Family Engagement in Services During COVID-19: A Mixed-Methods Study of Caregiver and Staff Perspectives

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Introduction: We examined changes in family engagement before versus during the pandemic in pediatric and family services and perceived facilitators and barriers to family engagement.
Method: We employed a mixed-methods assessment of staff and caregiver perspectives related to pediatric and family medicine clinics and family resource centers in rural northern New England. We used narrative synthesis to analyze qualitative interviews ($n = 29$) and descriptive statistics for quantitative surveys ($n = 108$).
Results: Staff felt they were not doing as well at engaging families during versus prepandemic, identifying numerous facilitators and barriers. We found differences in resources used by families before versus during the pandemic. We identified discordant perspectives between caregivers and staff regarding how well clinics and centers identified and responded to family needs.
Discussion: Leaders in pediatrics, advanced practice nursing, and related fields can draw on our findings to decide what services and modalities they provide for postpandemic. J Pediatr Health Care. (2022) XX, 1−11

KEY WORDS

COVID-19, family engagement, pediatrics, caregiver involvement, social services

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INTRODUCTION

The COVID-19 pandemic created unprecedented stressors for people across the globe. Emerging literature demonstrates uneven stressors for those in underprivileged and underserved groups (Czeisler et al., 2021a; Siegel & Mallow, 2021; Srivastava et al., 2021; van Dorn et al., 2020) and families and women with children (Brown et al., 2020; Connor et al., 2020; Czeisler et al., 2021b; Stockman et al., 2021). People experienced increases in food, housing, and work instability, as well as physical illness because of COVID-19 and a multitude of mental health and substance use challenges associated with isolation and a decrease in protective factors (e.g., work, school, and activities; Czeisler et al., 2021a; Escalante et al., 2021). Caregivers have also contended with closures of schools and child care centers, disruptions to healthy relationships and activities for their children (Vanderhout et al., 2020), and major social and mental health challenges in their children (Racine et al., 2021). Low-income caregivers and their children were especially impacted by financial instability, food and housing insecurity, and worries (Johnson et al., 2022; Siegel & Mallow, 2021).

When stressed, many families turn to natural supports such as family and friends or formal services. However, many families quickly disconnected physically (and sometimes emotionally) from loved ones during the pandemic. In addition, the pandemic forced pediatric health care and social service providers to implement restrictions and changes to service delivery. In-person visits were prohibited or reduced, and when in-person visits did return, it was often within a hybrid model of care using telehealth or telephone (Contreras et al., 2020; Ramtekkar et al., 2020).

During the pandemic, pediatric health and service providers also experienced major distress in their professional and personal lives. In this pandemic, distressed health professionals exhibited lower levels of engagement at work (Bradley & Chahar, 2020; Gómez−Salgado et al., 2021), likely impacting the families they serve. The "Great Resignation" era also caused major staff shortages that affected the quantity and quality of services (Cook, 2021).

Engagement in formal health care and social services is associated with improved health outcomes, lower costs, and decreased demand for acute care (Coulter & Ellins, 2007; Greene et al., 2015). Many argued that engaging families in health care services during the pandemic was crucial to family and society wellness. Historically, health care providers are the most trusted source of information (Aboumatar, 2020). Agencies such as family resource centers or parent-child centers were also central to family wellness, given their focus on social and economic needs.

Researchers have presented guidance and lessons learned about proactively engaging patients in services during this period of heightened stress. Recommendations include consumer engagement in planning efforts, leveraging technology, building systems that can adapt rapidly, and attending to staff burnout and equity in services (Abid et al., 2020; Aboumatar, 2020; Fleuren et al., 2021; Musialowski et al., 2021; Tolou-Shams et al., 2022). However, it is unclear how the rapid and overwhelming changes that accompanied the pandemic affected family engagement in formal services and whether and how service providers and agencies were able to shift their practices to identify and respond to family needs. Some aspects of service delivery, family needs, and family resource-seeking behaviors may continue postpandemic, emphasizing the importance of helping to understand which aspects of service are working and which are not.

This paper presents findings from a mixed-methods, multi-informant assessment of both staff and caregiver perspectives related to family engagement with pediatric and family medicine clinics and family resource centers/parent-child centers, two vital service sectors for families with young children (aged 0−8 years). We collected data in the months following the onset of COVID-19 in a rural community in northern New England. We aimed to answer the following research questions:

1. What does family engagement with clinics and centers look like now compared with prepandemic?
2. What are the facilitators and barriers to family engagement?
3. Where do families receive and prefer to receive their support and resources, and did this change during the pandemic?
4. How successful have clinics and centers been in identifying and responding to the needs of families during the pandemic? Are there discrepancies in provider and caregiver perspectives?

METHODS

We used a multiphased, mixed-methods design with caregivers and staff using purposive sampling techniques. We began in phase 1 by conducting targeted individual or small group interviews with caregivers, pediatric and family medicine clinic staff and leaders (hereafter called clinic staff), and family resource center/parent-child center staff and leaders (hereafter called center staff) in the three-county community. Phase 1 interviews occurred in September or October of 2020. We used findings from our phase 1 interviews to inform our survey questions in phase 2. In phase 2, we administered surveys to caregivers and clinic and center staff in the same community, albeit the community catchment area was expanded to five counties to increase the sample size. Phase 2 survey administration occurred between June and August 2021. All study activities and procedures were approved by the (insert) Institutional Review Board.

Community Context

Our Phase 2 community sample spanned two full counties and three half-counties served by four partnering centers. This community includes more than 30 rural towns in New Hampshire and Vermont split by the Connecticut River, with town population sizes ranging from 300 to 13,500. The community hosts a large academic medical center, an Ivy

League College, and several manufacturing businesses. The community is largely White non-Hispanic. Race and ethnicity of all ages vary slightly by town: 85% to 99% White and 83% to 98% English speaking, with 1% to 3% of the population Native American; 1% to 3% African American; 7% to 10% Asian; and 2% to 4% Hispanic (U.S. Census Bureau, 2021). Median family incomes range from low to high; 10 towns have annual median family incomes below $88,000, whereas six towns are considered affluent (U.S. Census Bureau, 2021). Both states are in the midst of a long-standing opioid epidemic (Brundage et al., 2019; Mattson et al., 2021).

Overall, our rural community experienced relatively low COVID-19 cases and deaths early in the pandemic (during the data collection period). Still, the community experienced strict restrictions. During part of the pandemic, Vermont's governor mandated that, with few exceptions, no family visit another person or family, even outdoors. Furthermore, Vermonters were not allowed into New Hampshire outside the bounds of essential work for certain periods. Schools and businesses abruptly shut down in the spring of 2020, with continued closures of summer centiamperes and places of employment throughout the summer of 2020. Clinical, social welfare, and mental health agencies largely shifted to virtual platforms, and many but not all remained virtual until the summer of 2021, with some mental health agencies continuing to be virtual into the winter of 2021−2022. In the fall of 2020, most schools introduced hybrid learning. Families experienced major child care challenges throughout the pandemic because of staff shortages and virtual or hybrid schooling.

Phase 1: Individual and Small Group Interviews

Participants
We interviewed 11 caregivers, five center staff, and 15 clinic staff (31 participants; 29 individual or small group interviews in total). Caregivers aged > 18 years with at least one child aged between 0 and 8 years and who lived in our catchment area. The caregivers were, on average, aged 29 years with two children (mostly infants/toddlers). Most caregivers (89%) were women, White non-Hispanic (89%), and had some college experience (63%).

Clinic staff included pediatric health providers, social workers, and behavioral health providers from six pediatric health clinics. Center staff included home visitors from two centers in our catchment area. We also interviewed leaders (directors, supervisors) within these agencies to ensure different perspectives. The clinic staff was, on average, aged 49 years, and all were White non-Hispanic. Most worked in family medicine (40%), had a graduate degree (65%), and were women (95%).

Procedures
Using snowball techniques, we recruited caregivers through a purposive sampling method with two partner centers. We asked center staff to identify and recruit families with different levels of engagement (i.e., number of interactions) with the center. Two researchers (E. M. K. Z. and H. G. H.) conducted the interviews using a semistructured guide. They assessed various impacts of the pandemic on family functioning, the most pressing needs of families, whether and how families were engaging with services since the onset of the pandemic, the barriers, and facilitators to engagement, and whether clinics and centers were meeting the needs of families.

We recruited center and clinic staff through emails to clinic and staff leaders. Seventeen interviews were conducted individually, and three staff participants were interviewed together in the context of a small group interview. Interviews lasted 45−60 min and were facilitated over the phone or Zoom (Zoom Video Communications, San Jose, CA). We conducted the interviews between September and October 2020.

Data management and analyses
Participants provided verbal consent. With permission, the researchers audio-recorded the interviews, and these recordings were transcribed. Narratives were coded and analyzed using a mixed deductive and inductive approach (Bradley et al., 2007). We managed and analyzed the qualitative data using Dedoose software. Initial codes were developed from the research questions (deductive). During coding, new codes were added as they emerged from the data using an inductive approach (grounded theory) with constant comparison methods. A second coder reviewed the codebook and coded excerpts. Disagreements in code application were discussed and resolved by all authors.

Phase 2: Quantitative Surveys

Participants

Center and clinic staff. Inclusion criteria included being aged > 18 years and working at one of the eight local pediatric or family medicine clinics in the project's catchment area or one of three local centers in the catchment area. See Table 1 for demographic information. Of our 51 staff survey respondents, 18 worked at a center and 32 at a clinic.

Caregivers. Inclusion criteria for caregivers included being aged > 18 years, having at least one child aged between 0 and 8 years, and living in the catchment area of the project. See Table 1 for demographic information. Of the 57 caregivers, 42 (74%) had contact with one of eight local clinics, compared with 13 (23%) having contact with one of four local centers. Only those who said they had contact with the place responded to survey items regarding engagement.

Procedures

Clinic and center staff. The clinic and staff survey was composed of questions about family engagement and practices in identifying and responding to needs, particularly in

TABLE 1. Demographics of caregiver and provider/staff survey respondents (n = 108)

Demographics	Staff	Caregiver
Age in years	45.8 ± 11.8	35.7 ± 5.4
Years in field	15.8 ± 11.5	–
No. of children		2.0 (1.1)
Setting		
Clinic	17 (33.3)	–
Family resource center	34 (66.7)	–
Role		
Direct service provider (DSP)	24 (47.1)	–
DSP/supervisors	6 (11.8)	–
Supervisors	10 (19.6)	–
DSP service providers/administrative staff	1 (2.0)	–
Administrative staff	10 (19.6)	–
Ages work with[a]		
0–3 years	24 (47.1)	–
4–6 years	16 (31.4)	–
7–11 years	14 (27.5)	–
12–17 years	14 (27.5)	–
18–21 years	17 (33.3)	–
Child age[a]		
Infant/toddler	–	17 (29.8)
Preschool (ages 3–5)	–	15 (26.3)
Kindergarten	–	12 (21.1)
Lower school age (6–8)	–	28 (49.1)
Upper school age (9–12)	–	9 (15.8)
Teenage	–	10 (17.5)
Education level		
Less than high school	0 (0)	3 (5.3)
High school diploma/General Educational Development	1 (2.0)	8 (14.0)
Some college	4 (7.9)	9 (15.8)
4-year college degree	11 (21.6)	18 (31.6)
Graduate degree	11 (21.6)	13 (22.8)
Not specified	24 (47.0)	6 (10.5)
Gender		
Male	1 (2.0)	11 (19.3)
Female	27 (52.9)	39 (68.4)
Not specified	23 (45.1)	7 (12.3)
Race/ethnicity[a]		
American Indian/Alaska native	1 (2.0)	4 (7.0)
Asian	0 (0)	2 (3.5)
Black/African American	0 (0)	1 (1.8)
Hispanic/latino	0 (0)	3 (5.3)
Middle Eastern/North African	0 (0)	1 (1.8)
Native Hawaiian/pacific islander	0 (0)	1 (1.8)
White	26 (51.0)	44 (77.2)
Not specified	25 (49.0)	5 (8.8)

Note. *Values are mean ± standard deviation or n (%).*
[a]*Participants could select more than one option.*

response to the pandemic. We deployed the survey in April 2021 during a meeting with clinic and center staff and asked leaders to send the survey link to staff members who could not attend the meeting. We followed up with subsequent emails targeting each agency to get staff participation.

Caregivers. The caregiver survey was composed of questions aligned with the staff survey assessing family engagement and identification and response to needs from clinics and centers, in addition to retrospective pre-questions and post-questions assessing the use of resources before (retrospective pre) and since (post) COVID-19. Retrospective pretest questions ask participants to reflect and report on prior behaviors and report current behaviors on the same survey instrument. This method is typically used for program evaluation (Pratt et al., 2000) but was used in this context as we could not get data reflecting actual behaviors before the pandemic. We deployed the caregiver survey between June and August 2021. We asked each participating clinic and center to post the survey on their social media websites and flyers with Quick Response codes in their waiting rooms. We posted the survey link to our community social media website and used a paid boost to recruit participants who were not actively engaged with a clinic or center.

FIGURE 1. Center and clinic staff responses (*n* = 28) to the engagement of new and existing families before and since the pandemic
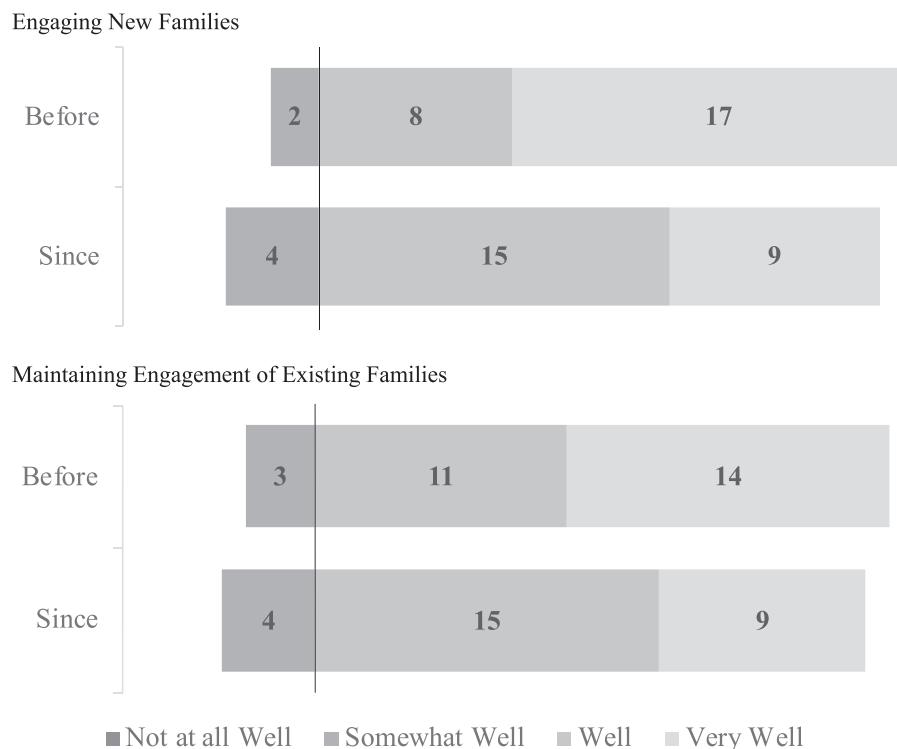
In addition, we integrated a research assistant into the large academic medical center general pediatric clinic waiting area, with a tablet, to recruit caregivers directly. Fifteen of the 57 caregivers were recruited from the pediatric clinic's waiting area.

Data Management and Analyses

We administered the surveys through a secure, web-based platform (Qualtrics). We used Microsoft Excel (Microsoft Corp., Redmond, WA) and SPSS (Version 27, IBM SPSS Statistics for Windows, Armonk, NY) to analyze descriptive data from staff and caregiver surveys, such as counts, percentages, and means.

RESULTS

We present mixed-methods results for three of our four research questions, with qualitative data presented first, followed by quantitative. One research question (Where did caregivers get their support and resources before and after the onset of the pandemic?) has only quantitative data to support the findings.

How Are Families Engaging?

Qualitative interviews with clinic and center staff and caregivers revealed mixed perspectives on whether family engagement increased or decreased during the pandemic, with trends toward more people feeling engagement decreased. Some staff noted that the pandemic had created a crisis with heightened physical and mental health needs, and those caregivers with heightened

needs came to service providers in crisis. Others felt engagement stayed the same and that the same barriers and facilitators that helped or hindered engagement prepandemic were still relevant, just amplified during the pandemic. Still, others perceived decreased engagement as the most common reason because families were trying to survive and could not participate in services.

We surveyed clinic and center staff about how well they felt their clinic or center was engaging new families and maintaining the engagement of existing families before and since COVID-19 (defined as after March 15, 2020). We did not have sufficient power to apply statistical analyses, but results indicate that more staff felt their clinic or center did better at engaging new or existing families before the pandemic than since the onset. Only one staff member reported that their clinic/center was doing better at engaging families since COVID (i.e., increased since COVID, "well" before and "very well" since COVID); 11 reported that their clinic/center was doing worse. Similarly, one participant reported their clinic/center was doing better at maintaining engagement since COVID, whereas seven reported their clinic/center was doing worse. See Figure 1.

What Are the Facilitators and Barriers to Family Engagement?

Qualitative interviews revealed that the pandemic had major but inconsistent impacts on engagement. For some caregivers, overwhelm associated with the pandemic led to increased engagement and seeking out resources, whereas, for others, it led to withdrawal and isolation. See Table 2 for facilitator and barrier themes drawn from these interviews.

TABLE 2. Caregiver and staff perceptions of facilitators and barriers to family engagement

Facilitators	Barriers

Providing resources
    Provision of resources such as food, caregiving resources/
    classes, journaling/reading groups and recorded books,
    phones, school supplies, social supports (i.e., play-
    grounds and access to social workers)
	Caregiver's mental health and feelings of being overwhelmed
	    Fewer services available, increase in family stress, limited
	    access to social and community supports (e.g., schools)
	    to identify when needs arise

Families increased their reporting of needs
    Families more willing to communicate the needs of children
    during the pandemic
	Priority toward concrete needs
	    Inconsistent access to food, income, and housing, makes it
	    difficult for families to engage with clinicians when basic
	    needs are not met

Flexible communication
    Staff accessible by email, text, phone, in-person, or virtually
	Technology/telehealth issues
	    Telehealth: difficulty in presenting physical issues (i.e., rash),
	    physical/speech therapy, young children present, for
	    some, hesitancy to discuss social or emotional concerns,
	    difficulty in making personal connections and in clinicians
	    to perceive nonverbal cues

Flexibility in the modality for visits	Technology: Poor internet connection, technical issues
	    (logging on, setting up calls), lack of access to phones,
	    computers, internet

Flexibility in offering telehealth, in-person, or phone visits	Transportation
Strong relationships with families	Lack of transportation and hesitancy to use public transport with children because of COVID-19
Valued rapport-building and connecting with families	Child care
Preventive outreach	Caregivers are overwhelmed by child care/school needs making it difficult for staff to implement services
The staff made extra efforts to reach out to families proac- tively to prevent crises	Limited time/resources
Effective ways to structure visits	

Structured visits reduced the need for follow-ups and
    "Warm up" pediatric visits by providing a book to the
    child before the visit
	COVID-19 restrictions decrease availability at clinics, mak-
	    ing it difficult for caregivers to connect with staff

Where Did Caregivers Get Their Support and Resources Before and After the Onset of the Pandemic?

Table 3 displays caregiver responses to where they received support and resources before versus since the onset of the pandemic. Except for websites, which increased in use since the pandemic, and their child's doctor, which largely stayed the same, all other resources decreased in use since the pandemic. Most caregivers reported using friends and family before and since the pandemic, followed by the child's school or child care program and their child's doctor. The largest changes in use before versus since the onset were observed in the child's afterschool programs (41% decrease, 37% before and 22% after), centers (24% decrease, 25% before and 19% after), and social media (23% decrease, 43% before and 33% after), which were all more frequently used before the pandemic. Caregivers reported very little change in their use of the child's doctor, and caregivers' use of centers was infrequent both before and after the onset of the pandemic (though it decreased even further after).

How Are Clinics and Centers Responding to Family Needs?

Qualitative themes regarding clinic responses to needs revealed that most caregivers felt clinics were readily responsive to their needs and questions, both related and unrelated to COVID-19. Caregivers also reported that it was helpful when clinic staff helped with school/child care requirements, such as conducting quick COVID-19 testing. However, clinics were not always available for in-person needs.

Qualitative themes from caregivers regarding center responses to needs revealed that centers provided them with concrete supports (e.g., diapers), programming (e.g., caregiving groups), and resources (e.g., housing, state benefits, child care). Multiple caregivers reported that center staff communicated frequently. However, it is important to note that we made intentional efforts to recruit caregivers through centers, specifically, biasing the sample.

Qualitative themes highlighted how the staff was impacted by the same stressors experienced by the families they served, possibly for the first time "weathering the same storm" (though in different boats). These stressors inevitably had impacts on their capacity to provide services. For many, when combined with the higher family needs and higher caseloads and referrals, these extra burdens led to burnout. Stress related to taking care of their children and the uncertainty in their personal and professional lives worsen the problem. Our interviews demonstrated how the pandemic affected staff capacity, fluctuating by center/clinic. Some staff reported spending more time triaging calls and formally coordinating work and care, limiting their time to provide other services, whereas others had more availability to provide services because of decreased travel time and more use of telehealth.

TABLE 3. Caregiver (*n* = 50) report for where they got their support and resources before vs. after the onset of the pandemic

Source	Before pandemic	Since pandemic	Change
Child's doctor	56	54	−4
FRC/PCC center	25	19	−24
Child's school or child care program	64	51	−20
Afterschool program/enrichment programing	37	22	−41
Social media	43	33	−23
Websites	40	48	20
Friends and family	86	76	−12

Note. *FRC, family resource center; PCC, patient-centered care. Values are presented as percentages.*

FIGURE 2. Percentage of caregivers (*n* = 41) versus clinic staff (*n* = 12) reporting that clinic staff identifies and responds to family needs well or very well
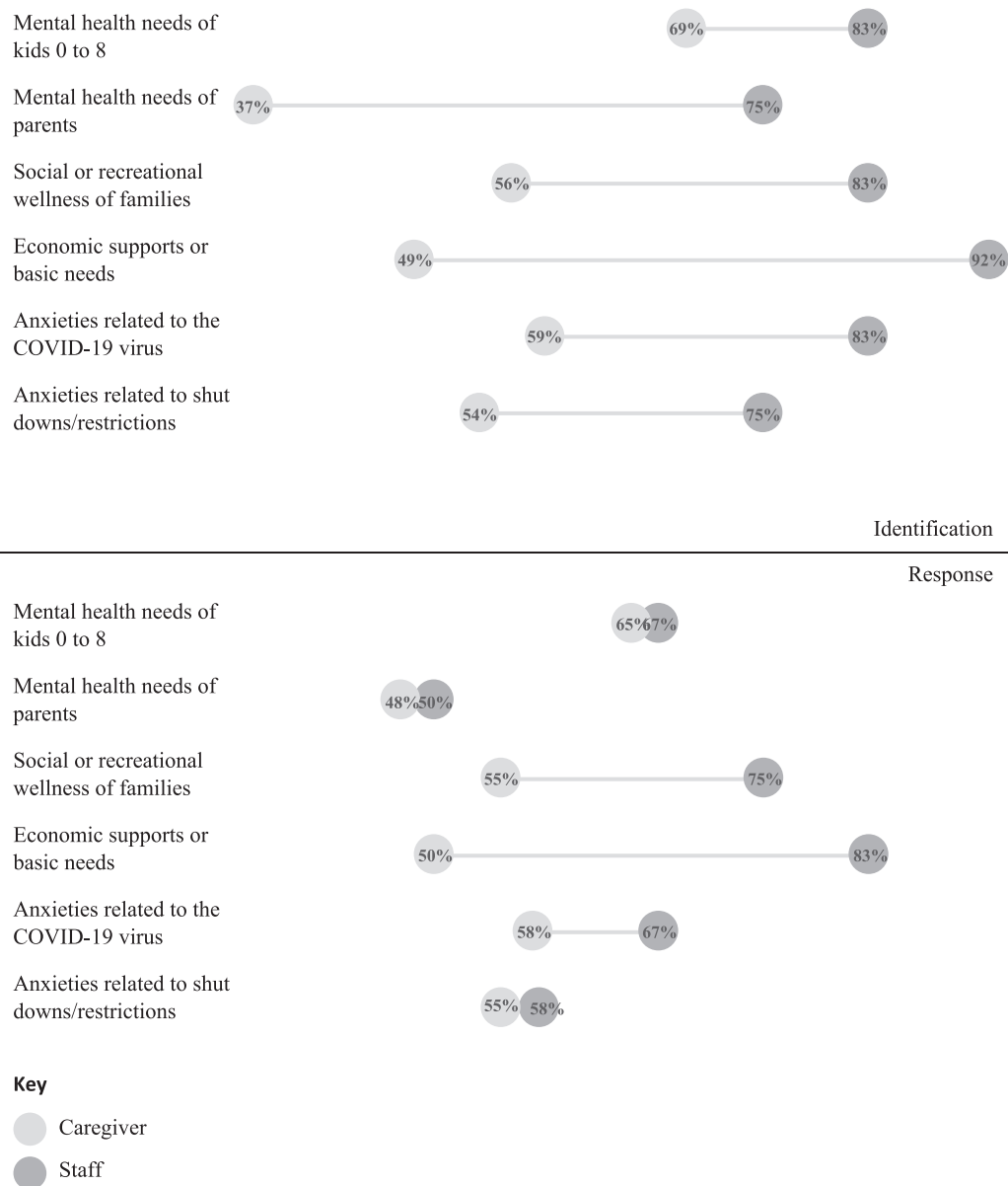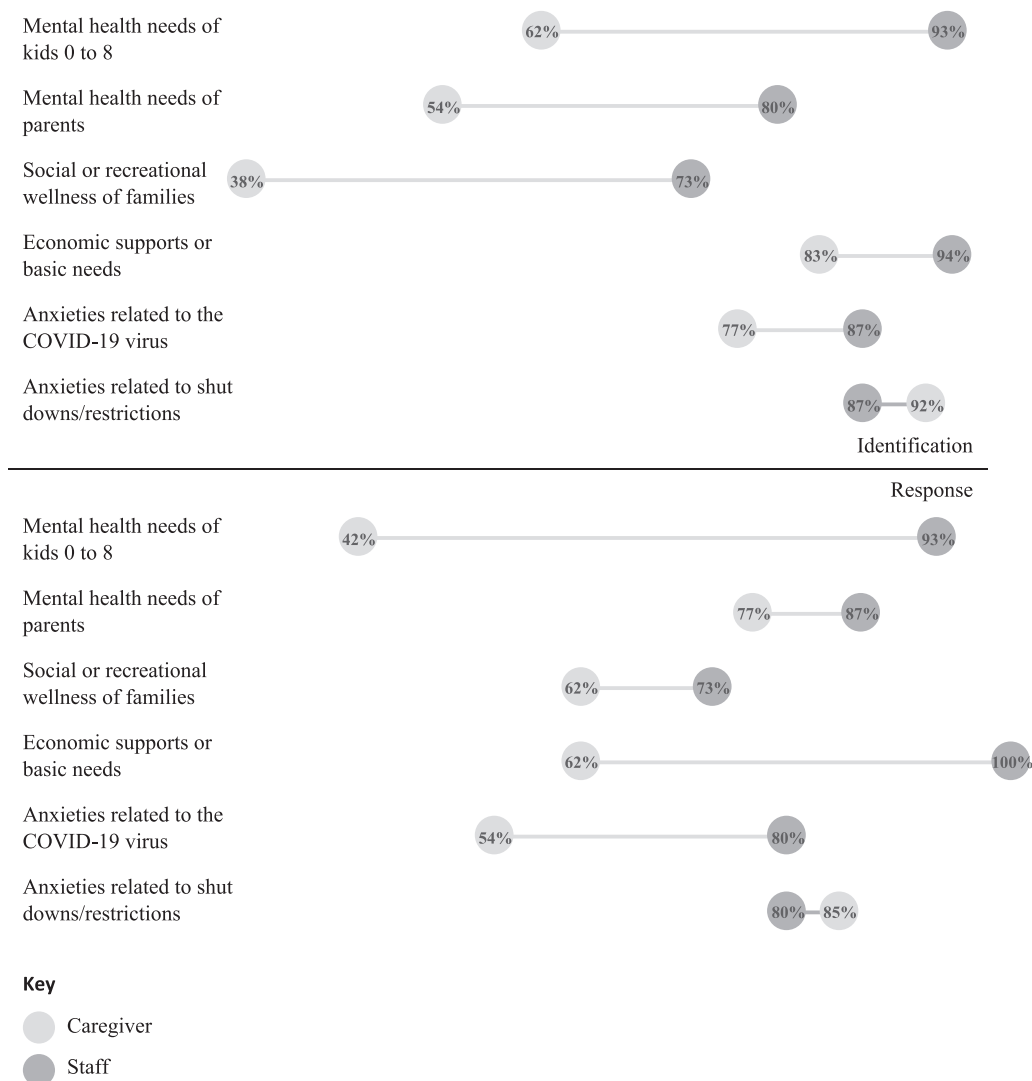
FIGURE 3. Percentage of caregivers (*n* = 13) and center staff (*n* = 16) reporting that center staff identifies and responds to family needs well or very well

In our quantitative surveys to caregivers and staff, we asked how well clinics and centers were doing at both identifying and responding to various family needs. We also wanted to examine discrepancies between caregiver and staff perspectives, separated by clinic and center staff.

See Figure 2 for a display of caregiver versus clinic staff responses. In general, there were large discrepancies between clinic staff and caregiver reports regarding identifying and responding to family needs, with more clinic staff feeling they were doing well or very well compared with what caregivers felt, except for identifying and responding to the mental health needs of kids aged 0−8 years. The two biggest discrepancies related to the identification of needs were economic or financial support needs and the mental health needs of caregivers. The two biggest discrepancies in responding to needs were economic or financial support and social and recreational wellness needs.

We also identified differences in caregivers versus center staff perspectives. In our survey, more center staff than caregivers reported that they were doing well or very well at identifying and responding to the needs of families, except for identifying and responding to anxieties related to shutdowns and restrictions. The two biggest discrepancies related to identifying needs were the mental health needs of children ages 0−8 years and social or recreational wellness needs. The two biggest discrepancies related to responding to needs were the mental health needs of children aged 0−8 and economic or financial support needs. See Figure 3.

DISCUSSION

Family engagement in services was highly variable among families. Overall, center and clinic staff felt they were not doing as well at engaging new or existing families in pediatric health care and family resource services since the onset of the pandemic

compared with before. Common themes related to facilitating family engagement included the provision of tangible resources and flexibility in communication, and the modality of service delivery (e.g., telehealth). Major barriers included overwhelm and mental health problems impeding engagement in services and the need to prioritize energy and time on basic needs. We identified differences in the frequency of various resources used by families (e.g., health care providers, schools, family/friends) before and after the pandemic. Family use of nearly all types of resources decreased, although some resources decreased more drastically than others (e.g., schools and child care). We also exposed discordance between caregiver and staff perceptions of how well clinics and centers were doing at identifying and responding to various family needs. Compared with staff, caregivers felt clinics and centers were doing less well.

Our findings identified a drop in family engagement with clinic and center services following the onset of the pandemic. Therefore, agencies had to quickly problem-solve and experiment with various engagement techniques, some of which are likely to stay. Our study contributes to a body of literature suggesting that flexible communication strategies (e.g., email, text) and flexibility in the modality of services provided (e.g., phone, videoconference, in-person) will be desired postpandemic (Abid et al., 2020; Aboumatar, 2020; Contreras et al., 2020; Mann et al., 2020). These shifts have major implications for payers to make telehealth or phone reimbursements permanent. Agency leaders will also need to work hard with their staff and families to decide when telephone or videoconference are not viable or effective options. Our study helps identify those circumstances. Families found phone and videoconference services less helpful when young children were present when speaking about adult mental health and when the visit needed "eyes on" a physical ailment. Others have presented similar nuances in the effectiveness of telehealth, particularly around pediatric health visits (Brophy, 2017; Cunningham et al., 2021; Curfman et al., 2021; Khoshrounejad et al., 2021; Traube et al., 2021).

Our findings suggest the need for tailored engagement strategies for families experiencing overwhelming stress. Our participants found proactive, preventive outreach to families and providing basic resources (e.g., diapers, link to economic supports) helpful. Participants also noted a need to level the (technological) playing field, particularly in rural communities like the one studied. It may also be important to formalize the distribution of resources so that when crises occur, infrastructure exists to quickly obtain food, diapers, household items, and connection to financial services for families in need. Similar to other researchers (Gómez−Salgado et al., 2021), our study suggests that agency leaders need to be prepared to take care of staff during crises. Burnout is a major contributor to reduced quality of care, productivity, patient satisfaction, and staff health (Salyers et al., 2017; West et al., 2018). Leaders can take preventive or reactionary steps to mitigate the impact on staff members and services (Fessell & Cherniss, 2020; West et al., 2018).

Families may have experienced shifts in what resources they need and where they get them. As the pandemic draws out, what were once new ways of seeking resources may not reverse. We identified only one resource domain that increased from pre- to postpandemic (websites) and one that stayed approximately the same (reaching out to health care providers); all others decreased. A decrease in the use of resources may mean families were more self-sufficient, or perhaps there were other resources families used that we did not ask about. Alternatively, families are experiencing compounding needs with reduced resources and doing with less.

Given that the most frequent resource for caregivers before and after the pandemic was family and friends, it may be wise to deploy large community-wide public service announcements to help all community members understand healthy coping strategies and where families can find assistance. Caregivers continued to use health care providers as a frequent resource following the pandemic, highlighting the crucial role that clinics can offer in addressing holistic needs. Building social, mental health, and other resources into pediatric settings would likely benefit many, and there is a growing literature to support this integration (Clemente et al., 2021; Njoroge et al., 2016). Another clear finding is the need for schools and child care settings to remain open, given their crucial role in providing resources to caregivers. Despite their best efforts, virtual resources cannot compete with the benefits of in-person schools and centers for children, families, and societies at large that depend on working caregivers (Verlenden et al., 2021). Communities may also succeed through integrating social, economic, and health and mental health resources at schools and child care centers or family resource/parent-child centers typically available to all families. In our current workforce shortage, federal, state, and local communities will need to invest in strategic staff hiring, retention incentives, and supports for these sectors.

We found discrepancies in caregiver and staff perceptions of how well clinics and centers were doing at identifying and responding to family needs. These results suggest that agencies must frequently assess caregiver perceptions. As others have identified (Abid et al., 2020), we must fully engage family voices, not just in identifying gaps but also in the coproduction of service delivery. Discrepancies may vary across clinics and centers depending on each agency's strengths and weaknesses. In our study, the biggest discrepancies in clinics were their identification of economic and caregiver mental health needs and their responses to economic, social, and recreational wellness needs. For centers, the biggest discrepancies were in identifying the mental health needs of young children and their social and recreational needs, and their responses to the mental health needs of young children and economic needs. Examining discrepancies between an agency's identification and response to needs may be fruitful. For example, in our sample (Figures 2 and 3), caregivers reported that clinics were better at identifying when responding to stress and anxiety related to shutdowns, and centers were better at identifying than responding to economic needs. Every agency does not need to be effective at responding to every need, but as a system of care in a community, these assessments can identify gaps and connect

families to the right services. Our findings also highlight the difference between identifying and responding to needs and the possible family frustrations that could develop when a clinic, center, or system of care fails to identify and respond.

Limitations and Future Directions

Our study highlights findings from one rural community in northern New England with a homogenous sample. These findings need to be understood in that context. Our results may be generalizable to other rural communities with similar responses to the pandemic. However, localized assessments must drive local plans. Second, our two phases of data collection spanned separate phases of the pandemic. The first phase, which included the qualitative data, occurred in the fall of 2020. The second phase occurred 6−9 months later, a relatively less stressful time with a temporary relaxation of some restrictions. Therefore, our quantitative data may reflect less overwhelm and fear and more open and available services. However, families were experiencing the "Great Resignation" challenges at that time (Cook, 2021), contributing to staff shortages and less access to many resources, adding context to our findings. Finally, although we did use purposive sampling of parents for interviews, and the resulting sample displayed differing levels of engagement, we did not specifically operationalize high and low engagement and were reliant on the center staff to define that.

Future research could continue unpacking which modalities (e.g., phone, videoconference, in-person) are best for which types of needs and build care systems that can sustain flexible communication and modalities. Future research could also help us better understand how to identify and remedy discrepancies between caregiver and professional perspectives about the quality of services. Another promising line of practice and research is how to leverage the use of family and friends as effective resources for struggling families. Efforts to increase staff satisfaction and retention are also in dire need, given the increased burnout experienced by staff and the rise in resignations. Finally, promoting the integration of holistic care into pediatric clinics, schools, child care centers, and other places to "meet families where they are" continues to be an important pursuit.

CONCLUSIONS

As the COVID-19 pandemic draws on and evolves, pediatric health care and related providers have many lessons to learn about family engagement, family use of resources, and perceptions of care. Families will prefer certain engagement and care strategies beyond the pandemic. Families have now experienced new care modalities and a degree of flexibility in care delivery that, even 2 years ago, we might never have thought possible. Service leaders and payers will draw on studies such as ours to decide what services and modalities they continue to provide and under what circumstances.

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