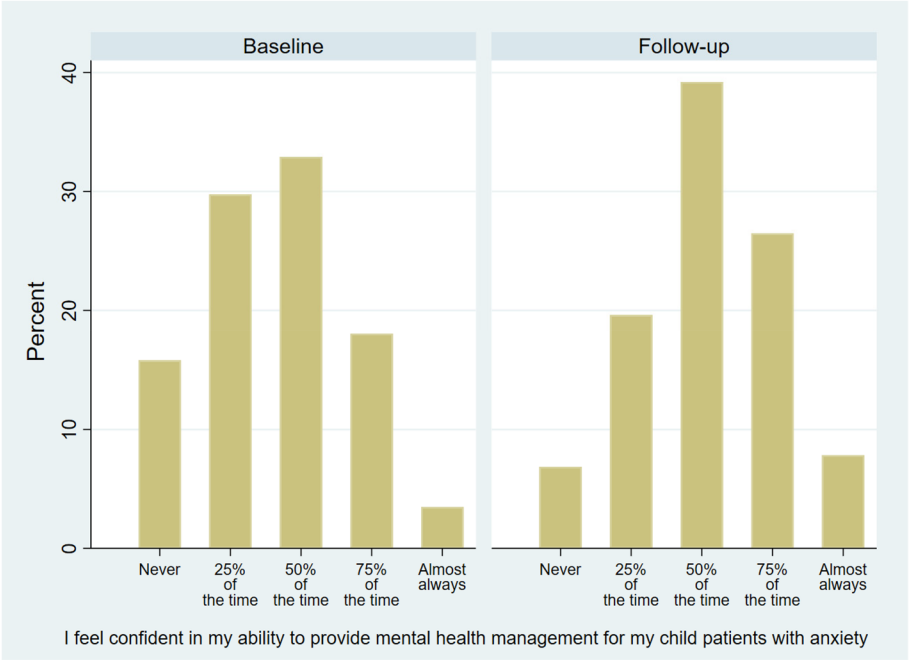

Fig. 2 Primary Care Provider's confidence in ability to provide mental health management for child patients with anxiety

Two-sample Wilcoxon Rank-sum (Mann-Whitney) Test ($N_{baseline}$=316, $N_{follow\text{-}up}$=102):

Baseline Rank Sum=62414, Baseline Expected=66202

Follow-up Rank Sum=25158, Follow-up Expected=21369

p=0.0002

using REDCap software. Statistical analyses were conducted using Stata IC 15.1 software.

The second and third research questions qualitatively examined overall challenges Milwaukee PCPs faced in providing mental health care to child patients. Survey items used for this analysis included: What are the biggest challenges that Milwaukee PCPs have in finding mental health specialist resources for child patients? and What are the biggest challenges that Milwaukee PCPs face in providing mental health assessment and treatment for child patients? Survey data was exported from REDCap and imported to MAXQDA software for qualitative data analysis. The interpretive framework of this research is pragmatism, and the research approach is thematic analysis [19, 20]. One coder coded each transcript using descriptive, structural, in-vivo, process, and holistic codes [21]. Then, this coder used thematic maps to organize codes into preliminary themes and test relationships between codes and themes [19]. Themes were refined and finalized through the writing process, discussion with another study team member, and by revising the original thematic maps [19]. Starting with codes related to the primary care setting, quotes were collated for each code and multiple illustrative or representative quotes categorized by code were added to a document to begin summarizing and reporting findings. After adding primary care-related factors and quotes to the word document the study team discussed possible groupings to best present the findings. The categorization of factors within and beyond the scope of WI CPCP was chosen. Next, additional codes beyond the primary care setting and those which grouped concepts patterned throughout the dataset, were added to the document grouping by the two overarching themes. Final revisions of the results included selecting illustrative quotes and creating detailed descriptions of these patterns in the dataset. Finally, themes were contextualized using the Levesque, Harris, and Russell (2013) conceptual framework of patient-centered access to health care [22]. This framework has been used to contextualize efforts to improve access to childhood mental health care [23].

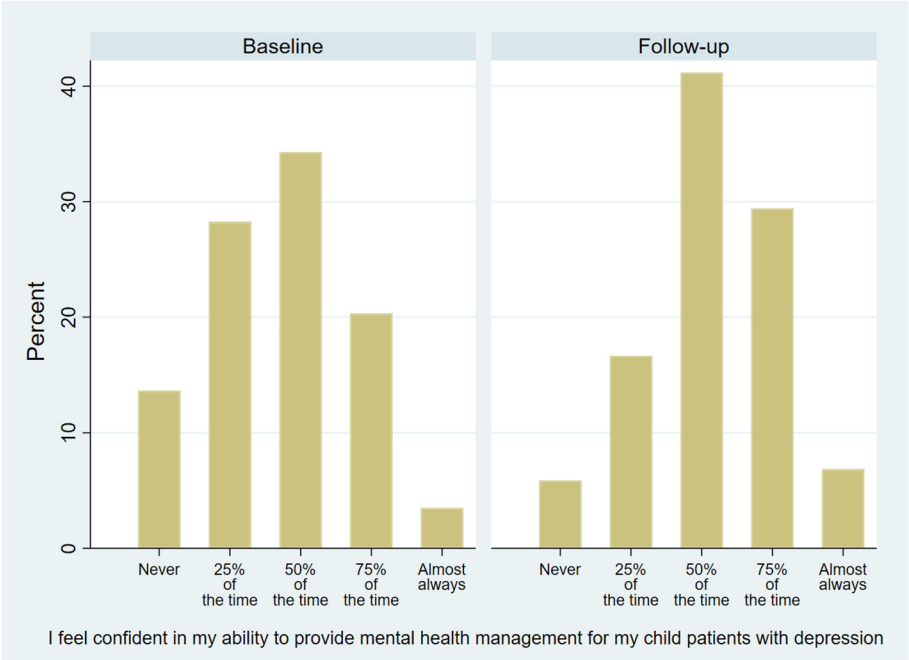

Fig. 3 Primary Care Provider's confidence in ability to provide mental health management for child patients with depression

Two-sample Wilcoxon Rank-sum (Mann-Whitney) Test ($N_{baseline}$=315, $N_{follow\text{-}up}$=102):

Baseline Rank Sum=62145, Baseline Expected=65835

Follow-up Rank Sum=25008, Follow-up Expected=21318

p=0.0003

Results

The sample includes 342 PCPs at baseline and 114 at follow-up who were practicing in Milwaukee County at the time of each survey (Table 1). A majority of respondents had Medical Degrees (73% at baseline and 77% at follow-up) and were in practice for two years or less (41% and 35.1%), followed by sixteen years or more (21% and 25%). About nine months into the program, 38% of PCPs that completed the follow-up survey had not yet had an encounter with a psychiatric consultant for example, regarding medication, diagnosis, or referral information. About 30% had one to two encounters with a consultant, 19% had three or four encounters, and the remaining 13% had six to ten encounters.

Research Question 1: What is the association between WI CPCP participation and PCP confidence and skill in mental health care?

There were statistically significant differences in the distributions between the baseline and the follow-up group for each of the five baseline vs. follow-up items. For each of these items, the sum of the follow-up group ranks was higher than expected, while the sum of the baseline ranks was lower. All comparisons were statistically significant with $p<0.05$. The following abbreviations will be used to report the results: Baseline Rank Sum (RS_b), Baseline Expected (E_b), Follow-up Rank Sum (RS_f) and Follow-up Expected (E_f). Figure 1 shows histograms for provider confidence in accurately diagnosing childhood behavioral health disorders (RS_b=62,890, E_b=66,202; RS_f=24,682, E_f=21,369). Figure 2 shows histograms for provider confidence in ability to provide mental health management for children with anxiety (RS_b=62,414, E_b=66,202; RS_f=25,158, E_f=21,369). Figure 3 shows histograms for provider confidence in ability to provide mental health management for children with depression (RS_b=62,145, E_b=65,835; RS_f=25,008, E_f=21,318). Figure 4 shows histograms for clinical skill with the management and treatment of anxiety disorders (RS_b=60,503, E_b=64,222; RS_f=24,575, E_f=20,857). Figure 5 shows histograms for clinical skill with the management and treatment of depressive disorders (RS_b=61,170, E_b=65,312; RS_f=25,150, E_f=21,008). A majority of providers found WI CPCP educational services on pharmacological management of depression and anxiety to be helpful (25%

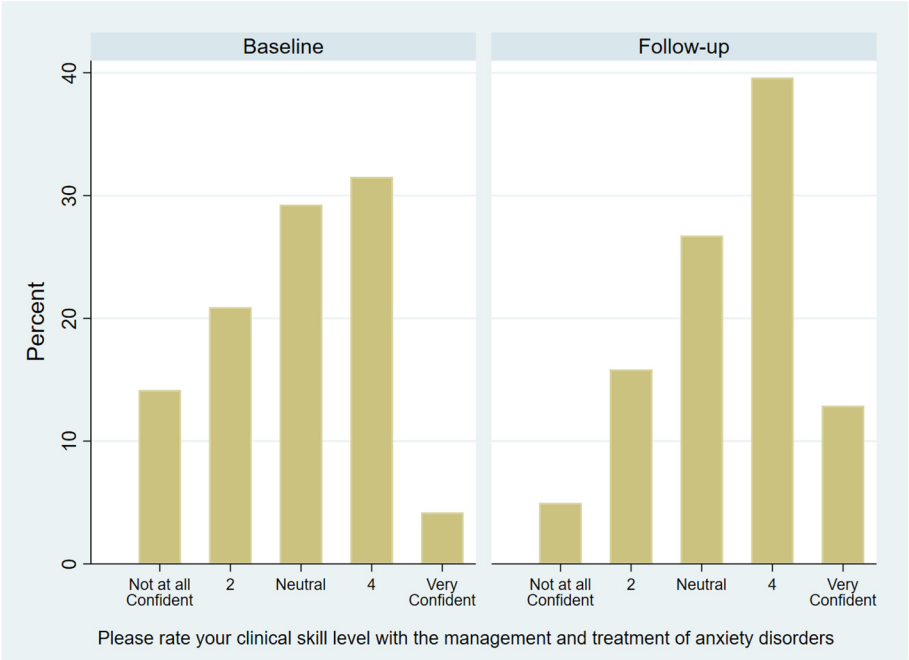

Fig. 4 Primary Care Provider's clinical skill level with the management and treatment of anxiety disorders

Two-sample Wilcoxon Rank-sum (Mann-Whitney) Test ($N_{baseline}$=311, $N_{follow\text{-}up}$=101):

Baseline Rank Sum=60503, Baseline Expected=64222

Follow-up Rank Sum=24575, Follow-up Expected=20857

p=0.0002

responded Helpful and 40% responded Very helpful; Fig. 6).

Research question 2: What are the biggest challenges for PCPs in finding mental health specialist resources for child patients?

Sixty-six percent of survey participants responded to this item in the baseline (N=227) and seventy-two percent responded in the follow-up (N=82). Themes identified during analysis for Research Questions 2 and 3 were categorized using the Levesque, Harris, and Russell (2013) conceptual framework of patient-centered access to health care [22]. See Fig. 7 for our adapted conceptual framework.

Factor within the scope of WI CPCP

Knowledge of referral options

Not knowing options to refer patients to mental health services was one challenge reported by participants. Providers shared not knowing what services exist in the community, what mental health professionals specialize in, what insurances are accepted, or which offer quality care, culturally appropriate services, and are skilled in working with children. Several providers mentioned wanting an organized, central source of information to help them with referrals. About nine months into WI CPCP, some still reported being unfamiliar with local resources.

> *"Also, I don't feel I have personal recommendations re: specific counselors and psychiatrists whom I know will be able to provide competent, compassionate care in particular situations (e.g. when dealing with issues of race, bullying, childhood adverse events/trauma informed care, concerns re: ADHD v ODD v other non-specific behavioral concerns, eating disorders, etc.). A centralized listing of providers specializing in each of these areas, both psychiatrists and therapists, would be very helpful."*
> *Provider 171, Baseline Survey*
> *"I am still relatively unfamiliar with therapist/counselors and psychiatrists in the area. This becomes problematic when a patient would benefit from a specific kind of therapist (such as one who works well with LGBTQ populations) and I am unsure what direction to point them in. I think it is also hard to determine who will be covered by my patient's insur-*

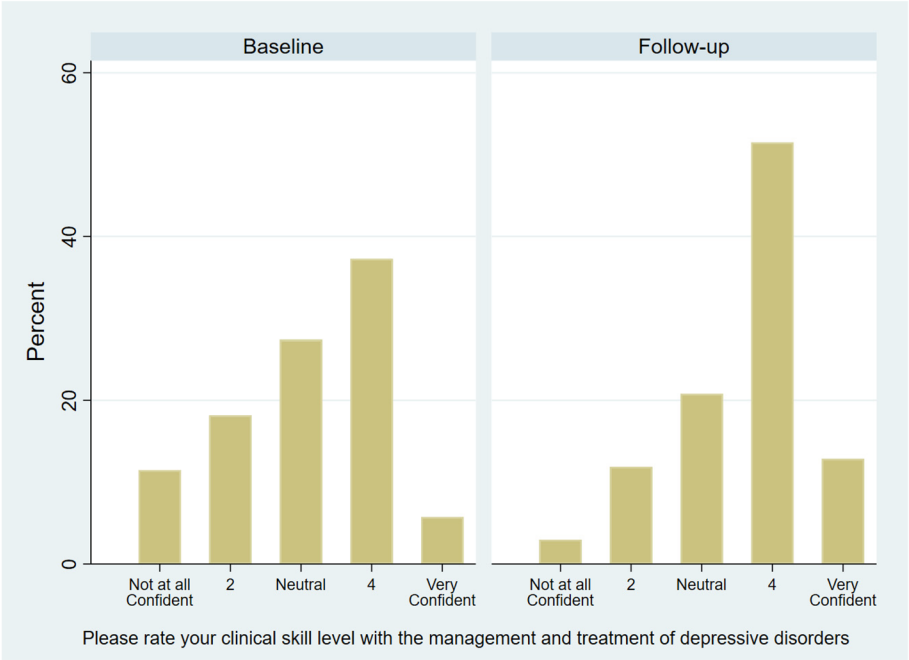

Fig. 5 Primary Care Provider's clinical skill level with the management and treatment of depressive disorders

Two-sample Wilcoxon Rank-sum (Mann-Whitney) Test ($N_{baseline}$=314, $N_{follow\text{-}up}$=101):

Baseline Rank Sum=61170, Baseline Expected=65312

Follow-up Rank Sum=25150, Follow-up Expected=21008

p<0.0001

> *ance and then to point them in the right direction only to make a ton of phone calls that makes an already stressful situation (supporting your child's mental health) even more stressful."*
> *Provider 107, Follow-up Survey*

Factors beyond the scope of WI CPCP

Access to onsite support (Integrated Care)

Having mental health care onsite can help PCPs connect patients to specialists. One provider noted that wait times to see mental health specialists have improved with therapists in primary care clinics. However, barriers to care still exist including a great need in the community for care and finding external resources for patients with "severe mental health issues or for complex med[ication] management." Provider 338, Baseline Survey.

Referrals limited by healthcare system

Referrals to services outside of the PCP's healthcare system posed challenges to connecting patients to mental health specialists, and some providers were not able to refer outside of their system at all. One provider shared frustration with their mental health referrals being directed to a triage system and feeling like they are not trusted to make direct referrals to psychiatrists. Another identified that their referrals to external organizations are rejected due to the patient not having a PCP within the organization or insurance not covering the patient.

Wait time to be seen by a specialist

Most providers reported the wait time to be seen by a specialist as a challenge. One shared that it is a challenge to "access providers in a reasonable amount of time (< 1 month)" and a couple reported wait times greater than six months. A long wait time may lead to not successfully connecting with a specialist, as one provider notes (Provider 56, Follow-up Survey), "Mental health is something that needs to be addressed when there is a crisis. If families have to wait 6–10 weeks for a first appointment they often don't follow thru-as something else becomes more critical by then." Long wait times are especially challenging for patients that have more complex or severe mental health concerns that are beyond the comfort level of PCPs.

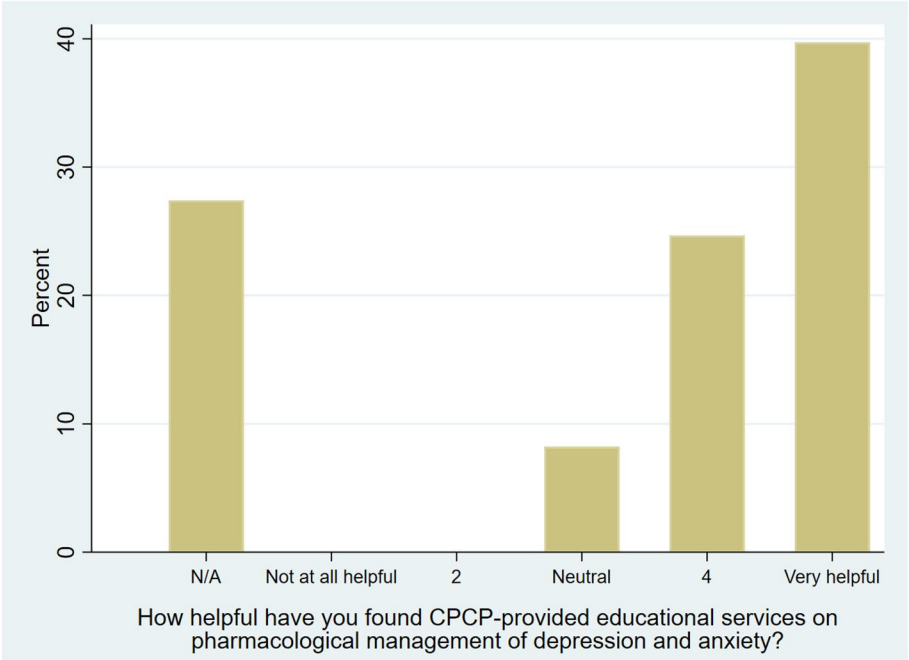

Fig. 6 Helpfulness of WI CPCP-provided educational services on pharmacological management of depression and anxiety for Primary Care Providers (Follow-up survey only)

N=73, Not applicable=27%, Neutral=8%, Helpful=25%, Very helpful=40%

Percentages add to over 100% due to rounding

Table 1 Wisconsin Child Psychiatry Consultation Program Survey Respondent Demographics

	Baseline		Follow Up	
	N	%	N	%
Record ID	342	100.0	114	100.0
Degree				
MD	251	73.4	88	77.2
DO	37	10.8	12	10.5
NP	33	9.7	13	11.4
PA	14	4.1	1	0.9
Other	4	1.2	0	0.0
Missing	3	0.9	0	0.0
Years in practice				
0–2	141	41.2	40	35.1
3–5	46	13.5	14	12.3
6–10	42	12.3	14	12.3
11–15	33	9.7	17	14.9
16+	72	21.1	28	24.6
Missing	8	2.3	1	0.9

Lack of mental health professionals

Many providers reported that there are not enough mental health specialists, especially psychiatrists, to meet the needs of patients in a timely manner. Desire to connect patients to psychiatrists was related to making a diagnosis, medication initiation or management, and seeing patients with complex or severe mental health needs. Desire to connect with counselors, therapists, or psychologists was related to a patient need for counseling or therapy, such as Cognitive Behavioral Therapy.

Insurance

Insurance coverage for mental health specialist services was also a reported barrier to finding mental health specialist resources for patients. Some providers specifically identified challenges finding counselors and psychiatrists that accept Medicaid insurance or that will see uninsured patients. Insurance barriers were related to accessibility or transportation challenges as well as longer wait times.

> *"Our clinic has pretty much all [Medicaid] patients who have lived through a lot of trauma. We are so lucky to have a great therapist in our clinic, but the medication piece can be tricky-given insurance as well as transportation issues, and often the dx [i.e., diagnosis] is not straightforward given all they've lived through."*
> *Provider 220, Baseline Survey*

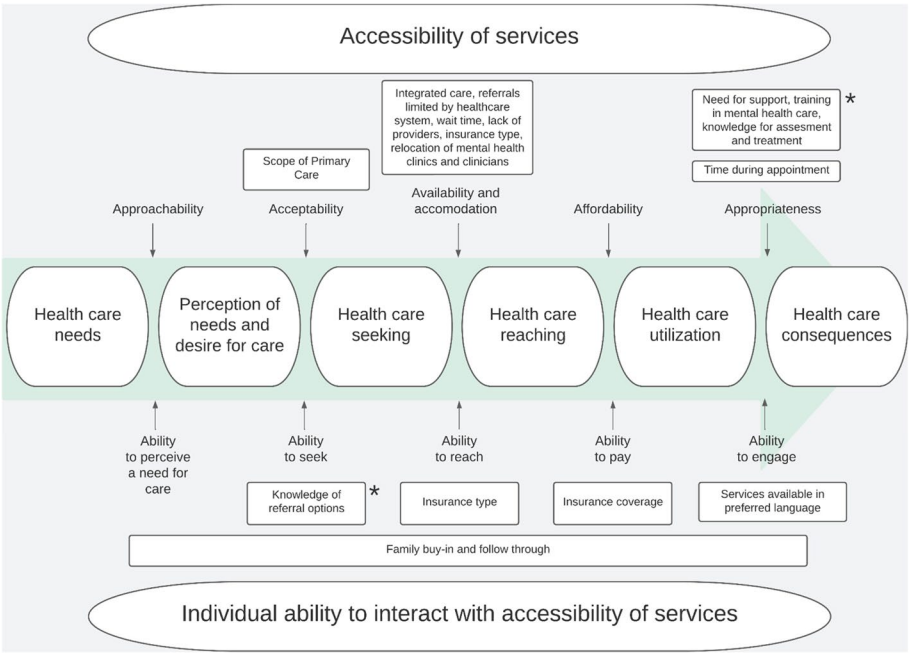

Fig. 7 Conceptual framework of primary care provider challenges to providing childhood mental health care

This framework is adapted from the Levesque, Harris, and Russell 2013 conceptual framework of access to health care [22]. Participants reported challenges related to a variety of individual and service-related access constructs (black boxes). Challenges within the scope of the Wisconsin Child Psychiatry Consultation Program have an asterisk (*) next to the box

"Insurance is the major limiting factor. The majority of my patients have Medicaid and families often have to call many (> 10-20) locations to get on a wait list. It often takes about 3 months once they are on a wait list. Our clinic does not have a Social Worker on site and so it is often me trying to look into other resources/follow-up. Another limiting factor is finding services for children younger than age 5. Counseling is a bit easier to get access for compared to psychiatry, however is still harder for Medicaid vs private insurance patients (often 1-2 months wait list)."
Provider 35, Follow-up Survey
"Access to psychiatry for my medicaid patients, particularly for any psychiatric provider that is located in an accessible location for patients living in the central city of Milwaukee is a tremendous problem. Due to this, the time to obtain appointment is often a 5-6 month wait if patient is not admitted or enrolled in [an intensive outpatient program]."
Provider 73, Follow-up Survey

Additional factors

Additional barriers to finding mental health specialist resources for child patients included cost for families, a lack of options for services in the patient's language (particularly Spanish), and frequent relocation of clinics or specialists.

Research question 3: What are the biggest challenges that PCPs face in providing mental health assessment and treatment for child patients?

Sixty-five percent of survey participants responded to this item in the baseline ($N=223$) and fifty-five percent responded in the follow-up survey ($N=63$).

Factors within the scope of WI CPCP

Need for support

Some providers shared a need for support from mental health specialists for assessment and treatment management. This need speaks to the importance of WI CPCP consultation services and of having access to a support system that one can contact with questions about diagnosis or treatment, patient referrals, or to follow up on a patient's care.

Training in mental health care

A lack of training in certain areas was shared in both baseline and follow-up surveys. In the follow-up survey, one provider reported not having enough training on assessment and treatment of anxiety and depression and another provider asked for additional information potentially through "an online study group with recommended articles." Provider 28, Follow-up Survey.

Knowledge for assessment and treatment

Related to a lack of training, providers shared their lack of knowledge in making an accurate diagnosis using the appropriate scale, prescribing or managing medications, and laying out a plan that is safe and can be followed by the family were challenges to providing mental health assessment and treatment. This lack of knowledge played a role in their confidence and comfort with providing mental health care. One provider said they need more training and patient exposure to become more confident. Another shared not feeling as comfortable with disorders other than ADHD, anxiety, and depression.

> *"I feel comfortable making the diagnosis of depression and anxiety, but it is hard to find a counselor to provide CBT [i.e., cognitive behavioral therapy]. For children with behavioral issues apart from ADHD, I don't feel as comfortable counseling parents on interventions and don't know where to refer them."*
> *Provider 49, Follow-up Survey*

Many providers shared their lack of knowledge or discomfort with medication for mental health disorders. Specific areas that they lacked confidence include knowing what dosage to prescribe, the side effects are for children including suicidal risk with antidepressants, knowing when to switch to another medication, and treating children who need multiple medications.

Factors beyond the scope of WI CPCP

Time available during appointments

The time that providers have during appointments to assess or treat mental health concerns was reported as a challenge in baseline and follow-up surveys. For example, fifteen-minute-long appointments are not long enough to evaluate mental health concerns and provide care thoroughly. However, as one provider notes (Provider 32, Baseline Survey) "reimbursement is poor for longer [appointments]." Another provider highlighted the connection between a lack of time to identify the correct diagnosis within a visit, the challenge of balancing time in a visit for mental health as well as other health concerns, and the frustration with trying to get help for mental health care from psychiatrists but facing the challenges of long wait times or lack of insurance coverage.

> *"There are often multiple possible diagnoses for the children (ex: developmental delay vs ADHD vs autism in children younger than 5 / ADHD vs ODD vs learning disorders in older children) and it is hard to sort out in the limited time that I have for a visit. Often times I meet the child for the first time at a well child check and am expected to address their mental health needs along with their other chronic and preventive issues within 30 minutes. It would be easier if I had more time for each patient but since I don't I have to rely more on psychiatry and the [child health clinic] to aid in diagnosis. This gets to be very frustrating when there are long wait lists for the [child health clinic] (> 6 months) and I can't find a psychiatrist due to insurance coverage."*
> *Provider 35, Follow-up Survey*

Family buy-in and follow-through

Providers shared that patient and family buy-in to address mental health conditions and follow-through with care was a challenge for both connecting patients to mental health services and for providing mental health assessment and treatment through primary care. Believing that the child's mental health concerns are serious enough was an important factor in families scheduling and attending appointments as well as following treatment recommendations. To make referrals more successful, one provider suggested the clinic reaching out to the patient to schedule the appointment.

> *"Also, if it is up to patients/families to follow through on the referral, often this will not happen and we do not presently have the resources to usher patients through this referral process (as they are currently over-burdened w/ non-psychiatric referral coordination work). Knowing that once I place the referral, the pt/family will be contacted either by the clinic they were referred to or by a centralized referral hub for psychiatric services would be very helpful."*
> *Provider 171, Baseline Survey*

Mental health care and the scope of primary care

Some providers shared that treating or managing mental health conditions is outside the scope of a PCP. One provider reported feeling unsafe practicing outside their scope of practice by prescribing medications they normally would not and with which they are not as comfortable, especially for patients that do not often attend follow-up appointments. However, the provider does

this to provide a bridge in care until the patient can be seen by a specialist, which can sometimes be a long time. Other reasons for "do[ing] things that are not really in the scope of practice of a general pediatrician" were the inability to find a specialist and family challenges affording specialty services.

A nurse practioner shared that they are not trained in psychiatry and are "very strict with knowing the scope of [their] licensure." Another provider noted they are "not a therapist and cannot provide adequate behavioral intervention therapy." Provider 56, Follow-up Survey.

Another provider shared their frustration with feeling forced to prescribe medication for mental illnesses because access to psychiatry for patients is so difficult. They identified the issue as systemic and called for improvements to be made in accessible and affordable psychiatric services instead of relying on primary care. This provider added that this added responsibility is leading to burnout among primary care providers.

> *"I do NOT want to be prescribing antidepressants or anxiety meds for my patients but I am forced to due to our flawed health care system. I understand the goal of this program, but I sure wish you would focus on improving access to psychiatrists instead. In the end this is just another thing dumped on general pediatricians and it's not right. ... I do not want to be doing this. It was not a part of my training, I am not interested in doing it, and I don't get paid for it well. This is one of the greatest frustrations with my job and it's causing burnout amongst all of us. Someone needs to step up and provide better access and affordable care from psychiatry"*
> *Provider 41, Follow-up Survey*

Discussion

This mixed methods study analyzed PCP responses to a baseline survey and a follow-up survey received 9-months after initiating participation in the Wisconsin Children's Psychiatry Consultation Program. Quantitative analyses found that provider confidence and skill in treating childhood anxiety and depression, as well as diagnosis of behavioral health disorders improved from baseline to follow up. This may result from access to consultations with behavioral health professionals on childhood mental health concerns and CME-accredited educational opportunities on mental health topics. Our finding aligns with a growing body of literature supporting that participation in a Child Psychiatry Access Program (CPAP) is associated with improved confidence and skill in mental health management for pediatric PCPs [12].

This is the first study to our knowledge that assesses the effectiveness of a psychiatry consultation program on PCPs' self-assessed ability to treat anxiety and depression. Data from the Wisconsin Health Information Organization (WHIO) All-Payer Insurance Claims Database indicate that participation in WI CPCP is associated with increases in the use of mental health-related diagnostic codes, suggesting increased comfort with mental health diagnoses [24]. These increases were particularly prominent for diagnostic codes related to the online educational opportunities offered by WI CPCP, specifically ADHD, depressive or mood disorders, and anxiety [24]. Future research can explore the effectiveness of such programs for treatment of ADHD and other specific conditions. This could help identify which educational content areas may need improvement, as well as opportunities for resource sharing between CPAPs.

PCP challenges to making mental health specialty referrals were categorized into two groups. The only challenge to referral within the scope of WI CPCP was knowledge of referral options. Although the WI CPCP offers a central referral resource list, it may need to better promote this service to increase awareness among PCPs. Beyond the scope of WI CPCP, providers reported the benefits of having onsite support and the challenges with limited referral options based on the provider's healthcare system and long wait times to access care caused by a lack of specialists and a lack of insurance coverage for services. Integrated behavioral health is a health care model in which primary care and behavioral health providers work together with patients and families to provide patient-centered care [25]. It is associated with better outcomes in a variety of mental health problems (including depression and anxiety) for children and adolescents than regular primary care [26]. Furthermore, living in a state with health insurance parity is associated with more affordable childhood mental health care for families and fewer mental health visits as a young adult [27, 28].

PCP challenges to providing mental health assessment and treatment for child patients were categorized into three groups. Multiple factors were within the scope of WI CPCP including the need for support from mental health specialists, training in providing mental health care, and a lack of knowledge in providing assessment and treatment. These three factors are part of the consultation and education core components of the program [7]. The time available during appointments and family buy-in and follow through were challenges beyond the scope of WI CPCP. Similarly, a CPAP study in New York found that having enough time during an appointment to talk about mental health concerns was an issue for both PCPs that had and those that had not yet participated in the program [29]. In the same study, family buy-in was

reported as key to a provider's ability to apply their mental health training [29], suggesting increasing buy-in as a potentially valuable training opportunity for PCPs.

Lastly, the final theme illustrates two key points. One is that although the American Academy of Pediatrics does identify necessary competencies in basic mental health care for PCPs to address conditions of mild to moderate severity [30], there remains an unease among some providers. Similarly, a Maryland CPAP study found participants were more comfortable with screening and referral than with direct intervention [31]. This suggests an opportunity for continued training for PCPs in mental health care to improve confidence and clarification on the boundaries of the scope of mental health treatment in primary care. The second key point is that access to mental health care for children is a systemic issue. Primary care and programs like WI CPCP alone cannot solve the problem. Lack of mental health specialists, long wait times, challenges with insurance coverage and the other factors mentioned in this study have forced PCPs to provide mental health care. Thus, WI CPCP is needed, as well as better reimbursement for mental health specialists to incentivize more people to choose the profession. Additional ways to improve recruitment and retention include lower caseloads (associated with lower levels of burnout and higher job satisfaction) [32, 33], more loan repayment programs, and financial reimbursement to increase the number of professionals willing to supervise trainees and support their time committed to this work [34].

Limitations

Both baseline and follow-up surveys are anonymous, so responses cannot be individually linked from baseline to follow up. Thus, statistically these two samples were treated as independent, even though they are linked. Furthermore, one individual conducted the qualitative coding. Therefore, it was not possible to calculate intercoder agreement as a measure of reliability. Another limitation is that data included in this analysis was collected over an eight-year period and did not distinguish between responses before and after the start of the COVID-19 pandemic. Thus, some findings may be lacking in the situational context of access to mental health care at the time the providers completed the surveys. Still, this study generated findings similar to studies using more recent data confirming the validity of our findings and ability to apply this knowledge to current practice.

Conclusion

This study supports the need for continued support of the Wisconsin Child Psychiatry Consultation Program to improve access to mental health care for children in Milwaukee and other underserved areas of Wisconsin. The results also support increasing awareness among participating PCPs of the services available through the program, such as a central source for vetted referral resources. Increasing access to integrated behavioral health and improving insurance parity can help supplement the efforts of WI CPCP and lead to better outcomes for patients.

Future research should evaluate the impact of participation in WI CPCP on provider skill and confidence with managing other mental health conditions. This can help tailor future educational trainings to areas where PCPs need improvement. In addition, challenges to finding specialists and providing assessment and treatment should be analyzed for the rest of the state of Wisconsin to identify challenges specific to other contexts, such as rural areas. Lastly, the impact of the COVID-19 pandemic on PCP ability to provide mental health care should be explored by comparing survey responses before and after the start of the pandemic.

Abbreviations

WI CPCP	Wisconsin Child Psychiatry Consultation Program
PCP	Primary care provider

Supplementary Information

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Supplementary Material 1.

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Authors' contributions

All authors contributed to the conceptualization of the study (LD, MB, and SY). LD and MB developed the methodology. LD conducted data analysis and wrote the original draft. All authors read, reviewed, edited, and approved the final manuscript (LD, MB, and SY).

Authors' information

The researcher's credentials at the time of data collection and analysis were BS for LD and PhD for the remaining authors. This study is part of the doctoral dissertation of LD. LD's training for this work includes coursework in qualitative analysis and survey research methods. LD also has experience conducting qualitative and quantitative analyses for other studies.

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Availability of data and materials

The dataset generated and analyzed during the current study is not publicly available nor available upon request to protect the confidentiality of study participants.

Declarations

Ethics approval and consent to participate

All study procedures were conducted in accordance with the US Federal Regulations for the Protection of Human Subjects and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The Medical College of Wisconsin Institutional Review Board approved this study. Informed consent was obtained through an informational letter at the beginning of each survey and participants proceeding to complete the survey.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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