Primary care experiences of providing mental healthcare for children in the USA during the COVID-19 pandemic: a qualitative study

Jane Garbutt, Sherry Dodd, Shannon Rook, Lauren Ericson, Randall Sterkel, Katie Plax

ABSTRACT

Background  The increased demand for mental healthcare associated with the COVID-19 pandemic adds to the already high unmet mental health needs among paediatric patients, resulting in a declared ‘mental health emergency’. The study objective was to describe paediatric primary care providers (PCPs)’ experience of meeting their patients’ needs for mental healthcare during the pandemic and to identify opportunities to optimise care.

Methods  19 paediatricians and 2 nurse practitioners completed a 30 min video interview in May 2021. Interviews were recorded and transcribed, and transcripts were analysed using consensual qualitative research methods.

Results  Participants reported marked increases in patient mental health needs during the COVID-19 pandemic. These included new diagnoses of anxiety and depression and increased treatment needs for patients with a prior mental health diagnosis. They identified that the mental health needs of their patients were greater, more severe and more challenging to manage with the resources currently available. While they were frustrated with the lack of communication and support from their mental health colleagues, and felt isolated and overwhelmed, they approached the increased demand for mental healthcare with a growth mindset. This outlook included providing care, seeking help to improve their skills and engaging with local resources such as the Child Psychiatry Access Project (CPAP).

Conclusions  Our findings suggest that urgent action is needed to better support paediatric PCPs to provide mental healthcare in our community. Providers identified an ongoing need for timely access to and effective communication with mental health providers to guide care in the medical home. This need could be addressed immediately by providing training for new and experienced clinicians, expanding the scope of CPAP programmes to include patient assessment and supporting implementation of integrated behavioural health programmes into the medical home.

INTRODUCTION

The unrelenting nature of the COVID-19 pandemic has fueled a surge in mental health needs.1 2 In the USA, the uncertainties, fears, isolation, personal loss and economic consequences associated with the outbreak increased stress, depression, anxiety and suicide risk in adults and children.3 4 Elevated rates of emergency department visits for suicide have been widely reported.3 5 6 This increased need led the American Academy of Pediatrics (AAP), the American Academy of Child and Adolescent Psychiatry and the Children’s Hospital Association to declare a national emergency in children’s mental health.19 pandemic adds to the already high unmet mental health needs among paediatric patients, leading to a national emergency in children’s mental health.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ The increased demand for mental health care associated with the COVID-19 pandemic adds to the already high unmet mental health needs among paediatric patients, leading to a national emergency in children’s mental health.

WHAT THIS STUDY ADDS

⇒ This study highlights the challenges and opportunities identified by paediatric primary care providers in mental healthcare and treatment.
⇒ While paediatric primary care providers felt the mental health needs of their patients were greater, more severe and more challenging than ever, they adopted a growth mindset to improve care, use local resources and help patients where they could.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ This report reinforces actions and policies to increase support and capacity of primary care providers to provide effective mental health care in the medical home.
⇒ These actions might include funding to expand Child Psychiatry Access Project programmes and support quality improvement projects to assist practices to transition to integrated care models.
⇒ Policies to support more integrated care including new payment models, workforce expansion and training for new and established clinicians would also be valued.
health, calling attention to the ramifications of the COVID-19 pandemic in addition to the already high unmet mental health needs among children and adolescents. With the long-standing shortage of mental health professionals to serve adolescents and children, many paediatric patients with depression and anxiety are cared for in their medical home by their primary care providers (PCPs). With limited mental health training, many PCPs lack confidence in their ability to provide effective care for patients with common mental health needs.8–10 During the pandemic, PCPs have been challenged to provide care while keeping themselves and their staff safe, and their businesses viable.11–13 They have had to implement new ways to conduct business such as telehealth, as well as manage staff and clinician shortages.10 Continued exposure to high levels of stress in the workplace can lead to anxiety, depression, stress and burnout in healthcare providers.11 12 Burnout is ‘a syndrome consisting of emotional exhaustion, depersonalisation (becoming more callous towards patients) and a diminished sense of personal accomplishment, which is primarily driven by workplace stressors’14 15 such as inadequate resources to keep up with increasing demands.10 Burnout is associated with adverse effects on physician health (depression, suicidal ideation, substance abuse, poor self-care), patient care (lower quality, more errors) and on the healthcare system (reduced productivity, increased turnover).15 Many frontline healthcare workers have reported increasing stress, burnout and exhaustion in themselves and their staff during the COVID-19 pandemic.12 16

This study aims to describe paediatric PCPs experiences in providing mental healthcare during the pandemic and identify pragmatic solutions to optimise care.

METHODS
Participants and setting
Eligible participants were community-based paediatric PCPs who provided mental healthcare for their patients. A convenience sample of 21 PCPs volunteered to participate in response to a listserv invitation to a local Paediatric PCP Learning Collaborative formed during the COVID-19 pandemic, and all were interviewed.

Data collection
Between 5 May 2021 and 25 May 2021, participants completed a single, 30 min virtual video interview to describe their experiences providing mental healthcare during the pandemic. Interviews were conducted one-on-one by practice facilitators (authors SR and LE) from the local practice-based research network (PBRN) who were known to some participants. They used a semi-structured interview guide to ask the following questions: (1) What changes in your patients’ mental health needs have you noticed in the past year compared with pre-pandemic? (2) What are the biggest challenges that you have faced when caring for your patients’ mental health needs? (3) What resources have you found to be helpful in addressing these challenges? (4) How has meeting the demand for mental healthcare for your patients affected you? Interviews were audio-recorded and transcribed verbatim by trained transcriptionists. Participants received a US$50 gift card.

Data analysis
Four analysts from diverse backgrounds (authors JG, primary care physician/academic researcher, LE, licensed professional counsellor, SD, SR, practice facilitators experienced in depression quality improvement (QI) initiative) used an inductive coding approach guided by the four interview questions.17 Each transcript was analysed manually, first to identify the text units that were associated with each question and then to identify themes. At each level of analysis, the analysts came to agreement about thematic coding, based on group discussions. Finally, two analysts re-coded each transcript using the revised hierarchical coding frame. Data saturation was achieved. Themes are reported with illustrative quotes identified by the participant number.

Patient and public involvement
Patients were not involved in this research as the focus was on describing PCPs’ experiences providing mental healthcare.

RESULTS
The 21 participants (19 paediatricians, 2 nurse practitioners; 16 female, 5 male) were experienced PCPs (mean years in practice 14.5, SD 10.7). They were from 17 practices, mostly from suburban settings (suburban 12, urban 4, rural 1). Four practices were independent, one was a Federally Qualified Health Centre, and 12 were part of a health system (table 1). Two practices had access to on-site care coordination and mental health providers, both serving underinsured or uninsured patients; six additional practices had access to care coordination (one on-site, five off-site). Four practices had completed a PBRN Mental Health (MH) QI project focused on adolescents with depression.

Changes in patient’s mental healthcare needs
Participants reported a marked increase in patient’s mental health needs with the pandemic. They described three patient groups: newly diagnosed cases of anxiety and depression, those with symptomatic stress responses and those with a prior mental health diagnosis and worsening symptoms.

…I spend about 40, maybe 60 percent of my day managing anxiety, depression, which has definitely increased in the last six months to a year. (1021)

They’re already anxious that’s why they were good students before, and now they’ve never dealt with this
kind of adversity. The pandemic has absolutely made that colossally worse. (1023)

..., we have the people with a history, and of course their symptoms are flaring up or getting worse because of what’s been going on. (1009)

Challenges in meeting the demand for mental healthcare
Accessing mental health experts was a significant challenge for both patients and PCPs. The increased demand for mental health care further limited long-standing access problems such as scarcity of psychiatrists and therapists, and lack of insurance coverage.

The waiting list to get in to see a psychiatrist is months long. Really nothing new that’s been brought on by the pandemic .... but it’s definitely gotten worse because of course now that the need is so much more. (1009)

... the biggest one [challenge] is finding counseling no matter what their insurance is. .... It’s just almost

---

**Table 1** Practice characteristics of 21 participants

| Practice and participant ID number(s) | Participated in PBRN QI project | Access to on-site mental health services (care coordination and/or MH provider) | Access to off-site shared mental health services (care coordination and/or MH provider) | Type of practice (independent, FQHC, part of health system) |
|--------------------------------------|---------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------|
| A (1004)                             | No                              | No                                                                             | Yes                                                                         | System A                                                |
| B (1005, 1008, 1025)                 | Yes                             | No                                                                             | Yes                                                                         | System B                                                |
| C (1006, 1015)                       | No                              | No                                                                             | No                                                                          | Independent                                             |
| D (1009)                             | No                              | No                                                                             | No                                                                          | System C                                                |
| E (1010)                             | Yes                             | No                                                                             | No                                                                          | System B                                                |
| F (1011)                             | No                              | Yes                                                                            | No                                                                          | FQHC                                                     |
| G (1012)                             | No                              | No                                                                             | Yes                                                                         | System A                                                |
| H (1014)                             | No                              | No                                                                             | Yes                                                                         | System D                                                |
| I (1016)                             | Yes                             | No                                                                             | No                                                                          | Independent                                             |
| J (1017)                             | No                              | Yes                                                                            | No                                                                          | System D                                                |
| K (1018)                             | No                              | No                                                                             | No                                                                          | System B                                                |
| L (1019)                             | No                              | No                                                                             | No                                                                          | Independent                                             |
| M (1020)                             | No                              | No                                                                             | Yes                                                                         | System A                                                |
| N (1021)                             | No                              | No                                                                             | No                                                                          | System B                                                |
| O (1022, 1026)                       | Yes                             | Yes                                                                            | No                                                                          | System B                                                |
| P (1023)                             | No                              | No                                                                             | No                                                                          | Independent                                             |
| Q (1024)                             | No                              | No                                                                             | No                                                                          | System B                                                |

The yes responses were bolded to aid reading the table.
FQHC, Federally Qualified Health Clinic; PBRN, practice-based research network; QI, quality improvement.
just a crapshoot trying to figure out who’s gonna take their insurance and who isn’t. (1004)

It’s very hard right now for our patients to gain access to counseling. ……There’s fewer choices with regards to scheduling because the demand so outpaces the supply of counseling services that the parents, they’re having to choose between work or a counseling session. (1025)

PCPs were challenged to access specialist care for seriously ill patients and felt unsupported when faced with ongoing management of patients released to PCP care after psychiatric consultation, intake assessment or hospitalisation.

The ones that are very sick yes. We have such trouble getting them admitted, getting them follow-up psychiatric care. …. They’re getting discharged back to me without psychiatric care. (1016)

… I knew that she had been hospitalized. I didn’t know what medications she was on. I didn’t know the doses. One of them was an antipsychotic, which I had never prescribed before. I didn’t feel it was completely fair that it was the mom calling me to ask me to do these things [refill prescriptions] when I didn’t have documentation or hadn’t had a conversation with anybody. (1022)

Other logistical challenges to providing adequate care included inadequate training and lack of time as mental health visits often took longer than the appointment time allotted.

Honestly, not a lot of training in mental health…. in residency. I think we do a month of stuff intern year…. (1014)

It’s hard to appropriately schedule, which means it’s hard to give the patients the time they need. (1006)

Another challenge to providers was to engage the family in the treatment plan, due to competing priorities.

I’m sure that there is a lotta folks out there that are completely overwhelmed by everything in their lives right now. The mental health potentially of the child or the adolescent is not being addressed by the family because they have other needs. (1010)

A lot of the psychologists are only doing virtual, which for teenagers that are struggling doing one more thing virtually is not on their to-do list, so to speak… (1024)

Helpful resources
PCPs found timely consultation with mental health experts, in-house or accessed through state Child Psychiatry Access Project (CPAP) programmes, to be very helpful. They also valued a PBRN QI project focused on adolescent depression and other Continuing Medical Education (CME) activities.

… I forgot to mention XX CPAP too as a resource. … That’s been a great resource, and they were extremely helpful and very nice and open to conversation, so that was a great experience. (1026)

our practice did the depression training module with [the PBRN]. I’m glad we did that…. I think it really just firm up our process for how we follow up with the kids and how frequently we bring ‘em back… I feel like we’re runnin’ a pretty tight ship here. (1016)

They typically referred to local hospitals for emergency evaluation. They provided patients with their list of counselling resources and community-based providers, recognising that access would be difficult.

(you) feel bad because you’re giving the parents this information, and the thing that their doctor is giving them is a dead end. (1025)

Impact on providers
PCPs found dealing with the increased need for mental health care to be challenging. They expressed frustration with the lack of access to needed resources for their patients, especially those with more serious needs. They felt alone and abandoned by mental health experts but needed to provide care for their patients.

Don’t tell me you can’t see a kid with delusions. I can’t do that. I’m not trained for that. (1016)

I just put my head down and plow forward. I’ve been doing it long enough that it’s—there’s just some things you just can’t change, so you work with what you’ve got. (1004)

Many PCPs articulated a negative personal impact. They described feeling overwhelmed, inadequate and emotionally drained, and they were exhausted.

There’s a lot of feelings of inadequacy because we can’t necessarily meet the needs of our patients. (1010)

For me, with a lot of these kids, I am pouring everything I have in desperation to get them better. I’m giving you everything I have, and it’s not enough. It’s just not enough. (1023)
Sometimes I make decisions and don’t sleep for a day or two ’cause I’m like, ‘Did I do the right thing?’ (1019)

I also have had three patients overdose in the last six months, and I—on medications I’ve prescribed. I’ve never had anybody in the last—wait, [Crying] I get upset about it, too, because I’ve never had anybody. I’m sorry. I’ve had three in six months, and so it breaks my heart [cries in the interview]. (1022)

... my boundaries aren’t as healthy... It’s just been difficult...it’s difficult to be really present for my own family on the hard days. (1011)

Some providers reported that even with all the challenges, meeting their patients’ need for mental health care was a positive experience. They felt they were making a difference and enjoyed seeing patients improve with treatment.

It’s one of those things where I am fulfilled with treatment when I’m able to do it, especially when you have a parent that comes back and says, ‘This has been a totally life-changing thing’. (1015)

DISCUSSION

The paediatric PCPs in our interviews clearly described the effects of the ‘mental health emergency’ from their local vantage point. They acknowledged long-standing problems with meeting their patients’ mental health needs including limited access to and communication with mental health providers, and their own lack of training. However, with the COVID-19 pandemic, they felt that the mental health needs of their patients were greater, more severe and more challenging given the resources currently available, and they felt isolated from their mental health colleagues. Although factors such as excessive workloads and imbalance between job demands and skills increase provider stress and the risk for burnout,14 PCPs demonstrated resilience and tenacity and approached the increased demand for mental healthcare with a growth mindset.18 They sought help to improve their skills from their local resources such as the CPAP and a PBRN QI project targeting depression care.

Meeting the increased need for mental healthcare for children and adolescents presents an opportunity to rethink mental healthcare delivery.19 Participants’ response to the increased demands for care suggest pragmatic solutions that could be implemented immediately. Providers identified an ongoing need for timely consultations and effective communication with mental health experts to guide care in the medical home.20 This urgent need could be met by expanding CPAP programmes (used by many participants) to include direct patient assessment and more staff for care coordination. CPAP programmes modelled on the Massachusetts Child Psychiatry Access Project are available in 40 states and provide free, same-day, telephonic psychiatry consultations for PCPs.21 QI initiatives could assist practices to explore models of behavioural health integration such as co-location of services,22 to increase access and provide opportunity for interaction through management of referrals and hallway consultations.23 Telemedicine visits,24 group visits and more coordination with school-based programmes25 may optimise use of limited resources.

For too long, mental health has been separated from physical health for care and treatment. Fully integrated, team-based collaborative care provides a long-term solution for managing teens with anxiety and depression in their medical home. In this model, the PCP works together with a care manager and a mental health specialist to evaluate, manage and monitor the patient’s progress using evidence-based medications and therapy.26 27 Integrated care improves patient outcomes, improves PCPs efficiency and self-reported competency and satisfaction with care delivery, and increases follow-up with mental health referrals.25 28–30 This approach reduces stigma and help families feel more comfortable, and enhances collaboration and coordination maximising each role’s expertise. Professional organisations such as the American Medical Association and AAP have published helpful toolkits to support practices to transition to integrated care models,22 but implementation will require additional support such as new payment models, expanding the workforce and increased training for new and established clinicians.31

Several limitations of our study should be considered. The research team is well known to many participants, and this might influence responses and our personal biases might have influenced interpretation of the data. As participants were a convenience sample of local volunteers, our findings may not be generalisable to all PCPs in our community or to PCPs in other locations such as rural settings or with more or less access to resources.

CONCLUSION

In our community, paediatric PCPs found meeting the markedly increased mental health needs of their patients in the pandemic challenging and stressful, and they were frustrated by the lack of communication with and access to mental health providers, especially for seriously ill patients. Yet, PCPs continued to provide care. Actions taken by participants to improve their capacity to meet the increased demands for care could be widely implemented immediately to optimise mental healthcare for teens and ease the burden on PCPs.

Contributors JG conceptualised and operationalised the research and designed the interview guide, analysed and coded the data, drafted the initial manuscript and reviewed and revised the manuscript. KP conceptualised and operationalised the research and designed the interview guide, drafted the initial manuscript and reviewed and revised the manuscript. RS conceptualised the research, designed the interview guide and reviewed and revised the manuscript. SD conceptualised the interview guide and reviewed and revised the manuscript. JG conceptualised and operationalised the research and designed the interview guide, analysed and coded the data, drafted the initial manuscript and reviewed and revised the manuscript. RS conceptualised the research, designed the interview guide and reviewed and revised the manuscript. SD conceptualised the interview guide and reviewed and revised the manuscript. JG conceptualised and operationalised the research and designed the interview guide, analysed and coded the data, drafted the initial manuscript and reviewed and revised the manuscript. KP conceptualised and operationalised the research and designed the interview guide, drafted the initial manuscript and reviewed and revised the manuscript. RS conceptualised the research, designed the interview guide and reviewed and revised the manuscript. SD conceptualised the interview guide and reviewed and revised the manuscript.
and operationalised the research and designed the interview guide, coordinated and supervised data collection, analysed and coded the data and reviewed and revised the manuscript. SR conceptualised and operationalised the research and designed the interview guide, completed interviews, analysed and coded the data and reviewed and revised the manuscript. LE conceptualised and operationalised the research and designed the interview guide, completed interviews, analysed and coded the data and reviewed and revised the manuscript. All authors approved the final manuscript as submitted and agreed to be accountable for all aspects of the work. JG is the guarantor.

**Funding** Work reported in this publication was supported by the National Center for Advancing Translational Sciences (NCATS) of the National Institutes of Health (NIH). Additional funding was provided by our Department of Pediatrics, and the local Children’s Hospital.

**Disclaimer** The content is solely the responsibility of the authors and does not necessarily represent the official view of the National Institutes of Health.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Ethics approval** The Washington University in St. Louis Institutional Review Board deemed the study to be exempt.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** All data relevant to the study are included in the article or uploaded as supplementary information.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

**ORCID iD**
Jane Garbutt http://orcid.org/0000-0001-7252-9198

**REFERENCES**
1 Czeisler Mark E, Lane RI, Petrosky E, et al. Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic - United States, June 24–30, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1049–57.
2 Xiong J, Lipitzis O, Nasri F, et al. Impact of COVID-19 pandemic on mental health in the general population: a systematic review. J Affect Disord 2020;277:55–64.
3 Leeb RT, Btskos RH, Radhakrishnan L, et al. Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic - United States, January 1–October 17, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1675–80.
4 Patrick SW, Henkhaus LE, Zickafusso JS, et al. Well-Being of parents and children during the COVID-19 pandemic: a national survey. Pediatrics 2020;146:e2020016824.
5 Yard E, Radhakrishnan L, Ballisteros MF, et al. Emergency Department Visits for Suspected Suicide Attempts Among Persons Aged 12–25 Years Before and During the COVID-19 Pandemic - United States, January 2019–May 2021. MMWR Morb Mortal Wkly Rep 2021;70:888–94.
6 Grossman MN, Fry CE, Sorg E, et al. Trends in suicidal ideation in an emergency department during COVID-19. J Psychosom Res 2021;150:110619.
7 AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health. American Academy of pediatrics, 2021https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/ [Accessed 30 Nov 2021]
8 Cheung AH, Zuckerbrodt RA, Jensen PS, et al. Guidelines for adolescent depression in primary care (GLAD-PC): Part II. treatment and ongoing management. Pediatrics 2018;141;
9 Horwitz SM, Storfer-Isser A, Kerker BD, et al. Barriers to the identification and management of psychosocial problems: changes from 2004 to 2013. Acad Pediatr 2015;15:613–20.
10 LaLonde L, Bruni T, Lancaster B, et al. The association between burnout and pediatrician management of adolescent depression. J Prim Care Community Health 2020;11:2150132720943355.
11 Orrú G, Marzetti F, Conversano C, et al. Secondary traumatic stress and burnout in healthcare workers during COVID-19 outbreak. Int J Environ Res Public Health 2021;18. doi:10.3390/ijerph18010337. [Epub ahead of print: 05 01 2021]
12 Corlett S, Berenson RW, Wengle E, et al. Impact of the COVID-19 Pandemic on Primary Care Practices. Urban Institute. U.S. Health Reform - Monitoring and Impact Web site, 2021. Available: https://www.urban.org/research/publication/impact-covid-19-pandemic-primary-care-practices [Accessed 12 Oct 2021].
13 Basu S, Phillips RS, Phillips R, et al. Primary care practice finances in the United States amid the COVID-19 pandemic. Health Aff 2020;39:1605–14.
14 Panagioti M, Panagopoulou E, Bower P, et al. Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. JAMA Intern Med 2017;177:195–205.
15 West CP, Dybryne LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. J Intern Med 2018;283:516–29.
16 Kirzinger A, Kearney A, Hamel E, et al. KFF/The Washington post frontline health care workers survey, 2021. KFF. Available: https://www.kff.org/report-section/kff-the-washington-post-frontline-health-care-workers-survey-toll-of-the-pandemic/ [Accessed 08 Nov 2021].
17 Palinkas LA. Qualitative and mixed methods in mental health services and implementation research. J Clin Child Adolesc Psychol 2014;43:851–61.
18 Dweck C. What having a growth mindset actually means. Harvard business review, 2016. Available: https://hbr.org/2016/01/what-having-a-growth-mindset-actually-means [Accessed 29 Nov 2021].
19 McEwen B, Saeed SA. Past epidemics, new disasters, COVID19, and mental health: learning from history as we deal with the present and prepare for the future. Psychiatr Q 2020;91:1121–33.
20 Sarvet BD, Wegner L. Developing effective child psychiatry collaboration with primary care: leadership and management strategies. Child Adolesc Psychiatr Clin N Am 2010;19:139–48.
21 Sarvet B, Guld J, Bostic JQ, et al. Improving access to mental health care for children: the Massachusetts child psychiatry access project. Pediatrics 2010;126:1191–200.
22 Association AM. Behavioral health integration compendium. 2020.
23 Hine JF, Gennenn AQ, Menousek KM, et al. Physician satisfaction with integrated behavioral health in pediatric primary care. J Prim Care Community Health 2017;8:89–93.
24 Galea S, Merchant RM, Lurie N. The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention. JAMA Intern Med 2020;180:817–8.
25 U.S. Department of Education. Supporting child student social, emotional, behavioral, and mental health, 2021. Available: https://www.ed.gov/documents/students/supporting-child-student-social-emotional-behavioral-mental-health [Accessed 04 Nov 2021].
26 Asarnow JR, Rozencweig J, M, Wiblin J, et al. Integrated Medical-Behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. JAMA Pediatr 2015;169:929–37.
27 Campo JV, Geist R, Kolko DJ. Integration of pediatric behavioral health services in primary care: improving access and outcomes with collaborative care. Clin Psychiatry 2018;63:432–44.
28 Germán M, Rinke ML, Gurney BA, et al. Comparing two models of integrated behavioral health programs in pediatric primary care. Child Adolesc Psychiatr Clin N Am 2017;26:815–28.
29 Riley AR, Paternostro JK, Walker BL, et al. The impact of behavioral health consultations on medical encounter duration in pediatric primary care: a retrospective match-controlled study. Fam Syst Health 2019;37:162–6.
30 Richardson LP, Ludman E, McCauley E, et al. Collaborative care for adolescents with depression in primary care: a randomized clinical trial. JAMA 2014;312:809–16.
31 Mental Health America. Child and adolescent mental and behavioral health principles, 2021. Available: https://www.mhanational.org/sites/default/files/CAMHi%20Principles%202021%20Final%2005-04-21.pdf [Accessed 05 Nov 2021].

Garbutt J, et al. BMJ Paediatrics Open 2022;8:e001497. doi:10.1136/bmjpo-2022-001497