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INTEGRATING BEHAVIORAL HEALTH INTO PEDIATRIC DEPARTMENTS AT A PRIMARY CARE ORGANIZATION, AND **RESPONDING TO NEW NEEDS DURING THE COVID-19** PANDEMIC: A PROGRAM EVALUATION AND ITS CHALLENGES

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Abstract

It is estimated that 14 million, or 21% of children residing in the United States meet diagnostic criteria for a mental health and/or substance use disorder (American Academy of Pediatrics, 2016)"}" id="2086950881">(American Academy of Pediatrics, 2016). Additionally, 16% of children and adolescents have impaired mental health functioning that does not meet criteria for a mental health disorder. Unfortunately, approximately 75% to 85% of children with behavioral health concerns do not receive mental health specialty services, and many of them do not receive any treatment at all. Limited resources and long wait times for services are among the many barriers to Behavioral Health care for this population. In addition to quality of life issues, untreated child mental health disorders have profound societal economic consequences. This study set out to evaluate a pilot project that integrates Behavioral Health (BH) care into pediatric departments at a large multi-site, multispecialty primary care organization as a strategy for reducing wait times for child BH services and improving patient outcomes. Data started to be collected and some preliminary findings were obtained but the program did not reach its planned endpoint.

In March of 2020 operations at the primary care organization were severely disrupted by an organizational and financial crisis caused by the necessary safety precautions designed to reduce the spread of infection during the onset of the Covid-19 pandemic. Behavioral Health care at the organization subsequently shifted to a telehealth platform. The in-person pilot program was terminated and reorganized into two new telehealth programs with the same goal of increasing access to BH care by reducing wait times for services. The first of these programs called the Pediatric Behavioral Health Covid Response (PBHCR) team was designed to address the emerging urgent child mental health needs caused by the pandemic. The second program called The Virtual Integration Program was designed to provide general BH care to children. Data for the new pilot program is incomplete, but preliminary results indicate that wait times and no show rates were reduced, and pediatric providers and their patients generally found the program helpful. The Virtual Integration Program was not evaluated. An exploration of operational data for the PBHCR program found that the use of a single session and psychoeducation in the form of Tip Sheets may be an effective strategy for increasing access to child behavioral health care.

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Marty Krakowsky, LICSW

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Dedication

In loving memory of my father Sam Krakowsky, whose life struggles inspired me to pursue a meaningful career dedicated to supporting others.

Acknowledgments

A sincere thank you to my Dissertation Chair Dr. Ram A. Cnaan. Your invaluable wisdom, support, guidance, and encouragement kept me grounded through the twists and turns of this project. Your steadiness, vision, and ongoing reassurances were "instrumental" in helping me see this endeavor through to completion. Thank you Dr. Femida Handy, for agreeing to join my committee in the late hours. I truly appreciate your support, feedback, and encouragement.

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Thank you to my wife, Dr. Anika Goldman, and to my children Dylan and Josh for your love and support, and most of all for your patience over these past 3 years. Anika, your pursuit of education, and dedication to the young children you so skillfully serve have always been an inspiration to me. I hope I make you proud.

Abstract

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Introduction

This project began as an evaluation of a Pediatric Behavioral Health pilot program that integrates Behavioral Health (BH) care into pediatric departments at a large multi-site, multispecialty primary care organization in Eastern Massachusetts. The program was designed to increase timely access to child BH services in order to improve patient outcomes. High demand for services at collocated BH departments at the organization has historically led to long wait times for services, disruptions in patient care, ineffective treatment, poor patient and provider satisfaction, and increased operational costs. To address this the BH department placed a child clinician within the pediatrics department at one of the larger sites that did not have a collocated BH department. The embedded therapist's role was to support the pediatrics department by providing immediate consultation to pediatric advanced care clinicians and patients, assess the mental health needs of patients presenting with behavioral and emotional concerns, provide short term therapy to patients while securing longer term treatment for them, and identify mental health resources in the community. Other features of the program included access to consulting child psychiatrists for support with pharmacotherapy, and monthly collaborative office rounds where formal education was provided to the pediatric team. The program started in March of 2018. It was expanded to a second site in August of 2018, and to a third site in August of 2019.

In March of 2020 plans to evaluate the program were disrupted by the onset of the Covid-19 pandemic, which caused significant fiscal and operational challenges to the organization, including site closings and furloughs. As a result, the research arm of the organization temporarily closed and data that had been collected for the evaluation was no longer accessible. Behavioral Health clinicians transitioned to providing telehealth from home in order to protect

themselves and their patients from infection. At the same time pediatric departments began receiving a large number of phone calls from patients reporting significant emotional and behavioral disturbances as a direct result of the pandemic. The framework and resources of the embedded program was used to create the Pediatric Behavioral Health Covid Response Team (PBHCR), which used telehealth to provide BH services to these families. Two key features of this program were the use of telephone assessment to make treatment recommendations, and providing patients and parents with Tip Sheets containing community resources and strategies for managing emotional and behavioral concerns caused by the pandemic (see appendixes C – M). A sister telehealth program, the Virtual Integration Program was also developed using the same framework, and eventually replaced the embedded therapist pilot program and the PBHCR.

A partial record of early data that was collected for the embedded pilot program remained accessible, and was used to evaluate the program. The preliminary data suggests that the program effectively reduced wait times and no show rates for initial appointments, and that pediatric providers and patients found the program helpful. However, this data is incomplete and should be interpreted with caution.

Operational data was used to explore patterns in the PBHCR program. A primary finding is that 42.15% of patients who met with a PBHCR clinician did not require additional services after their initial meeting. That number is comprised of 32.35% of patients who received Tip Sheets, and 9.80% who did not. As with the pilot program, this data should be interpreted with caution because it is incomplete, and based on operational reports rather than metrics generated for research purposes. Although additional research is needed, integrating BH programs into pediatric departments and the use of Tip Sheets appear to be promising strategies for increasing timely access to psychotherapy and improving patient outcomes.

Chapter 1 will discuss the prevalence of children and adolescents with mental health needs in the US, barriers to adequate care, and the economic and emotional costs associated with untreated child mental illness. Pediatric primary care departments as ideal settings for recognizing and initiating behavioral health care is presented. Negative effects of long wait times for mental health services are provided, and creative strategies for reducing wait times for mental health services in the US and around the world are explored. Chapter 2 will present the structure of the primary care organization and Behavioral Health departments, the state of pediatric behavioral health services prior to the implementation of the pilot program and reasons this was not sustainable, the need for change, a description of the Embedded Therapy Pilot Program, and the expected outcome. Chapter 3 will present the research methods that were planned to evaluate the pilot program. Chapter 4 will discuss the reasons the planned study could not be completed, and will share preliminary findings. Chapter 5 will discuss the fiscal and operational disruptions to the primary care organization caused by the Covid-19 pandemic, and the organizational crisis that followed. Organizational and regulatory strategies for continuing to provide health care services during this time are presented. New emerging child mental health needs that resulted from the coronavirus pandemic and subsequent stay at home orders are explored. Descriptions of two new telehealth programs designed using the resources and framework of the pilot project to address emergent pediatric mental health care needs in the wake of the Covid-19 pandemic are provided. Chapter 6 will present the research methods for exploring operational data to search for patterns in one of the new models, the PBHCR, that can be used to enhance similar future programs. Chapter 7 will present the findings and compares outcomes of the PBHCR program to an adult Covid-19 Response program that was also designed by using the framework of the embedded pilot program. Chapter 8 will discuss the relevance of

the findings, considerations for future programs, the limitations of this project, and areas for future research.

Chapter 1: Serving Children with Behavioral Health needs: the importance of timely access to services

It is estimated that 14 million, or 21% of children residing in the United States meet diagnostic criteria for a mental health and/or substance use disorder (American Academy of Pediatrics, 2016). Additionally, 16% of children and adolescents have impaired mental health functioning that does not meet criteria for a mental health disorder. Half of all adults in the US with a mental health disorder have experienced symptoms by the age of 14. Unfortunately, approximately 75% to 85% of children with behavioral health concerns do not receive mental health specialty services, and many of them do not receive any treatment at all. Barriers to mental healthcare, including financial constraints, lack of transportation, shortages of child mental health professionals, and stigma about mental health treatment led to a 40% to 50% early termination rate for those who do pursue treatment. About two thirds of primary care physicians (PCPs) are unable to arrange outpatient mental health treatment for their patients (Cunningham, 2009). This rate is two times higher than that of referrals to other health services, and is often due to inadequate or lack of medical insurance coverage, in addition to a scarcity of mental health providers. Thus, overall access to sufficient behavioral health services for children and adolescents in the United States is limited.

There are significant societal and financial costs associated with child and adolescent mental illness (American Academy of Pediatrics, 2016). Children with untreated mental health disorders often remain symptomatic into adulthood, which can interfere with educational attainment, employment, and lead to increased risk of poverty. Parents or caregivers of children with severe mental health disorders often experience disruptions in routine and work schedules, in some cases losing their jobs, which adds to caregiver stress, and exacerbation of symptoms. In 2007 the direct and indirect costs attributed to pediatric mental health disorders totaled approximately \$247 billion. Furthermore, mental health disorders account for approximately half of all work days taken off for Disability. Timely, and effective diagnosis and treatment of mental illness in childhood has been shown to lead to better outcomes for these individuals as they become adults, and could lead to overall reduced mental health related costs (National Research council and Institute of Medicine, 2009).

Pediatric departments have been conceptually described as "optimal" settings for "detecting and addressing behavioral health concerns and disorders" in children, as approximately 75% of children with psychiatric concerns present to family and pediatric departments, and about 50% of all pediatric visits address behavioral or educational concerns (Weitzman & Leventhal, 2006, p. 641). Additionally, pediatric providers are becoming increasingly skillful at recognizing behavioral health concerns with the use of screening tools that use DSM assessment criteria to identify mental illness. Further, child patients and their parents often have trusting relationships with pediatric providers that may help with disclosure of behavioral concerns. However, with regard to mood disorders, about 90% of primary care clinicians feel responsible for recognizing depression, but only 50% feel confident with assessment, and even fewer, 10 to 14% feel confident providing this care (Gerrity et al., 2001).

Schools are also natural access points for identifying behavioral and emotional concerns in children, and implementing school based interventions. However, in Massachusetts, school counselors and psychologists are authorized to diagnose learning disabilities but not other DSM diagnoses, and often encourage parents to share concerns with pediatricians, and/or refer to counseling services in the community. Schools are also often under-resourced and therefore

unable to provide sufficient behavioral interventions for problems that exist at home. Their interventions are usually designed to address school related or learning problems.

In a position paper cowritten by The American Academy of Pediatrics and The American Academy of Child and Adolescent Psychiatry (American Academy of Child and Adolescent Psychiatry: Committee on Health Care Access and Economics: Task Force on Mental Health, 2009), the authors recognize the primary care setting as an ideal access point for mental health services. They take the position that primary care clinicians (PCCs) "can and should" (p. 1248) initiate mental health services for children and adolescents with existing and emerging developmental and behavioral difficulties, and mental health disorders. They recommend that PCCs treat simple mental health disorders, and refer patients with more severe and complex presentations to specialty practices. Further, they recognize the benefits of having an onsite Behavioral Health department to increase the range of mental health services provided. Several additional studies highlight the benefits of having licensed mental health clinicians integrated into primary care departments, both for consultation and to provide assessment, triage and treatment. There is evidence that this helps improve access to mental health treatment, increases treatment adherence, increases efficiency and effectiveness of care, decreases overall medical costs, increases patient functioning and productivity, and improves patient and provider satisfaction (Fishman et al., 1997; Robinson & Reiter, 2007; Williams et al., 2006).

Effects of Long Wait Times for Mental Health Services:

Several studies indicate that longer wait times for initial BH appointments lead to increased rates of missed initial appointments. One such study investigated this relationship out of concern for the negative consequences that missed initial appointments have on organization resources and financial standing (Gallucci et al., 2005). They reviewed data collected for 5,901

adult and child patient referrals to a mental health clinic in Maryland to explore reasons for missed initial appointments. They found that overall 1,829 or 31% of referrals resulted with missed or cancelled appointments. They discovered a strong linear relationship between appointment delay and cancellations and no-shows. Twelve percent or 20 out of 173 patients did not keep initial appointments that were scheduled the same day as initial contact. Twentythree percent or 311 out of 1376 did not keep appointments that were scheduled the day after initial contact. Forty-two percent or 100 out of 241 patients did not keep appointments that were delayed for 7 days. And 44% or 18 out of 41 patients did not keep appointments that were delayed by 13 days.

Another study of a community mental health initiative demonstrated that by significantly reducing wait times for intake appointments, initial missed appointments dropped from 52% to 18% (Williams et al., 2008). As a result psychiatric hospitalization rates dropped. In the 18 months prior to the implementation of the program change there were 138 intakes, 13 of which required hospitalization. In the 18 months following the program changes there were 175 intakes and only one hospitalization. Furthermore, reallocation of resources to allow for immediate intakes proved to be cost saving, as an increase in kept appointments led to more billable hours for services. Staff completed anonymous surveys indicating positive perceptions of the program, increased teamwork and fewer complaints.

In a commentary about the use of waitlists for mental health services (Brown et al., 2002), the authors highlight the costs of treatment delays, which include "prolongation of emotional distress, occupational/social dysfunction, victimization, danger to self/others, [and] physical health risks and incarceration" (p.220). They cited additional evidence indicating that treatment delays are associated with missed initial appointments, frustration and hopelessness.

Further, people who are ambivalent about seeking mental health services may miss a "window of opportunity" (p.220) if the wait time is too long. Delayed access to BH services for adolescents can lead to further deterioration and forgoing care altogether, which can lead to more costly and difficult MH care in the future (Steinman et al., 2015).

Health care organizations in countries other than the US also struggle with providing timely access to mental health services. In Canada for example, 800,000 children ages 4 to 17 (14% of that age group) have mental disorders that interfere with familial, educational and community functioning (Waddell et al., 2005). Mental health concerns are the leading health problem that Canadians face after birth. However, less than 25% of this group receive specialty services. As in the US, scarcity of resources is counted among the reasons for limited access to treatment. As such these authors endorse a robust public health initiative seeks to improve preventive and emergent mental health services. Concerns about negative effects of long wait times for mental health services has led to increased interest in the ways these wait times are managed in Canada (Kowalewski et al., 2011). Acuity of presenting concerns is listed among the factors that may hasten access in a variety of mental health settings. Nevertheless, the initiative to improve timely access for services for all children and adolescents remains a priority.

In the UK, barriers to access to Behavioral Health services have led to creative strategies for providing treatment with limited resources. Single Session Therapy (SST) is one such method. In one study, a single 2 hour assessment and solution focused therapy session has been demonstrated to improve the severity of presenting problem for 74.3% of participants and frequency of the problem for 71.4% of participants at 1 month post session. (Perkins, 2006). A 95% satisfaction rate, in part because psychotherapists offered hope was also noted. A follow up study demonstrates that significant improvement was maintained 18 months post initial meeting for 60% of participants (Perkins et al., 2008). The later study reviews several papers with differing conclusions about the impact of delayed access to BH treatment. Although the evidence is inconclusive, they cited research that indicates delays to mental health services may lead to dissatisfaction with services, and may increase the likelihood of early dropout rates. Roberts, (1990;1995) claimed that immediate treatment is necessary when clients are in crisis. Although this SST research does not make direct claims about consequences of delayed access to treatment, by demonstrating the effectiveness of just psychotherapy meeting, it would follow that sooner access to treatment would lead to sooner symptom relief and reduce unnecessary mental health suffering.

In another British study on the impact of wait times on relationship therapy (marriage counseling) the authors write "waiting lists might be seen cynically as a self -regulatory system where natural wastage or drop-out rates of clients are a means of maintaining some sort of equilibrium" (Hicks & Hickman, 1994, p.3). They further write "a prompt response upon client referral is necessary in order to prevent their demise into a position of profound and irrevocable difficulty" (P. 7), These authors advocated for a more systemized approach to managing waitlists, which includes maintaining contact with patients on waitlists, and prioritizing referrals based on perceived client need in order to support consumers and increase client satisfaction. They also advocate for more funding of mental health resources.

Norway is another western country that struggles with providing timely psychotherapy services, where on average adult patents wait 55 days to see a mental health specialist (Biringer et al., 2015). These authors emphasize the World Health Organization's view that accessibility and availability to health services is a core element of quality healthcare and describe a generally negative view of waiting lists. They cited research that shows a correlation between long wait times and missed appointments, increased number of psychiatric hospitalizations, lower quality of life, poorer social and physical functioning, and poorer health status, and present new data qualifying patient experiences while waiting for mental health services obtained using semi structured interviews. Although there was some indication of initial relief to have been referred for services, they described themselves as exhausted, feeling trapped, unproductive, inadequate, and highly anxious. Participants tried to find their own ways to cope with varying degrees of success as they waited for services. The authors advocate for providing patients with coping strategies as they wait for services, while emphasizing the importance of reducing overall wait times.

In summary, the deleterious effects of long wait times for access to mental health services include high missed initial appointment rates, increased early treatment dropout rates or forgoing behavioral health care altogether, prolongation of emotional distress and victimization, occupational and social dysfunction, increased risk of danger to self and others, increased physical health risks, increased risk of incarceration, increased number of psychiatric hospitalizations, dissatisfaction with care from both health providers and patients, and increased financial costs to healthcare organizations. Conversely, reallocating services to reduce wait times has been shown to lead to better care and treatment outcomes, reduce psychiatric hospitalization rates, increase a sense of teamwork and morale, improve perceptions of BH programs, increase overall provider and patient satisfaction and reduce complaints, and reduce overall financial costs to mental health programs.

Awareness of these benefits has led to strategies for improving access to BH services at health care organizations in the US and around the world. Atrius Health is one example of a

large primary care organization in eastern Massachusetts that has made reduction of wait times one of the focuses of programmatic changes to their delivery of BH services. In 2016 Atrius Health implemented a short term, episodic treatment model to their collocated BH departments in order to reduce wait times for adult patients, and thereby improve overall mental health care (McDowell, 2018). Pediatric patients receiving services at BH departments were not included in this program change. In 2018 Atrius began a pilot project that integrates BH care directly into pediatric departments in order to capitalize on the benefits of reducing or eliminating wait times for mental health treatment of children and adolescents. This study set out to evaluate the effectiveness of this integrated pediatric behavioral health pilot project.

Chapter 2: The Initial Intervention

Atrius Health is a multisite, multi-specialty primary care organization in Eastern Massachusetts. At the time of the study there were 31 practice locations that provided care to 745,000 adult and pediatric patients, including 125,000 pediatric patients. Atrius Health was founded in 2004 using the name Health One Care System. It started with a partnership between two established medical groups: Dedham Medical Associates and Harvard Vanguard Medical Associates (HVMA). This new arrangement created a forum for new innovation, which included the development of quality medical standards and the use of a shared electronic health record (Epic) to improve the effectiveness of communication and overall medical care, while allowing the two organizations to still practice independently. Granite Medical Group joined in 2005. In 2006 the name Health One Care System was dropped in favor of Atrius Health. Atrius Health continued to expand and reorganize by incorporating VNA Care to improve the coordination of visiting nurse and hospice services for Atrius Health patients. In 2017 PMG Physician Associates joined Atrius Health, adding 7 new office locations, bringing the total number of locations to 31.

Of the 31 practice locations, only HVMA sites had Behavioral Health (BH) departments, which are collocated. There were 16 in total. The purpose of the BH departments is to provide psychotherapy and pharmacotherapy to adult and child patients who have primary care clinicians at the organization. Each BH department is staffed with psychotherapists and psychopharmacologists. Psychotherapists consist of Licensed Independent Clinical Social Workers (social workers who hold the Massachusetts LICSW license), licensed psychologists, and therapists with the state designated Licensed Mental Health Clinician (LMHC) license. Psychopharmacologists consist of board certified psychiatrists and psychiatric nurse

practitioners, whose primary role is to diagnose and provide medication treatment to Atrius patients suffering from mental illness.

In addition, the organization has a robust Behavioral Health Fellowship program that provides opportunities for post graduate social workers, and post-doctoral psychologists to provide psychotherapy to Atrius patients under the close supervision and guidance of licensed clinicians. This 12 month program prepares participants for licensure in their respective fields. An average of 10 fellows are accepted to the program each year, several of whom continue on to a second year fellowship, or are hired as credentialed BH clinicians upon completion of licensure requirements. Fellows attend weekly seminars where they receive training in Dialectical-Behavioral Therapy (DBT), Acceptance and Commitment Therapy (ACT), Motivation Interviewing (MI), Trauma Affect Regulation Education and Therapy (TARGET), short term psychodynamic therapy and group therapy. They can also choose to further specialize in treatment of trauma, addiction, women's health, health psychology, or pediatric behavioral health. Multicultural consideration and ethics in behavioral health are emphasized in their training. Fellows also have opportunities to support ongoing BH research at the organization, and have assisted with pilot projects.

High demand for services has historically led to poor access to BH treatment and long wait times for services. This has led to disruptions in care, increased emergency department visits and outside utilization, poor patient care, ineffective treatment, poor patient and provider satisfaction, and increased operational costs. In 2016, the organization restructured the way psychotherapy is provided to adults. In an effort to make behavioral health services more accessible and effective the department implemented a short term care model. A triage system was developed to assess whether each patient referred for services would be served well within the internal care model. The BH departments identified mental health organizations outside of Atrius to refer patients in need of longer term care, or if Atrius BH providers did not have openings. BH departments began offering group therapy as a means of providing services to larger numbers of patients with limited numbers of clinicians. A care facilitation program was developed to support highest risk and under-resourced patients. Despite some complications with initial implementation, this care model led to reduced wait times for initial and follow up appointments and reduced patient caseloads (McDowell, 2018).

The need for change:

In 2016, around the same time that the new adult care model described above was rolled out, a steering committee was assembled to explore shortcomings of the delivery of BH services to the pediatric population at Atrius Health, and to design improvements. The committee included representatives from the BH, Pediatrics and Central Operations departments and met for over a year. Surveys were used to acquire feedback from pediatric and BH clinicians. Pediatric providers indicated that there is "somewhat effective" collaboration with BH and access to BH support is "very unavailable." They expressed concern about prolonged delays in securing appointments with pediatric providers, particularly for medication. A BH operational report generated in March of 2018 indicated that on average there were 65 days between referral and initial appointments with a psychotherapist at collocated Behavioral Health departments, and 110 days for medication visits.

Long delays for treatment led to patient and referring provider dissatisfaction. Pediatric providers explained that they lack the training and support to manage the behavioral health needs of their patients while they wait for appointments. Pediatric patients and their families continued to struggle as they waited for access to a BH provider. In addition, pediatric BH clinicians

expressed feeling overwhelmed and unsupported in their efforts to provide effective, quality care, as continuously accepting new referrals leads to increasingly large caseloads, and subsequent delays for follow up appointments for new and existing patients. As a result, pediatric BH clinicians lack the time to deliver empirically based interventions, collaborate with parents and community supports, and receive consultation from peers, all of which are necessary to provide effective care to their patients. In addition, BH clinicians and pediatric providers both expressed interest in increasing collaboration with one another. This system was not sustainable and there was a clear need for change.

In March of 2018, Atrius Health began piloting a Pediatric Behavioral Health Care Model designed to address the concerns observed above. This effort was designed to improve access and quality of mental health services for Atrius Health child and adolescent patients. The program started as an initiative to bring BH services to sites that had none, and to experiment with an integrated BH care approach that would eventually be used across the organization. Integrated care differs from collocated care, in that BH clinicians are embedded directly into primary care departments rather than practicing at a separate collocated department. Integrated BH care would serve to address acute or short term needs of pediatric patients, and to serve as a bridge if they required longer terms services at collocated BH sites or in the community. The proposed intervention:

The embedded therapist (ET) provides direct support and consultation to pediatric advanced care clinicians (ACCs), which include pediatricians and pediatric nurse practitioners.

ACCs may directly seek out the ET for a face to face meeting or by electronic message. The ET is immediately available for emergent cases, in which patients present to their pediatric visit with suicidal or homicidal ideation, or appear psychotic or disoriented. In these cases the ET may be

approached and will meet with pediatric provider and patient as soon as possible that same day to support the family with accessing appropriate BH services. In other moderate to mild cases the ET provides guidance to help determine whether additional assessment is necessary, and next steps for the patient. If the ACC and ET determine that the patient would benefit from a referral to the pilot program, the ACC places a referral using the electronic medical record, and the patient may begin short term therapy with the ET. This includes a maximum of 6 sessions. If needed, the ET secures longer term therapy for patients – either within Atrius collocated BH sites, or outside of Atrius. They also refer to other community resources as needed. The consulting psychiatrist practices at a separate Atrius site, within a collocated BH department, and is available for psychopharmacology consultation by electronic message. If they make the determination that the patient would benefit from a face to face meeting with the psychiatrist, the pediatric provider generates a medication evaluation referral directly to the consulting psychiatrist. The BH department outreaches to the family to schedule a psychiatric appointment within two weeks. In some cases the patient will be referred for both short term therapy and pharmacotherapy. In these cases two separate referrals are generated. The patient's health insurance plays a role in determining where referrals are made. There will be times when patients have insurance accepted by the pediatric department but not the BH department, in which case the patient will be referred to the community for psychotherapy, and the ET's role is to support the family by providing resources and close monitoring until BH care is established. Emergent meetings with the ET lasting 16 minutes or longer will be billed if the patient has insurance accepted by the BH department. The consulting psychiatrist also attends collaborative office rounds at monthly pediatric staff meetings to develop their relationship with pediatric clinicians, reinforce conditions and criteria for the pilot, and to provide formal BH education.

The expected outcome:

Understanding the negative consequences of the long wait time from diagnosis to first BH intervention, Atrius Health staff searched for an alternative model of service that would be effective for its pediatric BH clientele. More specifically, the staff members of Atrius Health had four objectives in mind:

First, decrease wait time for BH service: Decreasing wait times between referral for BH services and initial contact with a BH clinician is a primary objective for both pharmacotherapy and psychotherapy services. Long wait times at collocated BH sites and absence of BH services at the initial pilot sites have led to patient and clinician dissatisfaction, and BH clinician burn out. Time between initial referrals to collocated BH departments and initial appointments with a BH clinician has averaged 65 days for psychotherapy appointments, and 110 days for medication appointments. The goal for the pilot program is that initial contact with a BH clinician would take place in 14 days or less from the date of referral

Second, reduce missed appointment rates: Reducing initial missed appointment rates is thought to improve emotional and behavioral outcomes for patients, and increase the likelihood of following through with BH treatment. Additionally, missed appointments are financially costly to both the BH department and the organization as a whole due to the loss of revenue for the open hour. No show rates in collocated BH departments average 7% to 10% for both adult and pediatric patients. An objective of the pilot program is to further reduce the no show rate. Third, improve pediatric provider satisfaction. Pediatric ACCs providing care at Atrius Health sites without collocated BH departments are unsupported when their patients present with mental health concerns. There has been a lack of clarity about whether their standard work should be to refer to BH departments at other Atrius sites, or to refer to BH providers outside of Atrius

Health. Collocated BH departments at other sites have not always accepted referrals from pilot sites because of their own limited access and ability to provide services to their home sites. Therefore, ACCs at pilot sites have often been on their own with seeking BH resources in the community, and have not had BH specialists with whom to consult. At sites with collocated BH departments, ACCs have been frustrated with the length of time it takes for their patients to have their initial appointments for their patients, particularly when the presenting problems require immediate attention. The objective is to improve pediatric ACC satisfaction by having immediate access to onsite BH care. If effective, the integrated program will be implemented at pediatric sites with collocated BH departments to improve ACC satisfaction at those locations as well.

Finally, improve pediatric patient parent satisfaction. Parents of children and adolescents who would benefit from BH services have also expressed dissatisfaction with lack of access to Atrius BH departments, and /or long wait times for initial appointments. This is particularly evident when they perceive their child's mental health or school functioning concerns as a crisis. The objective of the program is that parents will experience a high level of satisfaction with services provided in the pilot program.

The setting:

The Norwood and Dedham practice locations are two sites that do not have collocated BH departments, and whose PCPs struggled with identifying mental health resources for their patients. These sites were therefore chosen for the pilot. The program started at Norwood in March of 2018, and was expanded to the Dedham site in August of 2018. A psychotherapist with the Massachusetts LICSW credential was hired to spend 3 days within the Norwood pediatrics department, and 2 days within Dedham pediatrics. They provide formal education and consultation to PCCs, same day BH assessment and triage, and short-term solution focused therapy. Referrals to the community are provided if longer-term treatment is needed.

A consulting psychiatrist who practices at one of the collocated BH departments was identified to offer direct support to pediatricians via the electronic medical record system, and to provide pharmacotherapy to patients in urgent need of services. They attend monthly collaborative office rounds during pediatrics staff meetings to develop their relationship with pediatric clinicians, reinforce conditions and criteria for the pilot, and to provide formal education. In August of 2019 a version of this pilot was implemented at the Medford practice site. A total of 20 hours per week of integrated care is split between one of the that site's collocated psychologists who provides 8 hours of care, and a social work fellow who provides 12 hours of care.

The focus of this study is to measure the effectiveness of this Pediatric Behavioral Health Care Model. Insights gained would lead to improved outcomes for children and adolescents in need of BH services at Atrius. In addition, elements of this care model may be adopted by other primary care organizations.

Chapter 3: Research Methods I – Th Pilot Pediatric BH Embedded Care Model

The Atrius Health Academic Institute is a department within the organization whose purpose is to develop, evaluate and teach innovative approaches to healthcare delivery. It is essentially the research arm of Atrius Health. It is comprised of the following subdivisions: The Center for Clinical Research, The Center for Healthcare Innovation, The Center for Analytics and Informatics, and The Center for Education. All healthcare provided at Atrius Health is documented with Epic electronic health record software. The Academic Institute employs analysts who generate statistical data reports using the software. The reports are used to monitor operational trends, and inform policy and innovation. Analysts also oversee the implementation of paper and electronic surveys, and report survey results. The following measures will be used to evaluate the Pediatric Behavioral Health Care Model with support from the Academic Institute.

Measures:

1. Number of days between referral and initial contact with a BH provider:

When placing a referral to the embedded therapist or consulting psychiatrist, advanced care clinicians at Dedham and Norwood sites have been instructed to use a specific Smart Phrase. Smart Phrases are a tool in Epic that automates documentation. This includes generating workflow text and specific fields, and populating the fields with information pulled directly from the patient's medical record. The Smart Phrase was created to distinguish referrals within this pilot program from general Atrius BH referrals. Dropdown menus within the Smart Phrase are used to specify whether the referral is for psychotherapy with the embedded therapist, or for pharmacotherapy with the consulting psychiatrist. Two separate referrals are entered if the patient is referred for both psychotherapy and pharmacotherapy. Analysts will generate separate

reports for psychotherapy referrals and for pharmacotherapy referrals. These reports will specify the number of days between the date of the referral entry and the date of the initial appointment with the BH provider for all referrals placed over a three month period. Criteria for success is that initial appointments with a BH clinician will occur within 14 days of the referral for 85% of referrals placed. This criteria applies to both psychotherapy referrals and pharmacotherapy referrals.

2. Number of missed initial appointments with a BH provider:

Epic analysts will generate reports indicating the numbers of kept and missed initial appointments for the same three month period. Separate reports are generated for psychotherapy and for pharmacotherapy appointments. Criteria for success is that the no show rate will be less than 7% for all initial appointments.

3. Pediatric Provider Experience:

A survey has been created using the Survey Monkey website. Pediatric ACCs at the Norwood and Dedham sites will be asked to complete the survey online. It will consist of four questions (see appendix A). The first question will use a 5 point Likert scale to assess the extent to which the ACC finds the Embedded Therapy program helpful. The second question will use a 5 point Likert scale to assess the extent to which the ACC finds the Consulting Psychiatry program helpful. The third question will ask the ACC what they feel has been most effective about the program. The answer field for this question will be open ended. The fourth question will ask for any additional feedback, and the answer field will be open ended. A 70% positive response rate to the first two questions will indicate program success. The responses to the open ended questions will provide qualitative data that will be used to help shape structural changes to

improve the program. The survey development, administration and the generation of data reports is overseen by the Academic Institute.

4. Patient Experience:

Paper surveys (see appendix B) will be mailed to parents of patients who received BH services. Postage paid return envelopes will be enclosed with the surveys. The surveys will be returned to the Academic Institute for analysis. There are a total of four questions. The first is a 2 part question. The first part uses a 5 point Likert scale to attain feedback about overall satisfaction with the BH services their child has received. The second part asks for reasons for their rating, and has an open ended response field. The second question is divided into subsections that use a 5 point Likert Scale to elicit feedback about patient satisfaction with a) ability get an appointment for BH services, b) coordination of care between Pediatrics and BH departments, c) sensitivity of the BH team to parent and child needs, d) connection to helpful resources, and e) overall support with managing BH issues. Reasons for ratings are asked with an open ended response field. The third question asks for the location/locations where the BH services were received (within the pediatric department, within the BH department, or externally within a Community Health setting). The fourth question asks for the specific site where the BH services were received. Survey results are aggregated within the Academic Institute. Names of participants are optional. An overall satisfaction rate of 70% or higher is an indication of success. Qualitative data collected in the surveys will be used to inform programmatic improvements.

Timeline:

1. Number of days between referral and initial contact with a BH provider:

The first Epic report with number of days between referral and initial contact with a BH provider was generated for the Norwood and Dedham sites in November of 2018. A second report that includes all three sites, Norwood, Dedham and Medford was generated in December of 2019. A third report with data for all three sites is scheduled to be generated at the end of March, 2020.

2. Number of missed initial appointments with a BH provider:

The first Epic report with the numbers of kept and missed initial appointments with a BH provider at the Norwood and Dedham sites was generated in November of 2018. A second report that includes all three sites, Norwood, Dedham and Medford was generated in December of 2019. A third report looking back at all three sites is scheduled to be generated at the end of March in 2020.

3. Pediatric Provider Experience:

Links to the Pediatric Provider Experience Survey Monkey were emailed to 12 pediatric ACCs at the Norwood and Dedham sites in November of 2018. Results were tabulated in December of 2018. A second survey to be sent to pediatric ACCs at all three sites is scheduled for March of 2020.

4. Patient Experience:

Patient Experience surveys were mailed to patients in February of 2020. They will be tabulated by the end of March 2020.

Chapter 4: Findings I - The Pilot Pediatric BH Embedded Care Model

Unfortunately, the onset of the Covid-19 pandemic in mid-March of 2020 caused drastic operational disruptions at Atrius Health. One of the outcomes was the temporary closure of the Academic Institute. As a result, the data that had already been collected was no longer available, and the new Epic reports that were planned could not be generated. Furthermore, when the Academic Institute began the process of reopening, their focus shifted to addressing only Covid-19 related projects. By that time the Integrated Pediatric Behavioral Health program shifted to a virtual telehealth program, which made accessing data that had already been collected for the in person pilot program programmatically unnecessary, and it therefore remains unavailable. Luckily, some of the information that had been collected was presented in an operational report prior to the pandemic, so there is a partial record. The report was presented to the BH and Pediatric operations teams by the developer of the program for review in December of 2018, and includes preliminary data for the Norwood and Dedham sites from March of 2018 to November of 2018. Data from this report should be interpreted with caution because it was used for internal operations, and not research purposes. The report presents the following information:

By the end of November 2018, 100% of patients referred to the program received treatment. Over 200 patients served in the program established first contact for consultation with a BH provider in less than 24 hours, had access to therapy within 7 to 14 bustiness days, and had access to a BH prescriber within 14 days. This is compared to the initial state which was 64 days for psychotherapy and 110 for medication appointments. The no show rate for initial meetings was 5%. Exact numbers are not indicated. 100% of patients referred to the pilot program were seen within Atrius Health. This is compared to other sites where 80% of referrals to collocated BH departments are then referred to providers outside of Atrius Health because of the lack of

openings within the organization. Provider feedback is described as "overwhelmingly positive," with rapid access to BH clinicians and the monthly collaborative office rounds described as "highlights" of the program. It was observed that 16% of all consultations were for medication assessments and 84% were for psychotherapy, and that hiring additional psychotherapists is therefore recommended. Expanding the program to other sites, starting with the Medford site is also recommended.

The following charts were included for visual aid:

| | Access for Therapy | Access for Medication Evaluation |
|---------------|--------------------|----------------------------------|
| March 2018 | 64 days | 110 days |
| November 2018 | <14 days | <14 days |

| Consultations | | Days To First Contact |
|---------------|-----|-----------------------|
| Therapy | 264 | <24 hrs |
| Medication | 52 | <7 days |

| | Embedded Therapy Pilot | Atrius BH |
|----------------------|-------------------------------|-----------|
| Outside Utilization | 0% | 80% |
| Internal Utilization | 100% | 20% |

| Pediatric Panel Size | |
|-----------------------|----------|
| Norwood | 12,556 |
| Dedham | 7,132 |
| Medford | 8,589 |
| Total Pediatric Panel | 125, 017 |

A summary of the responses from the first Pediatric Provider Survey that was sent to 12 pediatric ACCs at the Norwood and Dedham sites in November of 2018 is included. Nine of the 12 the ACCs completed the survey. All of the respondents indicated that both the Embedded Therapy program and the Consulting Psychiatry program were helpful. For the embedded therapy program, 56% or 5 found it extremely helpful, 33% or 3 found it very helpful, and 11% or 1 found it somewhat helpful. For the Consulting Psychiatry program, 56% or 5 ACCs found

the program extremely helpful, 22% or 2 found it very helpful, and 22% or 2 found it somewhat helpful.

Responses to the open ended question "What are the areas you feel have been the most effective about the program?" are as follows:

"immediate access to consult for therapy and medication"

"rapid access for med evaluations and therapy"

"ability to obtain a consult on site and able to have close follow up"

"essential program"

"love the program, wonderful resource for PCP and families, hope to see it continue"

Responses to "Any other feedback?" are as follows:

I would say that the addition of [EMBEDDED THERAPIST] in the department has been wonderful. They helped me tremendously with a very complicated case, finding alternative school placement vs partial hospitalization program. They also helped expedite a referral to psychiatry. The patient, last time I checked in with them, has been able to manage at home but these options are still open. I would never have been able to arrange all of this without [EMBEDDED THERAPIST]'s help. Overall, wonderful to have them in the office ready to provide services.

"I think [EMBEDDED THERAPIST] is an excellent resource on so many levels for our patients."

"I think this is a terrific program."

"Having a BH professional to help assess for safety in our office in real-time has been especially helpful. This has been especially true when my assessment is that they are safe returning home but appreciate the expertise of a BH professional."

"The comfort level for parents and children coming to our familiar office is a very important and positive experience."

"Feedback from parents has been very positive about [EMBEDDED THERAPIST] as their provider. They connect well with our patients."

"[EMBEDDED THERAPIST] has been very helpful to me personally in sorting out appropriate management as well as seeing my patients."

"[EMBEDDED THERAPIST] is a skilled professional and a great addition to our office."

[Embedded Therapist] has been helpful to me both with phone consults and with seeing patients. I love having [EMBEDDED THERAPIST] as part of our practice and they have been very helpful to me and my patients. I hope the program will continue. I think having same-placed BH clinicians is becoming the standard of care in the community and in forward-thinking medical groups; it would be a terrible mistake to not invest in this future.

"Patients have almost immediate access, often within a week to therapy services."

"It is great to not feel as though I am sending patients into an abyss as I have a knowledge of who I am referring patients to."

"Invaluable resource"

"Crisis help"

"Incredibly pleased with the program"

"Patients feel more comfortable seeing someone in the practice."

"Having a department do the insurance leg work is invaluable."

"In addition to the benefits we discussed, there is a real benefit to having you in the department, so that the PCP can communicate directly with the therapist, provide background on the family, and also the PCP has access to the therapist's notes."

"It is wonderful to be able to run ideas by ET."

"Quickly gets back to PCP."

"Easy to communicate with you and place a referral."

"You have always been willing to try to help / see any patient who is accepting of short term therapy."

"Families think you are fantastic. I have not heard a single negative comment."

"I think this program is essential and has the potential to continue to build"

"Please let us providers know what we can do to continue to support this program"

This report indicates that by the end of 2018, the roll out of the pilot program appears to have met the benchmarks for success for three of the four measures described in chapter 3.

Measure 1: Number of days between referral and initial contact with a BH provider.

The initial state for collocated BH departments was 64 days for therapy and 110 days for medication appointments. The measure for success is less than 14 days for both psychotherapy and medication appointments. This report indicates that this benchmark was met. In fact, 264 patients referred to the program are reported to have received consultation with a therapist within 24 hours, and 52 patients received consultation with a prescriber within seven days. The exact number (n) of patients referred is not indicated, and the percentage of referrals that met this benchmark is therefore unknown, which is one of the reasons this should be interpreted with

caution. However, it is possible that every referral met these benchmarks (see Additional Observations below).

Measure 2: Number of missed initial appointments with a BH provider.

Criteria for success is less than 7%. The above report indicates that the rate of missed appointments was 5%, which meets the benchmark. As with the first measure exact numbers are not provided.

Measure 3: Pediatric Provider Experience.

Criteria for success is that 70% of clinicians would indicate that they find the embedded therapy program and the consulting psychiatrist programs helpful. Out of the 9 respondents that completed the survey, 56% or 5 found the embedded therapist program extremely helpful, 33% or 3 found it very helpful, and 11% or 1 found it somewhat helpful. Similarly, for the psychiatric consultation program 56% or 5 ACCs found the program extremely helpful, 22% or 2 found it very helpful, and 22% or 2 found it somewhat helpful. By these accounts 100% of all ACCs who answered the survey reported finding both programs helpful. If the three clinicians who did not respond to the survey did not think the programs were helpful, there is still a 75% positive response rate. Furthermore, as indicated in the report, the anecdotal responses are "overwhelmingly positive". Themes of clinician responses include the usefulness of having an ET in the department for both clinicians and patients, support with safety assessment, support with researching resources, positive feedback from parents, appreciation of access to consultation, effective communication, and most relevant to this study – speedy access to BH services. The program is described as "essential" and "invaluable," as the ACCs express their support for the model. It is important to note that it is not known whether every open ended survey response is presented in this report. In addition, many of the responses are worded as if

they are written directly to the embedded therapist. If respondents were expecting the ET to read the results they may not have answered honestly and/or omitted negative feedback.

Measure 4: Patient Experience.

This measure was not captured in this report.

Additional observations:

This report also indicated that 100% of patients referred for mental health services at the pilot sites were seen within Atrius Health. This is compared to the averages at collocated BH departments where only 20% of patients referred for BH services are seen within Atrius Health. Receiving services in house, or internal utilization, generally leads to increased patient satisfaction. In addition, depending on the nature of the patient's health insurance product this could be a cost saving measure. Many health insurance plans use a capitated model, where a lump sum of money is provided to a primary care organization to cover all medical costs for that patient for the fiscal year. Money from these insurers is pooled for that health plan's patients. It can therefore be costly to the organization when capitated patients receive services, including BH services outside of Atrius Health (external utilization). The percent of patients with capitated health plans at Atrius health fluctuates.

Another observation is that 16% of referrals were for medication management, and 84% were for therapy, which highlights the need for hiring additional therapists. It is possible that the total number of referrals in this report is 316, which is comprised of 264 therapy referrals and 52 medication referrals indicated in the Consultations /Days to First Contact Chart. The split between therapy and medication referrals is 16% and 84%, which is the same as the total split between all referrals for therapy and medication. If this is accurate then every referral greatly

exceeded the Measure 1 benchmark above. Overall, the initial data presented in this report is highly encouraging.

In October of 2020 the following two charts were generated as part of a milestone report for a grant that was used to pay for services provided by the Epic analysts at the Academic Institute:

| Description of Anticipated Clinical Outcome | Met (Y/N) | Associated Numeric Metrics | Reasons if Not Met |
|--|--------------|---|---|
| Access for treatment/therapy – Measured in days to first appointment | Y | Access to Embedded Therapist – measured by using Epic smartphrases – 85% of patients with a referral to see an embedded therapists were able to speak with one within 14 days of referral | N/A |
| Access for medication evaluation— Measured in days to first contact | Υ | Access to Embedded Therapist – measured by using Epic smartphrases – 85% of patients with a referral to see an embedded therapist were able to speak with one within 14 days of referral | N/A |
| Outside utilization for BH services (%) | N | Outside Utilization | Due to COVID-19 pandemic, unable to measure actual impact of program on outside utilization. Too many confounding variables |
| Increased Internal utilization for BH services (%) | Y | See Embedded Therapist Outcome – measured by Epic Smartphrase use response | N/A |
| Enhanced patient experience – Measured by Patient surveys | Y | Measured by patient survey – 70% of patients reported being satisfied with the services received | N/A |
| Enhanced provider experience – Measured by provider feedback survey | N | Provider feedback | Due to COVID-19 pandemic, we were unable to survey providers who were redirected to meet the needs of the pandemic. |
| TME – Measured at patient level | N | | Due to COVID-19 pandemic, unable to measure actual impact of program on outside utilization. Too many confounding variables |
| Reduction in administrative time burden for PCPs | N | Provider Feedback | Due to COVID-19 pandemic, we were unable to survey providers who were redirected to meet the needs of the pandemic. |

| Unanticipated | Response to Challenges | Major Take-Away |
|---|--|---|
| Challenges | | (may be used for best practice communications across provider network) |
| COVID-19 Pandemic - overall challenges | During the pandemic continued to provide consultation services remotely. Assembled a COVID-19 response team staffed by integrated therapy clinicians to provide support for entire organization. Originally embedded therapist were only to provide services to Medford/Norwood sites. Developed a virtual integration program On 8/12/2020 finalized a new referral process to shorten the time of identified need to outreach Spread embedded therapist program to Watertown practice starting week of 9/14/2020 | During the pandemic we were able to leverage our existing Embedded Therapist program and transform it using Telehealth. At the pandemic's peak in Massachusetts we assembled a response team staffed by integrated therapists. Due to the pandemic we were able to expedite the expansion of the program (through telemedicine) to other Atrius Health sites |
| COVID-19 Pandemic – Collaborate Office Rounds | Due to the pandemic and competing priorities we were unable to meet and spread collaborate office rounds trainings scheduled for late March 2020. | |
| Identifying consultant psychiatrist | Responded by identifying a pool of psychiatrists who are able to respond to pool messages, and which is managed by all providers. pandemic catalyzed the expansion of the en | New workflow began on 9/14/2020 as a response to staff shortages due to the COVID-19 pandemic abedded therapy program to other program to other specifically program to other specifi |
| sites. During the peak of the pandemic, the work established by this grant allowed Atrius Health to | | |

Overall, the COVID-19 pandemic catalyzed the expansion of the embedded therapy program to other sites. During the peak of the pandemic, the work established by this grant allowed Atrius Health to respond rapidly to changing demands further leading to the development of a virtual integration program.

The first chart provides descriptions of expected outcomes, whether the outcomes were met, metrics used, and explanations of reasons some of the metrics were not met for all three

pilot sites combined. The chart indicates that the benchmark for success for Measure 1 was achieved – that 85% of patients referred for psychotherapy with an ET or for a medication evaluation were seen within 14 days. Dates covered and an analysis of the metrics is not provided. Measure 2, number of missed initial appointments with a BH provider is not included in the charts. Measure 3, Pediatric Provider Experience could not be measured due disruptions caused by the Covid-19 pandemic. Measure 4, Patient Experience is presented, and the benchmark for success was met. An unknown number of patient satisfaction surveys were mailed in February of 2020 and 30 were returned. At least 70% of the responses indicated that the patient was satisfied with the service they received. Additional information about the surveys is not provided. There are also measures for increased internal utilization / reduced external utilization, TME (Total Medical Expense), and reduction in ACC administrative time. This indicates that other expected outcomes of the pilot were increasing internal utilization, which would cut costs (TME) associated with external BH services, and decreasing ACC time spent identifying BH resources for patients, which would increase job satisfaction.

The second chart describes the ways the Covid-19 pandemic caused disruptions to the pilot program, the pediatric BH department responses to the challenges, and major take-aways. It outlines the ways the framework of the imbedded program was used to create new programs to address child BH needs during the pandemic using telehealth. As a result, the pilot program as described no longer exists. This is expanded upon in the next chapters. Despite the incomplete data, there appears to be enough evidence to suggest that the embedded therapy program was an overall success, and that the development of similar programs is worth considering.

<u>Chapter 5: Covid-19 Pandemic Disruptions, Organizational Crises, and Programmatic</u> <u>Changes</u>

Evaluating programs within an organization can be challenging due to the ever evolving structures that make up the organization. This may include staff changes, financial challenges, and other operational changes as organizations respond to internal and/or environmental influences. Atrius Health experienced a severe organizational crisis due to the onset of the Covid-19 pandemic, just as this study was underway. A restructuring of resources within Atrius became necessary as the organization responded to the public health threat. As a result, the above study could not proceed as proposed, and was also required to evolve.

One definition of organizational crisis is "a low probability, high impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly" (Christensen, & Kohls, 2003, p. 60). Bundy et al. (2016) offer the following description: "an event perceived by managers and stakeholders as highly salient, unexpected, and potentially disruptive – [that] can threaten an organization's goals and have profound implications for its relationships with stakeholders" (p. 1662). In order to successfully navigate crises, leaders must correctly interpret the situation and act quickly using their understanding of the situation to develop effective solutions (Livingston, 2016). Furthermore, the survival of organizations and successful solutions to crises are predicated on trust in leadership, and effective communication. Crises also create opportunities for change.

The above definitions capture the experience of many US healthcare systems in the wake of the coronavirus pandemic. In March of 2020 the Covid-19 pandemic led to economic disruptions across the world, and the US. Health care organizations in the US experienced the

paradoxical position of being on the front lines of managing the pandemic by providing necessary specialized acute care in the form of testing and treatment in order to save lives and reduce the spread of infection, while simultaneously suffering severe financial losses as precautions taken to reduce community spread, such as suspending routine, non-urgent medical care lead to significant drops in revenue (Blumenthal et al., 2020). These crippling financial losses threatened the existence of a significant number of hospital and health care organizations for the first time since the Great Depression. It is estimated that office based medical practices averaged a reduction of 60% of patient visits during the first month of the pandemic. It was projected that hospitals would lose \$323.1 billion in revenue in 2020, and that 1 million health care jobs would be lost through May 2021.

Healthcare networks were required to quickly redesign organizational work flows in the wake of this financial crisis in order to effectively provide first line defense against the virus (Krist et al., 2020). Quickly transitioning to remote care through telehealth became necessary in order to reduce community spread and to help keep healthcare workers safe. Layoffs and furloughs of medical workers, salary reductions, and cuts to programs deemed non-essential became necessary to manage the financial losses, as health care systems mobilized resources to directly confront the pandemic (Harter et al., 2020, Krist et al., 2020). There were delays to preventive care, treatment of chronic health conditions, acute illness, and mental illness as a result. This likely lead to a further increase in wait times for pediatric BH services.

As health care organizations work to recover from the financial losses and resume opportunities to care for these populations, Krist et al. implore health care policy makers to learn from this period and develop infrastructure that can more easily address public health needs

during times of crisis without the deleterious consequences witnessed during this crisis. This includes considering changes to the ways health care is funded in the US.

As the largest independent physician group in Massachusetts, Atrius Health experienced the challenges outlined above. There was a reported 70 to 75% drop in revenue as result of cancelling all non-urgent appointments and medical procedures in an effort to promote physical distancing to manage the spread of the virus (Bartlett, 2020). Organizational leadership made cost saving decisions to close half of the Atrius Health sites and reallocate resources to other sites. Employees earning over 50K per year experienced stratified partial salary withholds, dozens of employees were temporarily furloughed, and non-critical programs were cut to help the organization survive the crisis. As a result, significant changes were made to the BH department, and to course of this research project.

BH clinicians immediately began working from home and transitioned to telehealth, which started with telephone meetings with patients, then eventually upgrading to mostly video calls. BH leadership successfully scrambled to develop new standard work to address the changes. Initially this included calling patients to inform them that visits would now be conducted remotely, implementing changes to scheduling codes, and changes to documentation and billing procedures. New protocols for telehealth platforms were established to comply with HIPAA and other regulatory requirements, and to protect provider privacy. Negotiations with health insurance companies were necessary to secure reimbursement for BH telehealth services. This created additional work for every BH employee, including leadership, clinicians and medical secretaries. Fortunately, the BH department was generally successful with this transition, and remained funded to address the needs of existing patients. Further, the department was able to accommodate the increase in demand for mental health services as Atrius

Health patients requested BH support to address newly emerging mental health issues caused by the pandemic itself.

Unfortunately, a direct outcome of the financial cuts was the temporary closure of the Academic Institute, which provides oversight of Atrius Health research projects. Access to Epic analysts who generate statistical reports and manage questionnaires was temporarily lost, which greatly limited the ability to access the data necessary to complete this program evaluation.

More importantly, the structure of the initial pilot project was expanded and reorganized to allow integrated clinicians to safely provide pediatric support remotely from home. It is now called the Virtual Integration Program. The Pediatric Behavioral Health Covid-19 Response Team (PBHCR) was created around the same time to offer support to pediatric patients struggling with mental health concerns as a direct result of the pandemic. This includes anxiety about Covid-19, coping with family members who have the coronavirus, adjusting to financial consequences of the pandemic, adjusting to remote learning, and other concerns brought on by the disruptions caused by the pandemic. As a result, the focus of this program evaluation expanded to include the successful implementation of these two new programs The emphasis on reducing wait times for BH services remained an essential feature of the care provided under these new circumstances.

"Telemental health refers to the use of information and communications technologies, including videoconferencing, to deliver mental health care remotely, including evaluations, medication management and psychotherapy" (Whaibeh et al., 2020, p. 199). This method for providing care was in use prior to the pandemic to support individuals requiring mental health services who struggle with mobility or reside in remote areas. These authors went on to explain that at the onset of the Covid-19 pandemic it became necessary to social distance in order to

reduce the spread of the virus. The close quarters of office visits increased the risk of transmission. It therefore became necessary for mental health clinicians to use the telehealth platform in order to safely continue to provide these critical services. The necessity of telehealth and telemental health during this time of crisis was recognized by US governing organizations. The Centers for Medicare and Medicaid Services temporarily lifted restrictions on telehealth, thereby allowing their subscribers to safely access healthcare and mental health care safely from home. Similarly, The Drug Enforcement Administration temporarily lifted their restrictions on remotely prescribing controlled substances. These accommodations will remain in place as long as the Department of Health and Human services declare the Covid-19 Pandemic a public health emergency.

These policies, and the adoption of similar policies by other health insurance companies that allowed reimbursement for telemental health at the same rate as in person visits, and in some cases waived copayments, made it possible for BH clinicians at Atrius Health to safely care for their patients remotely during the pandemic. In the midst of this transition there became an evident need to address BH concerns that were a direct outcome of the pandemic. Pediatric departments began receiving calls from concerned parents whose children were struggling emotionally and behaviorally due to a myriad of new stressors, including the transition to remote learning as schools closed for in person learning, financial uncertainty related to changes in parent employment, general fear of the virus, concerns about family members who contracted Covid-19 and in some cases passed away, and general uncertainty about the future. In addition, distancing from peers, and cancellation of social and sport activities resulting from necessary stay at home orders lead to increased isolation and subsequent emotional and behavioral difficulties.

These consequences of the Covid-19 global pandemic on child and adolescent mental health have been observed around the world (Fegert et al., 2020; Marques de Miranda et al., 2020), and tend to fall within the domains of community, family, and the individual child (Fegert et al., 2020). Social distancing practices, school closings, decreased access to routine medical care, loss of childcare, the loss of leisure outlets due to playground closures and pauses to social, group and sport activities are examples of community related stressors that led to increased emotional distress for children, adolescents and their families. Within the family domain, distance learning and work from home directives lead to increased anxiety as parents attempt to help their children succeed at school, often while in the midst of their own transition to working from home. In addition, the question of how to arrange childcare for children engaging in remote learning while parents work outside of the home became a significant stressor. Stressed parents and children adjusting to these changes, and stuck at home together led to increased opportunities for conflict. Furthermore, social distancing requirements limited access to natural supports, such as grandparents or other close family members. Many families rely on these supports for emotional connection and for childcare. These families now found themselves alone and isolated.

Many children also became fearful that loved ones in high risk groups would contract the virus and lose their lives, or that they themselves would become sick and die (Fegert et al., 2020). It was largely left to parents or caregivers to address their children's concerns, often while feeling anxiety themselves, which can create enormous distress for the entire family. When loved ones became sick, were hospitalized, or died from the virus (or other causes), social distancing requirements prevented families from direct contact with the loved one. This increased risk for depression, anxiety, post-traumatic stress and suicide for adults and young

people. There was also increased risk of stigma when children and/or family members contracted the virus. Furthermore, children with histories of mental illness are more prone to excessive worrying, thereby heightening their emotional vulnerability at the onset of the pandemic.

Families experiencing financial hardship due to layoffs, furloughs and lack of employment in the wake of the pandemic experienced their own unique mental health challenges (Fegert et al., 2020). Economic and financial insecurity, income decline, and increase in financial debt have historically been associated with declines in emotional functioning, increased risk of substance use, and increased suicidal behavior. Thus parents who struggled with deleterious economic consequences of the pandemic were at increased risk for emotional difficulty, which trickled down to the children residing with them.

In addition to these risks, the nature of quarantining presented its own mental health challenges (Fegert et al., 2020). The very nature of isolating at home leads to increased risk of "post-traumatic stress symptoms..., depression, low mood, irritability, insomnia, anger and emotional exhaustion" (p. 4). Many children isolating at home began spending more time on screens as a way of attending school, socializing and coping with boredom. Although there are some benefits to this, increased screen time also comes with risks, which include increased anxiety and depression, disruptions to sleep and circadian rhythms, and exposure to misinformation (Marques de Miranda et al., 2020). Furthermore, as children and adolescents spent more time online, they increased their risk for exposure to adult predators, who were also spending more time online (Fegert et al., 2020).

Children in high risk categories, such as those living in poverty, with chronic illnesses, intellectual disabilities, history of mental illness, and/or children with trauma histories were particularly vulnerable at the onset of the pandemic (Fegert et al., 2020). These groups tend to

be at higher risk of maltreatment than the general public during ordinary times. Stressors brought on by the pandemic further added to their vulnerability. Increases in physical, emotional and sexualized violence were reported all over the world during the lockdowns. At the same time, access to protective social service agencies was disrupted due the pandemic closures, which further increased the risk of additional trauma and subsequent emotional dysfunction for these populations.

Across the world and in the US, the need for mental health services greatly outweighs available resources. This discrepancy became further pronounced as more people sought services to address emerging mental health needs brought on by the onset of the Covid-19 pandemic (Marques et al., 2020). Moreover, children who had historically had their mental health needs met at school lost access to services during the Covid-19 school closings. As closed school systems worked to develop curriculums to support distance learning, mental health needs largely went unmet (Golberstein, et al., 2020; Phelps & Sperry, 2020). As an alternative many families who lost services for their children, or whose children presented with newly emerging mental health concerns reached out to primary care providers for mental health support. Additionally, frontline healthcare workers became a natural entry point for access to Covid-19 related mental health services as they provide medical care to patients infected with the virus, or who receive testing (Pfefferbaum & North, 2020). These healthcare providers working with families are in an ideal position to assess the mental health needs of their patients and families, and to provide appropriate referrals.

The themes described above were quickly recognized within the Atrius Health pediatrics and BH departments in late March and early April of 2020, as Covid-19 stay at home directives and school closings began across Massachusetts. By the end of March 2020 most Atrius Health

BH clinicians had transitioned to providing telehealth from home. Capitalizing on the framework that had been put in place with the pilot integrated care model, two new programs were developed and implemented in place of the original care model to support pediatric patients. The first was The Pediatric Behavioral Health Covid-19 Response Team (PBHCR), which was a short term program designed to support children experiencing emotional distress as a direct consequence of the onset of the pandemic. The second is The Virtual Integration Program, which expanded on the original pilot program as the BH department transitioned to telehealth.

The Pediatric Behavioral Health Covid-19 Response Team (PBHCR):

This program was developed to address the overwhelming and acute need for screening and intervention of BH concerns in children and their families that were a direct result of the onset of the Covid-19 Pandemic. Examples include increased worry or anxiety about an ill family member, grief around the death of a loved one from Covid-19, obsessive worries/fears related to contagion, excessive worry that the child or family members may become ill, somatic symptoms, and anxiety as a result of becoming ill with Covid-19. Children with severe reactions to the stay at home order and school closings may also be referred. This list is not exhaustive.

Patients with more general difficulties secondary to the restrictions due to the stay at home order or remote learning, or for families who are feeling renewed pressure to address long standing mental health concerns were not referred to this program. Rather, they were referred for services using the standard process for referring to Atrius collocated BH departments.

This program began to take shape in late March of 2020, and went live as described below on April 20, 2020. The program ended on July 6, 2020, as the public appeared to move

beyond the initial shock of the Covid-19 pandemic, and resources were once again reallocated to further develop the Virtual Integration Program. All interventions were completed via telehealth.

Program design:

- Pediatric provider (PCPs, APCs, NPs, RNs) receives a communication in the form of a phone call, Epic MyHealth message (electronic communications sent between health care providers and patients using the electronic health record system) or during an in person visit that meets criteria for a referral to PBHCR.
- The pediatric provider places the referral in Epic using the referral code REF343.
- Once the referral is entered the pediatric provider informs the patient and/or parent/caregiver that they can expect a call within one business day from a restricted phone line from a member of the PBHCR team. They explain that the clinician will provide a brief assessment and intervention, and provide additional referral information if needed.
- Five Atrius BH Child psychotherapists consisting of licensed psychologists, Licensed Independent Clinical Social Workers, and a social work fellow were recruited to the team. They each provided two hours of PBHCR coverage one day a week, Monday through Friday, thereby staffing program for 2 hours every business day. The PBHCR clinician reviews the referral queue and places outreach calls to referred patients. Priority during the first hour is given to new referrals. Priority during the second hour is given to referrals where an outreach attempt has already been made. Clinicians provide assessment and intervention on the phone and, if deemed useful, send relevant resources via MyHealth.

- Pre-written MyHealth communications that include psychoeducation, parenting advice pertaining to child adjustment to the Covid-19 pandemic and other BH concerns, and community resources have been prepared. They are called Tip Sheets (see appendixes C M). They are accessible with smart phrases (defined in chapter 3).
- Some patients have not set up their MyHealth accounts. In these cases telephone
 calls are sufficient.

The clinician arranges additional treatment for patients requiring further support.

- Patients requiring long term or ongoing therapy are referred to the community –
 several referral partners have been identified. Referral information is
 communicated to them verbally and/or with a MyHealth message.
- Patients requiring short term therapy (3 to 4 sessions) and who have health insurance accepted by the Atrius Health BH department, may be referred internally to Atrius Health BH clinicians. Three of the five PBHCR clinicians accepted these internal short term referrals. To refer them the clinician enters a new REF159 referral code, and sends that clinician an Epic message marked urgent alerting them to the referral, and requesting support with scheduling. PBHCR clinicians may refer to themselves as well.
- Two Atrius BH child psychiatrists are available for urgent child medication appointments. To refer to them the PBHCR clinician enters a new REF159 referral code, and then sends them an Epic message marked urgent alerting them to the referral. The psychiatrists help coordinate scheduling. The referred patient must have a health insurance product accepted by the Atrius Health BH

- department to be referred internally. If they do not have an insurance product accepted at Atrius BH they will be referred to the community.
- All routine medication appointments are referred to identified partners in the community.
- If the parent/caregiver answers the outreach call, but is not able to speak at the time of the call, the PBHCR therapist schedules a telephone meeting. If outreach calls are not answered the PBHCR therapist will leave a message if possible, and send a MyHealth message if their account is active. After two unsuccessful attempts a BH medical secretary will provide mental health resources in the community with a MyHealth message or phone call, alert the PCP, and close the referral.
- PBHCR clinicians are responsible for documenting all referral contacts, and closing the referrals when completed.
- When PBHCR clinical contact is established, a visit note is generated and billing codes are entered for reimbursement.
 - 90791 is the billing code for an intake. It is used when a full screening is completed.
 - 90847 is the billing code for family therapy. It is used if a full screening is not completed, and clinical contact was established with a patient and parent/guardian for a minimum of 26 minutes.
 - 90846 is the billing code for family therapy without the patient present. It is used if a full screening is not completed and clinical contact is established only with a parent/guardian for a minimum of 26 minutes.
 - o There is no need to bill for screenings lasting under 26 minutes.

- Patients whose insurance is not accepted in Atrius BH departments will not be billed.
- In the event of an emergency, the PBHCR clinician will call the local police station and complete a Section 12. In Massachusetts this is the legal order to transport a person who is flagged as a danger to himself or others to a hospital for further psychiatric evaluation. An emergency room physician then makes a determination as to whether the patient will be involuntarily hospitalized to further address their psychiatric needs and keep them safe.
- All completed treatment notes are routed back to the patient's PCC for review and coordination of care.

The Virtual Integration Program:

This program was designed using the framework that had been developed for the original pilot and PBHCR programs. As the PBHCR program came to an end in July of 2020, resources were once again shifted to support the Pediatric Departments at the Norwood, Dedham and Medford Atrius Health sites. The pediatric department at the Atrius Watertown site was also added to the Virtual Integration Program. The Watertown site is one of the original Harvard Vanguard sites that had a collocated BH department. However, that department closed in 2017 as part of a broader Atrius Health plan to save operational costs. Other nearby Atrius Health collocated BH departments absorbed many of their referrals. It became clear that this was no longer sustainable due to staffing and other programmatic and fiscal changes that occurred around the same time that the Virtual Integration Program was in development.

Elements of The Virtual Integration Program went into effect in the summer of 2020 as the PBHCR program ended. A new Cohort of BH Fellows that included child clinicians who

would play a significant role in the program was onboarded that summer. Master of er Student interns, along with Bachelor level student interns or practicum students were also brought on to provide care facilitation. The program in its current format was formally rolled out on September 14, 2020. All providers in this program are providing telehealth from home.

Program Design:

- Pediatric Provider (PCPs, APCs, NPs, RNs) learns of mental health related concerns from a patient or parent/caregiver, and makes the determination that they would benefit from BH services.
- To refer for psychotherapy, the pediatric provider places a referral in Epic using the referral code REF159, and selects the Pediatric Integrated Clinic option. They specify whether the referral is routine or urgent.
- Once the referral is entered the pediatric provider informs the patient and/or parent/caregiver that they can expect a phone call within a week from a restricted line from a member of the BH Virtual Integration team. They explain that the clinician will provide a brief assessment and intervention, and provide additional referral information if needed.
- Seven Atrius BH Child clinicians were recruited to the program to work as integrated therapists. They consist of a licensed psychologist, a Licensed Independent Clinical Social Worker, a social work fellow with the Licensed Clinical Social Worker credential, and four psychology fellows. They each provide five care coordination / triage hours, and seven integrated clinic hours to the Virtual Integration Program each week, for a total of 35 care coordination /triage hours and 49 clinical hours per week.

- Care Coordination / Triage hours: The Integrated therapist reviews the referral queue and places outreach calls to referred patients. Priority is given to referrals marked "urgent" by the referring pediatric provider. Next priority is given to referrals where one outreach attempt has already been made. The remaining referrals are reviewed in order of date, with priority given to the oldest referrals. Therapists provide assessment and intervention on the phone, and if deemed useful, send relevant resources via MyHealth.
 - Tip Sheets, or pre-written MyHealth communications with psychoeducation and parenting advice pertaining to common childhood behavioral and emotional concerns, and containing community resources have been prepared, and are accessible with smart phrases. Tip Sheets with information about managing BH concerns related to the Covid-19 pandemic remain available.
 - Some patients have not set up their MyHealth accounts. In these cases telephone
 calls are sufficient.

The clinician arranges additional treatment for patients requiring further support.

- Patients requiring short term therapy (6 to 8 weekly sessions) are referred to the
 integrated clinic. The therapist has access to integrated clinic schedules and is
 able to review scheduling options with the parent/caregiver.
- o Patients requiring longer term therapy are referred to collocated Atrius BH departments with the REF159 referral code. Efforts are first made to see if there are current openings using an Epic messaging pool. Reasons for the referral are documented and the initial referral to the integrated clinic is closed.
- Some patients referred to the program will not be able to have their mental health
 needs met within Atrius Health. This is usually because their health insurance is

- not accepted within the BH departments, or they require a different level of care.

 These patients will be referred for Care Facilitation (see below).
- If the patient requires a medication evaluation the integrated therapist sends an Epic Message to the PCP advising them to submit a medication consultation request (see below).
- o If outreach calls are not answered the integrated therapist will leave a message if possible, and send a MyHealth message with external resources if their account is active. After two unsuccessful attempts a BH medical secretary will review the referral to make sure the family was provided resources, and inform them that the referral is being closed. This is done with a telephone call and/or a MyHealth message. They then close the referral, and alert the referring provider. All communications are documented.
- Integrated therapists are responsible for documenting all referral contacts, and closing the referrals when completed.
- When clinical contact is established, a visit note is generated and billing codes are entered for reimbursement.
 - 90791 is the billing code for an intake. It is used when a full screening is completed.
 - 90847 is the billing code for family therapy. It is used if a full screening is not completed, and clinical contact was established with a patient and parent/guardian for a minimum of 26 minutes.

- 90846 is the billing code for family therapy without the patient present. It is used if a full screening is not completed and clinical contact is established only with a parent/guardian for a minimum of 26 minutes.
- There is no need to bill for screenings lasting under 26 minutes.
- o In the event of an emergency requiring psychiatric hospitalization, the integrated therapist will call the local police station and complete a Section 12. Clinicians must be licensed to complete a section 12. Fellows will therefore reach out to licensed members of the team for support with this process.
- All completed treatment notes are routed back to the patient's PCC for review and coordination of care.
- Integrated Clinic Hours: Each integrated therapist offers seven 1hour psychotherapy appointments every week. They attempt to see patients weekly for a total of 6 to 8 visits. If patients require longer term care additional visits are added, or their care with the same therapist is transferred to that clinician's collocated clinic time slots.
- Care Facilitation: Two MSW student interns have been recruited to provide care facilitation in the program. One provides 16 hours of service, and the other provides 24 hours for a total of 40 care facilitation hours per week. Their role is to work with families whose mental health needs cannot be met within Atrius Health, usually because their health insurance is not accepted within Atrius BH departments or they require a different level of care, and to connect them with appropriate resources in the community. They regularly review referrals that have been forwarded to them for care facilitation.

 When each care facilitator starts working with a family they remain with that family until their care coordination goals are met. Updates are documented in both the referral and in

their medical chart. Their final disposition is routed to the referring PCC, at which time the referral is closed. The care facilitators are supported by bachelor level student interns completing semester long practicums.

- Medication consultation and referrals: This process has shifted since this program role out in in September of 2020. The initial workflow was for pediatric providers to send an Epic Message to a consultation pool of four Atrius Health child psychiatrists. The message was to include details of the presenting problem and a clear consultation question. The psychiatrist who first reads the message takes ownership and manages the message until the end of the consultations. The psychiatrists were advised to encourage the pediatric providers to prescribe BH medication or make med changes with their support. A referral for a BH medication evaluation could only be completed after the initial consultation occurred, and this would need to be documented in the referral note. Urgent referrals are made using the REF159 referral code, checking the "pediatric integrated program" and "medication" boxes. Attempts would be made to have the patient seen for a medication evaluation within 2 to 3 weeks. Non-urgent referrals are made using the REF159 code and checking the "medication" box, and wait times are usually many months. Starting in January of 2021 pediatric providers no longer need to consult with psychiatrists before placing a referral. BH medical secretaries review the referral queue regularly and work with the psychiatrists to find openings for urgent appointments.
- Pediatric Emergencies: In the event of a pediatric ACC becoming aware of a patient mental health emergency, they will send an Epic Staff Message marked High Priority to the integrated therapist providing care coordination on that day, with a brief description

of the concern and a call back phone number. The ACC will also submit a referral using the REF159 referral code and check the pediatric integrated program, other, and evaluation/further assessment boxes, and choose the highest level priority. The integrated therapist will call the pediatric office using the number provided and consult with the pediatric clinician to determine next steps.

- If psychiatric hospitalization is indicated the integrated clinician will complete section 12 protocols. Clinicians must be licensed to complete a section 12.
 Fellows will therefore reach out to licensed members of the team for support with this process.
- In lieu of collaborative office rounds that was established in the original pilot program, an integrated therapist virtually joins monthly pediatric team meetings to provide case consultation and promote collaboration between the departments.

Chapter 6: Research Methods II - PBHCR

The PBHCR program was in operation from April 20, 2020, to July 6, 2020. Atrius Health Academic Institute research resources remained unavailable to the BH department during that period. However, the need to support Atrius Health patients with services to address mental health concerns directly related to the Covid-19 pandemic was quickly recognized by the organization, and new Epic referral codes were created to differentiate this population in need of emergent care from referrals for general BH care. The establishment of distinct referral codes for BH Covid-19 response programs made it possible for the BH operations team to generate reports without the support of the Academic Institute. Operational reports were used to monitor referral and treatment outcome patterns during the 11 weeks that the PBHCR was operating. Reports were also generated for a similar Covid-19 response program for adults, also created using the framework of the pediatric pilot program. This program was called the BHCR (Behavioral Health Covid Response – minus "Pediatric"). A description and timeline of the adult program is not presented. A final report in the form of 12 graphs that included the most up to date data for the PBHCR and adult BHCR was generated on July 7, 2020, and made available for review in October of 2020. Unlike the original pilot program that had specific benchmarks for success, the data collected for the PBHCR is used to explore patterns that may help future BH programs improve timely access to treatment. There were no specific expected outcomes. Data was not provided for the Virtual Integration Program, which is therefore not examined. The following measures were used to monitor patterns in the PBHCR program:

Measures:

1. Referral Work Queue Snapshot:

A report with the scheduling statuses of each of the child and adult patients referred to the Covid-19 Response programs was generated weekly to monitor utilization of both Covid-19 response programs. Descriptions of scheduling statuses are as follows:

- Contacted Referring Provider: The BH team has informed the referring PCC that the patient has not responded to outreach attempts.
- No Show: The patient missed their initial BH appointment.
- Pending Administrative Review: Medical secretaries are in the process of reaching out to a patient to schedule their initial BH appointment.
- Future: The referral has been flagged for review at an upcoming BH triage meeting.
- Ready for Scheduling: The referral has just been entered and is waiting for the patient's health insurance to be verified.
- Appt Cancelled: The patient cancelled their initial BH appointment. The reason for the cancellation is not indicated.
- Problem Resolved: The patient cancelled their initial BH appointment because they are no longer experiencing symptoms that require BH care.
- Second Outreach: Two attempts have been made by the BH Covid-19 Response team to contact the patient, but communication has not yet been established.
- First Outreach: One attempt has been made by a BH Covid-19 Response team clinician to contact the patient, but communication has not yet been established.
- Pending Clinical Review: A referral was generated and is waiting to be reviewed by a member of the Covid-19 response team.
- Total: Total number of adult and pediatric patients in the current referral queue.

A final report that was generated on July 7, 2020, the day after the PBHCR program ended was provided for review.

2. Percent of Completed Visits with a Level of Service (LOS) entered:

Clinicians at Atrius Health are required to submit LOS codes for clinical services in order for the organization to receive reimbursement from health insurance companies. The Level of Service (LOS) refers to the specific billing code used. A graph illustrating the percentage of visits with a BH Covid-19 response clinician that was billed for the service was provided for review. Data for both the child and adult programs was included.

3. BHCR Outcomes of Completed Referrals Year to Date:

A graph was generated illustrating the outcomes for patients referred to the adult program where the referral was completed or closed. Referrals are completed after an initial clinical contact is established with a patient, or after several attempts to contact the patient are unsuccessful and a letter is sent explaining that the referral is now closed. Descriptions of outcomes of completed referrals are as follows:

- Brief Therapy: This outcome describes adult patients referred to the BHCR program who were subsequently referred for short term therapy with a BHCR clinician.
- Letter Sent: This outcome describes adult patients referred to the BHCR who did not respond to two telephone outreach attempts by BHCR clinicians. In these situations a letter is sent advising the patient of the outreach attempts, that the referral will be closed, and advising contacting the BH department if they are in need of further services.
- Specialty Clinic: This outcome describes adult patients who after receiving the BHCR intervention were referred to a collocated BH department within Atrius Health.

- Referred out to CFPS/iHope: This outcome describes adult patients who were referred to the community for psychotherapy services after meeting with a BHCR clinician. CFPsych and iHope are organizations that provide telemental health in the community that were accepting referrals at the time.
- Resources only provided: This refers to adult patients who after meeting with a BHCR clinician were provided with Tip Sheets, or written resources to support them with managing the stress of the pandemic (Appendixes C to M are examples of Tip Sheets provided in the pediatric program. Similar Tip Sheets were made available in the adult program). They were not referred for additional BH services.
- Not Needed: This outcome refers to adult patients who did not require any additional support after their first meeting with a BHCR clinician.
- 4. PBHCR Outcomes of Completed Referrals Year to Date:

A graph was produced illustrating outcomes for patients referred to the pediatric program where the referral was completed or closed. Just like with the adult program (measure 3 above), referrals are completed after an initial visit with a PBHCR clinician, or after several attempts to contact the patient are unsuccessful and a letter is sent explaining that the referral is now closed. Descriptions of outcomes of completed referrals are as follows:

- Brief Therapy: This outcome describes pediatric patients referred to the PBHCR program who were then referred for short term therapy with a PBHCR clinician.
- Specialty Clinic: This outcome describes pediatric patients who were referred to a child therapist at one of the Atrius Health collocated BH departments after meeting with a PBHCR clinician.

- Referred out to CFPS/iHope: This outcome describes pediatric patients who were referred to the community for psychotherapy services after a telephone meeting with a PBHCR clinician. CFPsych and iHope are organizations that provide telemental health in the community, that were accepting child referrals at the time.
- Resources only provided: This refers to pediatric patients/caregivers who were provided with Tips Sheets (see appendixes C to M) or written resources to support them with managing the stress of the pandemic after their telephone meeting with a PBHCR. They were not referred for additional BH services.
- Not Needed: This outcome refers to pediatric patients/caregivers who did not require any additional support after their first telephone meeting with a PBHCR clinician.
- 5. BHCR Year To Date Outcomes of Patients Referred to Brief Therapy:

A graph was generated illustrating the outcomes for adult patients who after meeting with a BHCR clinician were referred for brief psychotherapy with a BHCR clinician. This may be same clinician who conducted the initial evaluation, or a different clinician on the team, depending on access and goodness of fit. Descriptions of outcomes of adult patients referred to brief therapy in the BHCR program are as follows:

- Letter Sent: This refers to adult patients who after meeting with a BHCR clinician were referred for brief psychotherapy within the program, and who have not responded to two outreach attempts to schedule their appointment with a provider. In these instances a written letter is sent describing the attempts to reach them, and requesting that they call to schedule their appointment within a certain time frame or the referral will be closed.

- Started Treatment: This outcome describes adult patients referred for short term therapy within the BHCR program who have kept their first appointment, thereby starting their BH treatment.
- Scheduled: This outcome applies to adult patients referred for short term therapy within the BHCR program who have their first appointment scheduled on a future date.
- Pt cancelled/no showed: This outcome applies to adult patients who did not keep their initial appointment with a short term therapist within the BHCR program, because they either cancelled, or no-showed.
- Cancelled by provider: This refers to instances when an initial scheduled appointment with a BHCR therapist was cancelled by the provider. This may have occurred because the provider was ill, or needed to make scheduling changes for other reasons.
- Referred out by site: This outcome applies to adult patients who were referred for short term therapy within the BHCR program, and a decision was subsequently made to refer the patient to a community provider. This may have occurred because the clinician did not have access, or the time offered was not convenient for the patient.
- First Outreach: This outcome applies to instances when an adult was referred for short term therapy with a BHCR clinician, and has not yet responded to the first outreach attempt to schedule their initial appointment.
- 6. PBHCR Year To Date Outcomes of Patients Referred to Brief Therapy:

A graph was provided illustrating the outcomes for pediatric patients referred for brief psychotherapy with a PBHCR clinician following an initial screening. Descriptions of outcomes are as follows:

- First Outreach: This outcome describes an initial unsuccessful attempt to contact a patient to schedule them for their first short term therapy appointment with a PBHCR therapist. There is usually a second outreach attempt before a letter is sent. The referral is then closed if patients do not respond to the letter.
- Scheduled: This outcome refers to pediatric patients who were referred for short term therapy with a PBHCR clinician after their initial screening, and were successfully scheduled.
- 7. Age Distribution of PBHCR Referrals:

A graph was created indicating the ages of children referred to the PBHCR program.

8. BHCR Average Number of New Referrals Entered Daily:

A graph was provided that tracked the average number of daily referrals to the adult BHCR program over the same number of weeks that the PBHCR program was operating.

9. PBHCR Average Number of New Referrals Entered Daily:

A graph was provided that tracked the average number of daily referrals to the child PBHCR program over the course of the 11 weeks it was in operation.

10. PBHCR Volume by "Referred From" Location:

A graph was provided that illustrates the number of patients referred to the PBHCR program each week by Atrius Health site and medical department.

11. Level Of Service (LOS) Entered for Closed Encounters:

Two graphs illustrating the distribution of different Level Of Service (LOS) or billing codes used in the PBHCR program were provided. This first was for the child PBHCR program. The second was for the adult BHCR program. The LOS refers to Current Procedural Terminology (CPT) codes, which are 5 digit numerical codes published by the American Medical Association (AMA) that correlate with medical procedures recognized by public and

private health insurance companies. They are used to describe and bill for medical services. The CPT codes used in the Covid-19 Response programs were as follows:

- 90791: This is the billing code for a psychiatric diagnostic evaluation without medical service. This is a standard billing code that licensed non-medical therapists can use to bill for an intake. In order to satisfy the requirements to use this code, there must be a minimum of 16 minutes of clinical time spent in the meeting, a complete medical and psychiatric history must be collected, an initial diagnosis must be established, the patient's ability to respond to treatment must be assessed, and an initial plan of treatment must be developed. This code is usually used one time at the onset of treatment with a BH provider. Reimbursement rates by insurance companies vary by product, and by the license under which the practitioner operates. For example, doctoral level psychologists are usually reimbursed at higher rates than masters level psychologists or social workers for the same service. This code usually reimburses at higher rates than the other codes listed.
- 90832: This is the code used to request reimbursement for an average of 30 minutes of individual psychotherapy. This is a time based code that requires from 16 to 37 minutes of the encounter to include psychotherapy with an individual patient.
- 90847: This is the code used to request reimbursement for family psychotherapy. The identified patient and at least one other family member must be present and benefit from this service in order to use this code. A minimum of 26 minutes of clinical contact is required.
- 90846: This is the code used to request reimbursement for family psychotherapy without the patient present. As with the 90847 code, a minimum of 26 minutes of clinical contact is required.

- 90834: This is the code used to request reimbursement for 45 minutes of individual psychotherapy. This is a time based code that requires from 38 to 52 minutes of the encounter to include psychotherapy with an individual patient.
- 99214: This is a medical code used for outpatient office visits by BH prescribers.

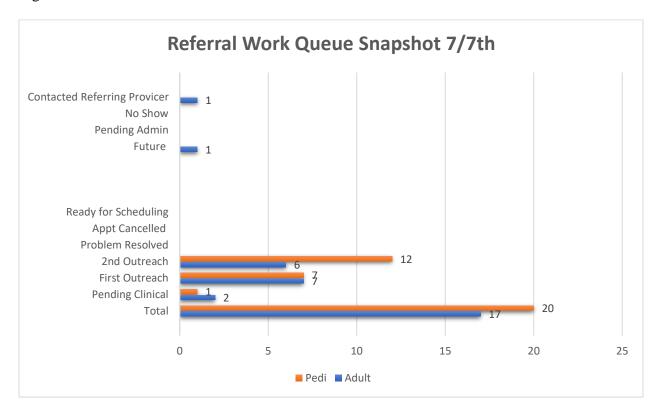
<u>Timeline:</u>

The 12 graphs provided for review were generated on July 7, 2020, the day after the PBHCR program ended. They were made available for review in October of 2020.

Chapter 7: Findings II - PBHCR

As Atrius Health adjusted to public health and financial challenges brought on by the Covid-19 pandemic, administrative and clinical resources were directed toward the direct care of patients effected by the coronavirus. This included the development of the PBHCR, and a sister program for adult patients named BHCR (Behavioral Health Covid Response – minus "Pediatric"). A description of the BHCR is not available. In order to support the BH department effort, system analysts created the REF343 referral for PBHCR services. Unlike the integrated pediatric BH pilot program which used a smart phrase for entering referrals, the use of this specific referral code made it possible to generate reports without using the Academic Institute. Furthermore, the allocation of BH resources to monitor the program was supported by the organization, and within the BH department because it directly related to the pandemic. The following data was generated on July 7, 2020 and covers the entire period the program was in operation – from April 20, 2020 to July 6, 2020. This data was used for internal monitoring, and was made available to this writer for review. Unfortunately, the data was not generated for research purposes and is therefore limited. It should therefore be interpreted with caution. Data for the Virtual Integration Program is also not available, as it is not directly part of a response to Covid-19. Therefore, the focus of this chapter is the PBHCR. Data for the BHCR program is used for comparison. There was a total of 176 referrals to the child PBHCR program, and 240 referrals to the adult BHCR program.

Figure 1.



This first graph is a snapshot of the scheduling status of patients in the referral work queue captured on July 7, 2020, the day after the PBHCR program ended. Data is shown for the pediatric program in orange, and for the adult program in blue. The scheduling statuses listed on the left are as follows:

Contacted Referring Provider: This scheduling status indicates that the BH team has informed the referring PCC that the patient has not responded to outreach attempts. There were no pediatric and one adult patient with this scheduling status on 07/07/2020.

No Show: This scheduling status indicates that the patient missed their initial BH appointment. This status does not apply to the PBHCR program. It is unclear if this status was used in the adult model. There were no patients with this status on 07/07/2020.

Pending Administrative Review: This scheduling status is used to indicate that medical secretaries are in the process of outreaching to a patient to schedule their initial BH appointment.

This scheduling status also does not apply to the PBHCR program. It is not known whether this status was used in the adult program. There were no patients with this status on 07/07/2020.

Future: This scheduling status indicates that BH clinicians have flagged the referral for review at an upcoming BH triage meeting. Each collocated BH site has weekly triage meetings where referrals are reviewed, and a decision is made whether to refer the patient to a provider in the community or to have them seen in house at an Atrius Health collocated BH department. Factors that are considered include the severity of the patient's emotional presentation, medical complications, provider access, and goodness of fit with Atrius BH clinicians. If patients are considered appropriate for treatment inhouse, they are assigned to specific BH clinicians at these meetings. There were no pediatric patients, and one adult patient with this scheduling status on 07/07/2020. This scheduling status was usually bypassed in the pediatric program, but remained an option if the clinician was unsure about how to proceed and wanted to discuss with their local site BH team.

Ready for Scheduling: This scheduling status indicates that the referral has just been entered and is waiting for the patient's health insurance to be verified. The name of this status is somewhat misleading, as there are still a number of steps, and other scheduling statuses used before the patient can be scheduled. This scheduling status was also bypassed in the PBHCR program, as PBHCR clinicians know which insurance products are accepted at Atrius Health BH. In addition, pediatric patients with health insurance not accepted by the Atrius Health BH department were screened in regardless of whether or not they could be billed for the service. It is not known whether this accommodation was offered in the adult program. There were no pediatric or adult patients with this status on 07/07/2020.

Appt Cancelled: This scheduling status is used to indicate that a patient cancelled their initial BH appointment. This was not used in the PBHCR program. It is not known if it was used in the adult program. There were no patients with this status on 07/07/2020.

Problem Resolved: This scheduling status is used to indicate that a patient cancelled their initial BH appointment because they are no longer experiencing symptoms that require BH care. This scheduling status closes the referral. This may have been used if a PBHCR clinician placed an outreach call to the patient and was informed that the child no longer needs services. It is not known if this was used in the adult program. There were no patients with this status on 07/07/2020.

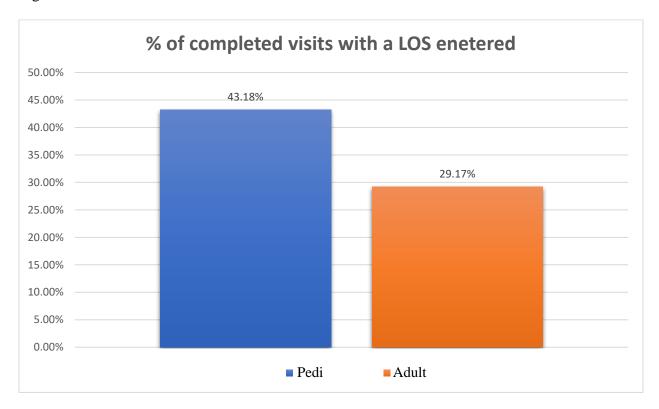
2nd Outreach: This scheduling status indicates that two attempts have been made by the PBHCR clinician or the BHCR team to contact the patient, but communication has not been established. There were 12 pediatric patients and 6 adult patients with this status on 07/07/2020. First Outreach: This scheduling status is used to indicate that one attempt has been made by a PBHCR clinician or a member of the BHCR team to contact the patient, but communication has not been established. There were 7 pediatric patients and 7 adult patients with this scheduling status on 07/07/2020.

Pending Clinical Review: This scheduling status is used to indicate that a referral was generated and is waiting to be reviewed by a member of the PBHCR or BHCR team. This is the scheduling status that would lead to an outreach phone call by a PBHCR clinician. There were one pediatric and two adult patients with this status on 07/07/2020.

Total: There were a combined total of 20 pediatric patients and 17 Adult patients in the referral queue on 07/07/2020.

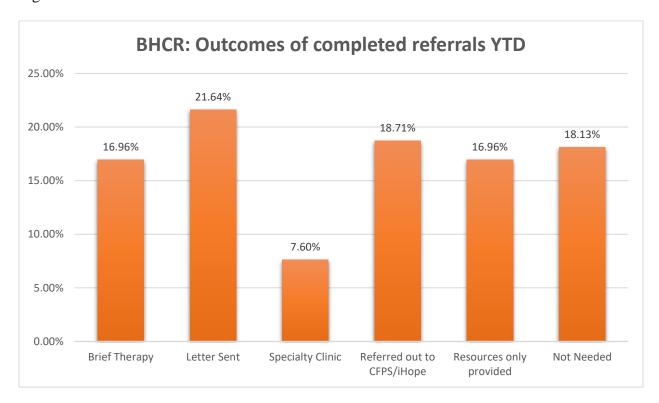
Graphs like these were created each week of the PBHCR program to monitor the need for services and utilization of the program. This graph indicates that there were no new referrals in the pediatric program on July 7, 2020, the day after the program ended, and that clinicians were continuing to reach out to patients who had not answered clinical outreach phone calls. It is not known whether the need for services dropped, or whether PCCs were asked to stop making referrals as these programs ended. The scheduling status of "ready for scheduling", which was bypassed in the PBHCR program, is a reminder that all pediatric patients with a PCC at Atrius Health had access to the program weather or not their individual health insurance plans were accepted by the Atrius BH department. The administrative decision to give all pediatric patients access to the program regardless of insurance is a way of reducing barriers to mental health care. It is worth exploring whether this would be financially viable in similar future programs. In order for this to occur BH employees would need be subsidized by other medical departments, or services provided to patients with non-par insurance would need to be subsidized by patients whose insurance is accepted by the department.

Figure 2.



This graph shows the percentage of total initial meetings for which a Level Of Service (LOS) was entered for both the pediatric and the adult programs. The LOS refers to billing codes. When a billing code is entered the patient and/or their health insurance company receives a bill for the cost of the service, thereby generating income for the health care organization. A minimum of 16 minutes of clinical time is needed to bill. "Completed visits" describes referrals where contact with the patient was established. The graph includes data for initial meetings only. Follow up meetings for short term therapy or in collocated departments are not included. The blue bar indicates that 43.18% or 76 of the total 176 patients referred to the pediatric program were billed for a provided service. The orange bar indicates that 29.17% or 70 of the 240 adult patients were billed for a provided service. Although more adult patients were seen in the programs, a higher percentage of pediatric patients were billed, which helped with funding during this fiscal crisis.

Figure 3.



This graph shows the outcomes for patients referred to the adult program where the referral was completed or closed. Referrals are completed after an initial clinical contact is established with a patient, or after several attempts to contact the patient are unsuccessful and a letter is sent explaining that the referral is now closed. Exact numbers in each category cannot be determined because the total number of completed referrals for the adult program is not provided. It is likely that this graph includes most of the data for the adult program, with several outstanding referrals in the process of being reviewed.

Brief Therapy: This outcome describes adult patients referred to the BHCR program who were then referred for short term therapy with a BHCR clinician. This outcome applied to 16.96% of adult referrals.

Letter Sent: This outcome describes adult patients referred to the BHCR who did not respond to two telephone outreach attempts by BHCR clinicians. In these situations a letter is sent

advising the patient of the outreach attempts, that the referral will be closed, and advising contacting the BH department if they are in need of further services. This outcome applied to 21.64% of adult referrals, which makes it the most frequent outcome.

Specialty Clinic: This outcome describes adult patients who after receiving the BHCR intervention were referred to a collocated BH department within Atrius Health. This outcome applied to 7.60% of adult referrals, which makes it the least frequent outcome.

Referred out to CFPS/iHope: This outcome describes adult patients who were referred to the community for psychotherapy services after meeting with a BHCR clinician. CFPsych and iHope are organizations that provide telemental health in the community that were accepting referrals at the time. This outcome applied to 18.71% of adult referrals.

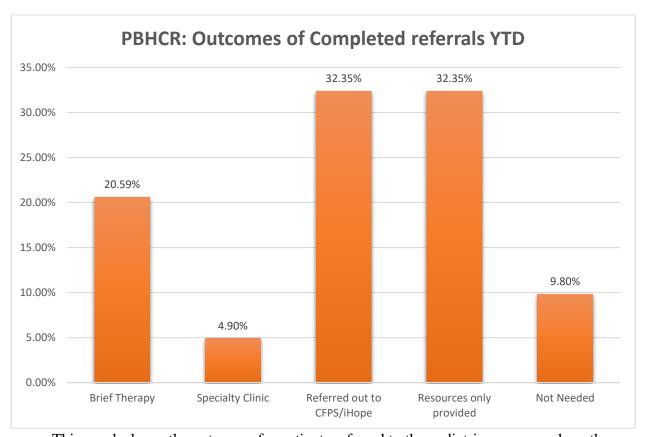
Resources only provided: This refers to adult patients who after meeting with a BHCR clinician were provided with Tip Sheets, or written resources to support them with managing the stress of the pandemic (Appendixes C to M are examples of Tip Sheets provided in the pediatric program. Similar Tip Sheets were made available in the adult program). They were not referred for additional BH services. This outcome applied to 16.96% of adult referrals.

Not Needed: This outcome refers to adult patients who did not require any additional support after their first meeting with a BHCR clinician. This outcome applied to 18.13% of adult referrals.

It is worth noting that a total of 35.09% of completed referrals either did not need additional services (18.13%) or were satisfied with just one telephone meeting and Tip Sheets (16.96%). Since over one third of completed referrals had this outcome, it would be worth exploring the use of similar programs that offer fast access to a BH clinician who can provide a brief assessment and written resources. This could potentially reduce wait lists for BH services

by about a third. This could also potentially create more openings for patients in need of ongoing services by reducing the number of patients who would ordinarily be scheduled for a full intake with a BH provider. It is also worth noting that the outcome with the highest percentage is "Letter Sent" (21.64)%, which indicates that they did not respond to at least 2 outreach attempts. Possible reasons for this may be that the patient did not think the referral was necessary, overall presentation improved, phone calls were at inconvenient times, or mistrust of phone calls from private or unrecognized phone numbers. This list is not exhaustive. An investigation of reasons for this outcome could potentially help shape similar programs in the future.

Figure 4.



This graph shows the outcomes for patients referred to the pediatric program where the referral was completed or closed. Referrals are completed after an initial visit with a PBHCR clinician, or after several attempts to contact the patient are unsuccessful and a letter is sent explaining that the referral is now closed. As with the previous graph (figure 3), the number of patients in each category cannot be determined because the number of total completed referrals is not known. There may still be referrals in the work queue that have not yet been reviewed, or where there are ongoing outreach attempts. Just like with the previous graph, it is likely that most of the data for the PBHCR is captured here, with several outstanding referrals not yet completed. Unlike the graph for the adult model in figure 3, there is no category for "Letter Sent." Reasons for this are not clear. This appears to suggest that there was no need for letters because PBHCR

clinicians had successfully contacted patients, or that outreach calls were still in process. It may also be an oversight.

Brief Therapy: This outcome describes pediatric patients referred to the PBHCR program who were then referred for short term therapy with a PBHCR clinician. This outcome applied to 20.59% of pediatric referrals.

Specialty Clinic: This outcome describes pediatric patients who were referred to a child therapist at one of the Atrius Health collocated BH departments after meeting with a PBHCR clinician. This outcome applied to 4.9% pediatric referrals.

Referred out to CFPS/iHope: This outcome describes pediatric patients who were referred to the community for psychotherapy services after a telephone meeting with a PBHCR clinician. CFPsych and iHope are organizations that provide telemental health in the community, that were accepting child referrals at the time. This outcome applied to 32.35% of pediatric referrals.

Resources only provided: This refers to pediatric patients/caregivers who were provided with Tips Sheets (see appendixes C to M) or written resources to support them with managing the

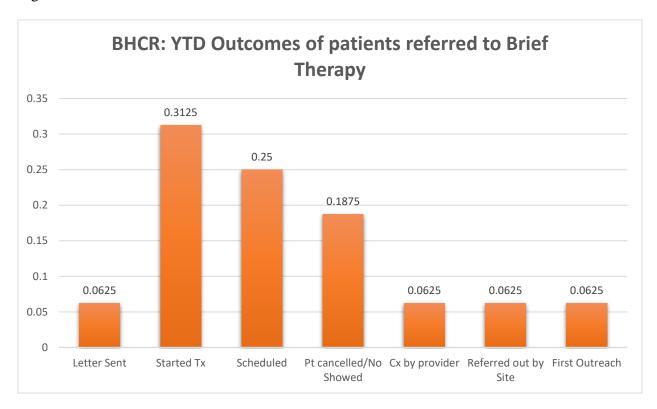
Tips Sheets (see appendixes C to M) or written resources to support them with managing the stress of the pandemic after their telephone meeting with a PBHCR. They were not referred for additional BH services. This outcome applied to 32.35% of pediatric referrals, making it the most common outcome.

Not Needed: This outcome refers to pediatric patients/caregivers who did not require any additional support after their first telephone meeting with a PBHCR clinician. This outcome applied to 9.8% of pediatric referrals.

The most striking thing about this graph is that 42.15% of pediatric patients and/or their caregivers who met with a PBHCR clinician needed just one telephone meeting and written advice (32.35%), or did not require any follow up after their initial telephone meeting (9.80%).

The notion that just one psychotherapy appointment can be effective is supported above (Perkins, 2006; Perkins, Ruth & Scarlett, 2008). This implies that child BH organizations should consider offering single session therapy appointments to children and families in crisis. If therapy openings are rationed in this way, and is sufficient to support over 42% of child referrals, then this can drastically reduce wait times for longer term services. This is similar to findings in the adult model where 35.09% adults either did not need additional services (18.13%) or were satisfied with just one telephone meeting and Tip Sheets (16.96%).

Figure 5.



This graph shows the outcomes for adult patients who after meeting with a BHCR clinician were referred for brief psychotherapy with a BHCR clinician. This may be same clinician who conducted the initial evaluation, or a different clinician on the team, depending on access and goodness of fit. The total number of adult patients referred for brief therapy is not indicated.

Letter Sent: This outcome describes adult patients who after meeting with a BHCR clinician were referred for brief psychotherapy within the program, and who have not responded to two outreach attempts to schedule their appointment with a provider. In these instances a written letter is sent describing the attempts to reach them, and requesting that they call to schedule their appointment within a certain time frame or the referral will be closed. This outcome applied to 6.25% of adults referred for short term therapy with a BHCR clinician.

Started Tx: This outcome describes adult patients referred for short term therapy within the BHCR program who have kept their first appointment, thereby starting their BH treatment. This outcome applied to 31.25% of adults referred for short term therapy with a BHCR clinician. This was the most common outcome.

Scheduled: This outcome applies to adult patients referred for short term therapy within the BHCR program who have their first appointment scheduled on a future date. This outcome applied to 25% of adults referred for short term therapy with a BHCR clinician. This was the second most common outcome, following adults who have started their treatment.

Pt cancelled/no showed: This outcome applies to adult patients who did not keep their initial appointment with a short term therapist within the BHCR program, because they either cancelled, or no-showed. This outcome applied to 18.75% of adults referred for short term therapy with a BHCR clinician.

Cx by provider: This refers to instances when an initial scheduled appointment with BHCR therapist was cancelled by the provider. This may have occurred because the provider was ill, or needed to make scheduling changes for other reasons. This outcome applied to 6.25% of adults referred for short term therapy with a BHCR clinician.

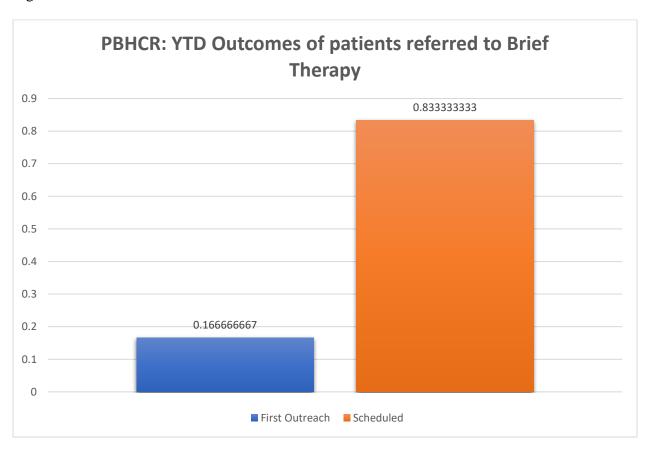
Referred out by site: This outcome applies to adult patients who were referred for short term therapy within the BHCR program, and a decision was subsequently made to refer the patient to a community provider. This may have occurred because the clinician did not have access, or the time offered was not convenient for the patient. This outcome applied to 6.25% of adults referred for short term therapy with a BHCR clinician.

First Outreach: This outcome applies to instances when an adult was referred for short term therapy with a BHCR clinician who has not yet responded to the first outreach attempt to

schedule their initial appointment. This outcome applied to 6.25% of adults referred for short term therapy with a BHCR clinician.

Out of all adults referred for short term therapy in the adult BHCR program, only 56.25% started treatment (31.25%) or had a future appointment scheduled (25%). This suggests that even during times of emotional crisis, and when access to a BH clinician is made easier with the use of telehealth (although some adults may struggle with or not have access to the necessary technology for telehealth), a large portion of adults referred for services do not keep their initial appointments. A total of 18.75% did not show up, or cancelled their appointments with a BHCR provider. An exploration of the reasons for the low rate of kept appointments may help shape future programs.

Figure 6.



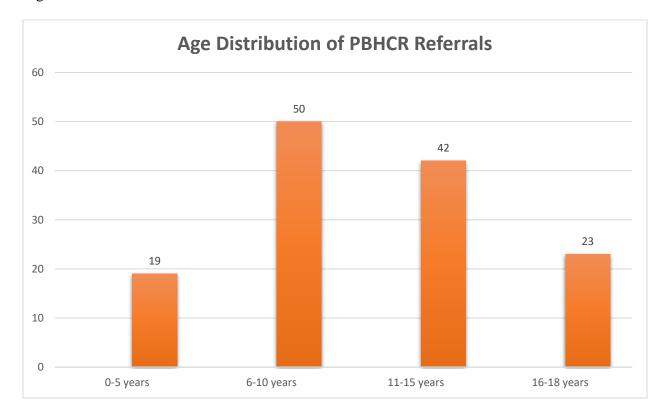
This graph shows the outcomes for pediatric patients referred for brief psychotherapy with a PBHCR clinician following an initial screening. The exact number of referrals is not known.

First Outreach: This outcome describes an initial unsuccessful attempt to contact a patient to schedule them for their first short term therapy appointment with a PBHCR therapist. There is usually a second outreach attempt before a letter is sent. The referral is then closed if patients do not respond to the letter. On the day after the program ended this outcome applied to 16.67% of pediatric patients.

Scheduled: This outcome refers to pediatric patients who were referred for short term therapy with a PBHCR clinician after their initial screening, and were successfully scheduled. On the day after the program ended this outcome applied to 83.33% of patients referred.

The above two graphs (figures 5 and 6) suggest that pediatric patients were more likely to follow through with scheduling short term therapy than adult patients. Further investigation into the total numbers and percentages of child patients who kept their appointments would help with understanding the overall utilization and effectiveness of the PBHCR program, and could help shape future programs. This graph indicates that the PBHCR program was effective at outreach for scheduling short term therapy.

Figure 7.

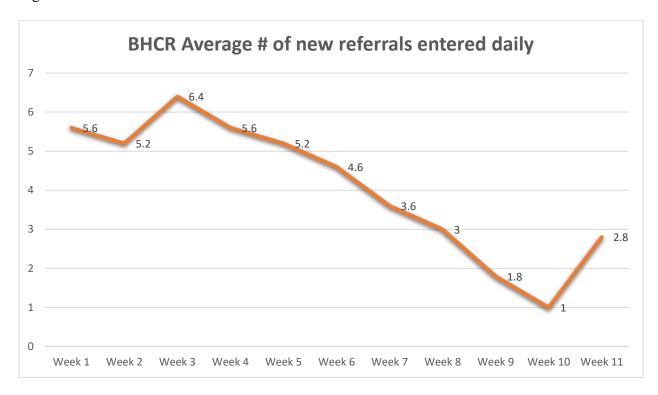


This graph displays the age distribution of pediatric patients referred to the PBHCR team. There was a total of 176 pediatric patients referred to the program. Nineteen or 10.8% were children ages birth to five. Fifty or 28.41% were ages six to ten, which was more than any of the other age groups. Forty-two or 23.86% were ages 11 to 15, which made up the second most referred age group. Twenty-three or 13.07 % were ages 16 to 18. There were an additional 42 pediatric patients referred to the program ages 19 to 23, who are not shown on this graph because they were considered adults. They comprised 23.86% of all referrals, which is equal to the 11 to 15 age group. It is likely that children ages 6 to 10 were most interested in services because they struggled the most with transitioning to remote learning. Children in this age group tend to struggle more with attention and self-regulation than older children, and require more adult supervision. This likely impacts their ability to participate in remote learning.

This graph also illustrates the confusion around health care that older teenagers and young adults experience during their transition to adulthood, as the young adult age group were omitted from this slide. After age 18, at which point individuals are considered legal adults, many patients continue to meet with pediatric providers for several more years. When needing specialty services, including BH, there can be confusion about whether they should be referred to adult or child programs. This speaks to a broader issue of difficulty young adults have with assuming adult responsibilities or independence as they navigate their own health care.

Transition programs for this age group have been considered in the past. An exploration of patient experiences as older adolescents and young adults make this transition would help assess the need and structure of such programs.

Figure 8:



This graph shows the average number of referrals to the adult BHCR program over the same number of weeks that the PBHCR program was operating. Referrals are usually entered on business days. The data are as follows:

- Week 1: Monday, April 20, 2020 to Friday, April 24, 2020. Average of 5.6 new referrals a day.
- Week 2: Monday, April 27, 2020 to Friday, May 1, 2020. Average of 5.2 new referrals a day.
- Week 3: Monday, May 4, 2020 to Friday, May 8, 2020. Average of 6.4 new referrals a day.
- Week 4: Monday, May 11, 2020 to Friday, May 15, 2020. Average of 5.6 new referrals a day.
- Week 5: Monday, May 18, 2020 to Friday, May 22, 2020. Average of 5.2 new referrals a day.
- Week 6: Monday, May 25, 2020 to Friday, May 29, 2020. Average of 4.6 new referrals a day.
- Week 7: Monday, June 1, 2020 to Friday, June 5, 2020. Average of 3.6 new referrals a day.

Week 8: Monday, June 8, 2020 to Friday, June 12, 2020. Average of 3 new referrals a day.

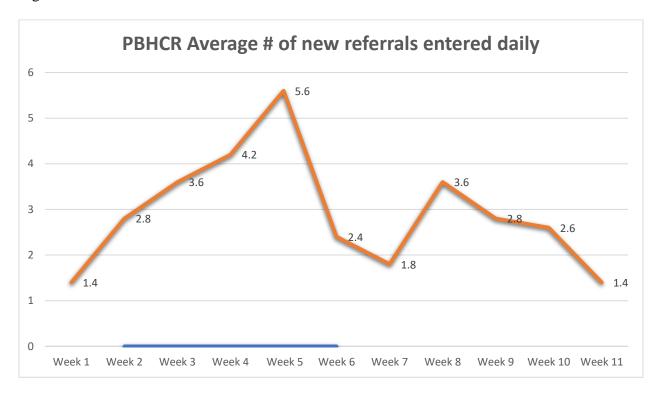
Week 9: Monday, June 15, 2020 to Friday, June 19, 2020. Average of 1.8 new referrals a day.

Week 10: Monday, June 22, 2020 to Friday, June 26, 2020. Average of 1 new referral a day.

Week 11: Monday, June 29, 2020 to Friday, July 3, 2020. Average of 2.8 new referrals a day.

The average number of daily referrals was around 5.5 during the first 4 weeks. The number of new referrals peaked on the third week, with an average of 6.4 new daily referrals. This was followed by a steady decline over the next 7 weeks, with the lowest number of daily referrals, averaging 1 a day occurring on week 10. There was a slight uptick during the 11th week with new referrals averaging 2.8 a day. This graph suggests that on average the high levels of emotional distress felt by adults at the start of the pandemic tapered off as the weeks progressed. Reasons for the uptick in late June or early July of 2020 are not clear. This was the week leading into the fourth of July weekend. New rates of Covid-19 in Massachusetts were generally low that week.

Figure 9.



This graph shows the average number of new referrals for each week that the PBHCR was operating. Referrals are usually entered on business days. The data are as follows:

Week 1: Monday, April 20, 2020 to Friday, April 24, 2020. Average of 1.4 new referrals a day.

Week 2: Monday, April 27, 2020 to Friday, May 1, 2020. Average of 2.8 new referrals a day.

Week 3: Monday, May 4, 2020 to Friday, May 8, 2020. Average of 3.6 new referrals a day.

Week 4: Monday, May 11, 2020 to Friday, May 15, 2020. Average of 4.2 new referrals a day.

Week 5: Monday, May 18, 2020 to Friday, May 22, 2020. Average of 5.6 new referrals a day.

Week 6: Monday, May 25, 2020 to Friday, May 29, 2020. Average of 2.4 new referrals a day.

Week 7: Monday, June 1, 2020 to Friday, June 5, 2020. Average of 1.8 new referrals a day.

Week 8: Monday, June 8, 2020 to Friday, June 12, 2020. Average of 3.6 new referrals a day.

Week 9: Monday, June 15, 2020 to Friday, June 19, 2020. Average of 2.8 new referrals a day.

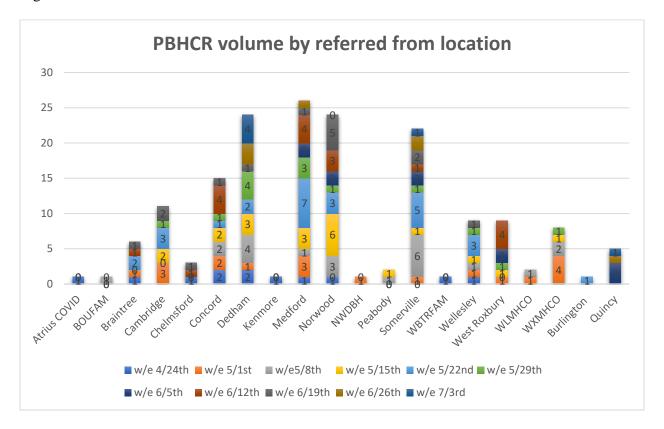
Week 10: Monday, June 22, 2020 to Friday, June 26, 2020. Average of 2.6 new referrals a day.

Week 11: Monday, June 29, 2020 to Friday, July 3, 2020. Average of 1.4 new referrals a day.

The Average number of new daily referrals was 1.4 a day during the first week of the program. There was a steady increase after the initial week, with the number of daily referrals peaking at an average of 5.6 a day during the fifth week, May18 to May 22, 2020. This was followed by a drop to an average of 2.4 daily referrals the following week, week 6, and another drop to an average of 1.8 daily referrals the week after that, week 7. A second peak occurred the following week, week 8, with an average of 3.6 daily referrals. Week 9 saw a decline to an average of 2.8 new daily referrals. Week 10 was similar with an average of 2.6 daily referrals. And the final week, week 11 had an average of 1.4 new daily referrals, which was the same number as the first week.

This graph suggests that pediatric patients were not as distraught as adult patients during the first week of the program, and that their discomfort increased as the weeks wore on. By week 5 new child referrals were slightly higher than adult referrals, which had just started to slowly drop. One possible reason for this is that children and adolescents may have initially felt some relief when Massachusetts school closings started in mid-March. These school closing were initially meant to last 3 weeks, and school districts varied with plans to support learning during this period. Many children may have appreciated the break. On April 21, during the first week of the program, the Governor announced that schools would be closed for the remainder of the school year. At this point it became clear that distance learning plans would be necessary. There was confusion about expectations and many students had difficulty adjusting. It is possible that this peak seen during the fifth week of the program coincides with this confusion about distance learning, and the difficulty many students had adjusting to the change in learning and expectations.

Figure 10.



This graph shows the number of patients referred to the PBHCR program each week by Atrius Health site and medical department. There are a total of 172 referrals in this slide. This is four less than the total 176 referrals reported for the program. Reasons for this discrepancy are not known. The following is a breakdown of total referrals by site and medical department over the 11 weeks the program was running. Sites that did not place referrals to the program are not represented in this graph.

Atrius COVID: This describes referrals that came from a general Covid-19 referral pool that was used one time during the first week of the program. It is unclear which site generated this referral. One referral is indicated.

BOUFAM (Bourne Family Medicine Department): 1

Braintree (Braintree Pediatric Department): 6

Cambridge (Cambridge Pediatric Department): 11

Chelmsford (Chelmsford Pediatric Department): 3

Concord (Concord Pediatric Department): 15

Dedham (Dedham Pediatric Department): 24

Kenmore (Kenmore Pediatric Department): 1

Medford (Medford Pediatric Department): 26

Norwood (Norwood Pediatric Department): 24

NWDBH (Norwood Behavioral Health Department – this is the embedded pediatric pilot

program that is the described above in chapter 2): 1

Peabody (Peabody Pediatric Department): 2

Somerville (Somerville Pediatric Department): 22

WBTRFAM (Braintree - Weymouth Family Medicine Department): 1

Wellesley (Wellesley Pediatric Department): 9

West Roxbury (Chestnut Hill – West Roxbury Pediatric Department): 9

WLMHCO (Wellesley Behavioral Health Department): 2

WXMHCO (Chestnut Hill – West Roxbury Behavioral Health Department): 8

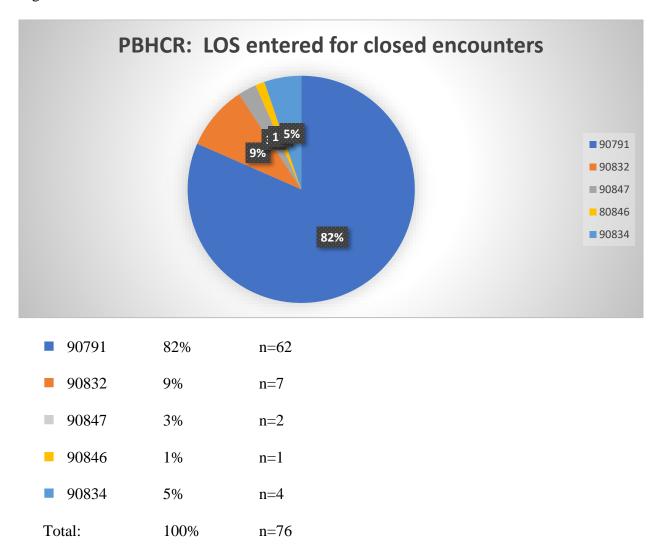
Burlington (Burlington Pediatric Department): 1

Quincy (Quincy Pediatric Department): 5

Interestingly, the highest numbers of referrals came from Medford (26), Dedham (24), and Norwood (24 or 25 if the referral from the pilot program is included), which were the sites chosen for the original embedded therapist pilot project based on need for BH services. This is likely indicative of the ongoing need for BH services at these sites that do not have collocated BH departments. It is also interesting that clinicians at collocated BH departments placed

referrals. This helped connect patients with immediate services that their departments could not accommodate due to a lack of openings. It is possible that not all sites and BH departments had the same awareness of the program. The ongoing relationships that the original pilot sites had with the developer of all the programs described above may have had increased awareness the PBHCR, and increased likelihood to utilize the program. Information is usually passed on with global emails, and by department chairs. Each site and department has their own culture, and possible differences in workflows. An exploration of the way information about the program was presented to pediatric departments across the sites, and level of awareness of the programs offered may help with increasing utilization of future programs. It is important to remember that the organization as a whole was in flux during this period, with many sites closing, furloughs, changes in workflow, and many employees working from home. This may have influenced awareness and utilization of the program.

Figure 11:



Current Procedural Terminology (CPT) codes are 5 digit numerical codes published by the American Medical Association (AMA) that correlate with medical procedures recognized by public and private health insurance companies. These are the same as the LOS codes presented in figure 2. They are used to describe and bill for medical services. This graph shows the different CPT codes used for initial appointments in the pediatric PBHCR program. They are as follows:

90791: This is the billing code for a psychiatric diagnostic evaluation without medical service.

This is a standard billing code that licensed non-medical therapists can use to bill for an intake.

In order to satisfy the requirements to use this code, there must be a minimum of 16 minutes of

clinical time spent in the meeting, a complete medical and psychiatric history must be collected, an initial diagnosis must be established, the patient's ability to respond to treatment must be assessed, and an initial plan of treatment must be developed. This code is usually used one time at the onset of treatment with a BH provider. Reimbursement rates by insurance companies vary by product, and by the license under which the practitioner operates. For example, doctoral level psychologists are usually reimbursed at higher rates than masters level psychologists or social workers for the same service. This code usually reimburses at higher rates than the other codes listed. This code was used for 62 or 82% of all visits for which an LOS was entered in the child program, which makes it the most frequent CPT code used. The high utilization of this code indicates that for the great majority of encounters that were billed for services, clinicians learned enough about the patient's history and current functioning to develop a meaningful case conceptualization, diagnosis, prognosis, and initial treatment plan, and submitted for reimbursement at the highest rate possible.

90832: This is the code used to request reimbursement for an average of 30 minutes of individual psychotherapy. This is a time based code that requires from 16 to 37 minutes of the encounter to include psychotherapy with an individual patient. This code was used 7 times, or for 9% of all billable encounters. This billing code reimburses at the lowest rate of all codes used.

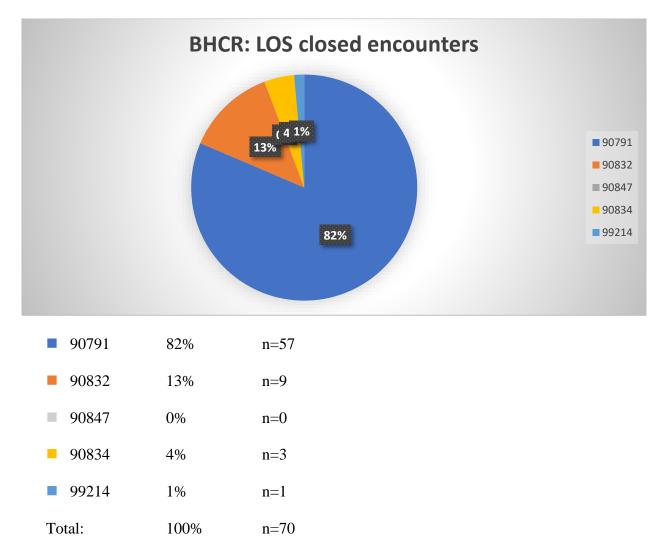
90847: This is the code used to request reimbursement for family psychotherapy. The identified patient and at least one other family member must be present and benefit from this service in order to use this code. A minimum of 26 minutes of clinical contact is required. This code was used 2 times, or for 3% of all billable encounters. The reimbursement rate for this code is usually higher than a standard 45 minute individual therapy code (90834), but lower than a

diagnostic evaluation code (90791). It reimburses at the second highest rate of CPT codes shown on this chart.

90846: This is the code used to request reimbursement for family psychotherapy without the patient present. As with the 90847 code, a minimum of 26 minutes of clinical contact is required. This code was used one time, or for about 1% of all billable encounters. The reimbursement rate for this service is usually the same as, or just under family therapy (90847). 90834: This is the code used to request reimbursement for 45 minutes of individual psychotherapy. This is a time based code that requires from 38 to 52 minutes of the encounter to include psychotherapy with an individual patient. This code was used 7 times, or for 9% of all billable encounters. This billing code reimburses at rates somewhere in between 90847 / 90846 and 90832.

Note: for a complete list and description of CPT codes please refer to the American Medical Association website: https://www.ama-assn.org

Figure 12:



This graph shows the different CPT codes used for initial appointments in the adult BHCR program. All CPT codes listed here are described in figure 11 above except for 99214, which is a medical code used by BH prescribers. This indicates that at least one of the patients who accessed the adult program had their first visit with either a BH psychiatrist or a psychiatric nurse practitioner. Prescribers may have responded to other calls for which they did not enter an LOS. Just like with the pediatric program, the great majority of patients who were billed for services were billed at the highest rate.

Chapter 8: Discussion & Conclusions

The demand for child and adolescent mental health services in the US far outweighs available resources for over 14 million children who meet criteria for a mental health or substance use disorder, or have other mental health impairments. Lack of access to BH care has significant quality of life and economic consequences for these children and their families that often follows them into adulthood. The sparsity of available services often leads to long wait times for services, general dissatisfaction with the BH care they receive, and high BH treatment dropout rates. Given the limited availability of resources, creative strategies for improving timely access to BH programs are necessary to address these issues.

The pediatrics and BH departments at Atrius Health recognized these concerns and have actively worked to tackle them with the development of an imbedded therapy model to improve access to BH care. Three principals that have guided this model of intervention are the understanding that pediatric departments are a natural entry point for recognizing mental health concerns and initiating appropriate care, the recognition that pediatric ACCs may not feel confident assessing and providing BH care and therefore benefit from consultation, and the importance of timely access to mental health treatment in order to reduce drop out rates and improve patient outcomes.

The implementation of the Embedded Therapy pilot program was designed with these principals in mind. By embedding a therapist within pediatric departments, ACCs and pediatric patients have access to immediate consultation with a BH clinician. The clinician helps determine and arrange next steps for the patient, and bridges care for patients waiting for long term mental health services. The embedded therapist also carries a panel of patients who require short term therapy. The model provides access to consulting psychiatrists for support with

pharmacotherapy services as well. In addition, monthly collaborative office rounds provide a forum for psychiatrists to support pediatric providers with BH education.

This pilot program began operating at the Atrius Health Norwood site in March of 2018. It was expanded to the Dedham site in August of 2018, and then to the Medford site in August of 2019. Four measures were planned to assess the effectiveness of the program. First was number of days between referral and initial contact with a BH provider. Criteria for success was that initial appointments with a BH clinician would occur within 14 days of the referral for 85% of referrals placed. This criteria applied for both psychotherapy and pharmacotherapy referrals. The second measure was number of missed initial appointments with a BH provider. Criteria for success was that the no show rate would be less than 7% for all initial appointments. Epic analysts generated reports indicating the number of days between referral entries and initial appointments with BH providers, and initial appointment no show rates looking back 3 months. These reports were created in November of 2018 for Norwood and Dedham, and December of 2019 for Dedham Norwood and Medford. A third report covering all three sites was planned for March of 2020, but could not be completed due to operational disruptions brought on by the Covid-19 pandemic. The third measure looked at the experience of pediatric providers. A survey was developed for pediatric ACCs consisting of four questions. The first question used a 5 point Likert scale to assess the extent to which the ACC found the Embedded Therapy program helpful. The second question used the same format to assess the extent to which the ACC found the Consulting Psychiatry program helpful. The third question asked the ACC what they felt has been most effective about the program and had an open ended response field. The fourth question asked for additional feedback, and also had an open ended response field. A 70% positive response rate to the first two questions would indicate program success. The responses

to the open ended questions would provide qualitative data that may be used to help shape structural changes to improve the program. Links to the survey were emailed to 12 pediatric ACCs at the Norwood and Dedham sites in November of 2018, and the results were aggregated that December. A second survey was scheduled to be sent to pediatric ACCs at all three sites in March of 2020, but operational disruptions caused by the Covid-19 pandemic prevented this from occurring as well. The fourth measure looked at the experience of patients. In February of 2020, paper surveys were mailed to parents of patients who received BH services in the pilot program. These surveys also consisted of four questions. The first was a 2 part question that used a 5 point Likert scale to attain feedback about overall satisfaction with the BH services their child received, and asked for reasons for their rating. The second question was divided into subsections that used a 5 point Likert Scale to elicit feedback about patient satisfaction with a) ability get an appointment for BH services, b) coordination of care between Pediatrics and BH departments, c) sensitivity of the BH team to parent and child needs, d) connection to helpful resources, and e) overall support with managing BH issues. Reasons for ratings were asked, with open ended response fields. The third question asked for the location/locations where the BH services were provided. The fourth question asked for the specific site where the BH services were provided. An overall satisfaction rate of 70% or higher would indicate success. Qualitative data collected in the surveys would be used to inform programmatic improvements. Thirty surveys were returned. Unfortunately, most of the data that was collected remains unavailable due to the temporary closure of the research arm of Atrius Health caused by the coronavirus pandemic. Early data in the form of an operational report that was saved in an email, along with charts generated for a milestone grant report were used to evaluate the program. Although the record is incomplete, the early findings are optimistic.

Preliminary data indicates that the program was generally successful. Compared to the initial state in collocated BH departments, wait times for BH services and initial appointment no show rates were greatly reduced. In addition, pediatric ACCs expressed their appreciation of fast access to consultation for themselves, and BH services for their patients, and there is evidence that patients found the program helpful. The program appears to have increased internal utilization of BH resources, which helps lower costs to the organization. This pilot program was initially implemented at two sites that did not have collocated BH departments, and was expanded to include a third site where access in their BH department was limited. These were the first steps of a broader plan to implement the program agency wide. Integral to the program was ongoing evaluation of the treatment model to measure its effectiveness and explore ways to introduce enhancements. Unfortunately, the disruptions caused by the Covid-19 pandemic prevented a thorough review of the program. As such, even though there is evidence that the program was meeting benchmarks for success, the early findings are incomplete and should be interpreted with caution. Furthermore, the provider feedback survey did not have questions asking specifically about weaknesses or recommended changes to the program. Such questions would have allowed for a more critical exploration of the program's strengths and weaknesses. A review of all the data collection that had been planned would have been necessary for a more accurate understanding of the program's effectiveness. Additional assessment of the care model is no longer possible now that the program does not exist in its initial, in-person format.

A great success of the program that could not have been predicted is that it provided a framework for addressing the immediate mental health needs of pediatric patients who struggled in the wake of the Covid-19 pandemic. The designer of the pilot was able to quickly modify established protocols and resources to develop the PBHCR program that was implemented across

the organization, and later the Virtual Integration Program. Elements of these programs were used to develop the adult BHCR program as well. As a result, many children, their parents and adults were able to quickly access BH providers for support during that unsettling time. This included the most vulnerable in our population who were most adversely affected by the pandemic. These Covid-19 response programs were designed in the midst of a global health crisis that created crippling fiscal and operational challenges to many US health care systems in the US, including Atrius Health. Despite these challenges the BH leadership team quickly learned the regulatory procedures required to provide care using telehealth, and created new protocols that were implemented organization wide to ensure continued BH care for patients. They should be recognized for their hard work and dedication.

Operational resources were used to monitor the Covid-19 Response programs as part of an organization wide effort to provide timely care to patients impacted by the coronavirus. This included the creation of new referral codes for Covid-19 BH services, which helped identify these individuals as requiring urgent BH services. The use of referral codes made tracking data in Epic possible at the local BH specialty level, without relying on Academic Institute analysts. Reports with numbers of referrals, completed visits, child age distributions, referral sources, patient outcomes and billing patterns were generated to monitor the programs. A final report with 12 graphs that was generated on July 7, 2020, the day after the PBHCR program ended was made available for review in October of 2020. Observations of treatment practices and outcomes could be used to shape future programs. There were no specific benchmarks for success, or expected outcomes. Unfortunately, data was not presented for the Virtual Integration Program because it is not part of a Covid-19 response program. The Virtual Integration program has therefore not been reviewed. Furthermore, the data that was provided was not specifically

generated for research purposes. Interesting patterns were found, and are worth exploring further, but these findings should be interpreted with caution.

A review of the operational data made available for the PBHCR and adult BHCR found that a single triage meeting with a BH provider and the use of written Tip Sheets may be sufficient for addressing the immediate needs of patients experiencing a mental health crisis. Within the child model 32.35% of patients received Tip Sheets, and did not require additional services after a single meeting with a BH clinician. An additional 9.80% did not require additional services or Tip Sheets. That is a total of 42.15% of patients who did not require additional services after just one meeting with a BH clinician. Similarly, in the adult program 16.96% of patients were provided with Tip Sheets and did not require additional services. An additional 18.13% of adults did not require additional services or Tip Sheets. That is a total of 35.09% of adult patients who did not require additional services after just one meeting with a BH provider. Furthermore, many of services provided in these programs were billable, which helps fund the programs. A higher percentage of child visits than adult visits were billed.

As indicated above (chapter 2) the effective use of single session psychotherapy where assessment is completed and solutions are offered has been found to provide hope to patients, and to have lasting benefits (Perkins, 2006; Perkins et al., 2008). These principles appear to have played out in the Covid-19 response programs. The finding that 42.15% of patients seen in the PBHCR model did not need additional services is encouraging, but is based on one operational report with incomplete data. Additional research is necessary to develop a more accurate understanding of the effectiveness of this approach. This should include an exploration of the value of Tip Sheets. The Virtual Integration Program, which is currently in operation is a continuation of these models, and provides an opportunity for additional study.

An incidental finding is that there was some confusion about pediatric patients age 18 and older who are referred for specialty services. Their status as pediatric patients was not clear on an operational level, as indicated by the omission of this age group from a graph of pediatric patient age distributions. This group of older teenagers and young adults would benefit from clearer organization practice policies. The development of transition programs for this population as these young adults become more independent and responsible for their own medical care should be considered.

The changeover to telehealth as a primary mode of providing BH services is a central feature of the PBHCR and the Virtual Integration Program. Prior to the Covid-19 pandemic BH telehealth appointments were usually reserved for patients who resided in remote areas or struggled with mobility (Whaibeh et al., 2020). At the onset of the pandemic US governing organizations recognized the need for mental health providers to transition to telehealth and lifted restrictions to allow BH patients to continue to safely receive their care. These authors advocated for the continued use of telemental health after the pandemic ends in order to reduce barriers to treatment. Presently, the future of telemental health programs remains unclear. In March of 2020 the entire BH team at Atrius Health quickly shifted to this model, and as of June 2021, most Atrius Health BH clinicians continue to work remotely. There are some preliminary findings at Atrius Health that the use of telehealth reduced the no show rate. Many clinicians and patients have expressed that they find telemental health convenient, and are hesitant to return to in-person office visits. Others have found that the nature of virtual meetings interferes with the connection needed for a strong therapeutic alliance. Many have also complained about poor internet connections and other technological barriers to virtual care. Others do not have access to the technology needed for virtual appointments. In addition, many child clinicians and patients

have struggled with using this format, as young children are easily distracted, both by their surroundings and by the technology. Interactive therapies such as play and art therapy are also limited with telemental health. This list is not exhaustive. Virtual BH care is likely here to stay in some form. Additional research on the effectiveness of telehealth, strategies for overcoming barriers, and best practices for in-person therapy vs virtual therapy is greatly needed to inform future policies.

As the Covid-19 pandemic appears to be ending, the long term effects of the pandemic on child developmental and emotional health remains to be seen. This includes long term consequences of distance learning, periods of isolation, loss of loved ones, and mental health risks associated with economic consequences. The need for children and families to access mental health services will continue, and resources remain limited. Organizations will be required to continue to find creative ways to address these needs with limited resources. The use of telemental health, Integrating BH clinicians into pediatric teams and the use of Tip Sheets appear to be promising strategies for improving timely access to services and improving patient outcomes.

References

- American Academy of Child and Adolescent Psychiatry: Committee on Health Care Access and Economics: Task Force on Mental Health. (2009). Improving mental health services in primary care: Reducing administrative and financial barriers to access and collaboration.

 *Pediatrics, 123(4), 1248-1251. doi:2155/10.1542/peds.2009-0048
- American Academy of Pediatrics. (2016). Improving mental health services in primary care; A call to action for the payer community august 2016.
- Bartlett, J. (2020, March 17). Atrius Health to temporarily close sites, furlough staff during pandemic. *Boston Business Journal*.

 Https://www.bizjournals.com/boston/news/2020/03/27/atrius-health-to-temporarily-close-sites-furlough.html
- Biringer, E., Sundfør, B., Davidson, L., Hartveit, M. & Borg, M. (2015). Life on a waiting list:

 How do people experience and cope with delayed access to a community mental health

 center? Retrieved from https://psykologisk.no/sp/2015/04/e6/
- Blumenthal, D., Fowler, E. J., Abrams, M., & Collins, S. R. (2020). *Covid-19 implications for the health care system*. Massachusetts Medical Society. doi:10.1056/NEJMsb2021088
- Brown, S. A., Parker, J. D., & Godding, P. R. (2002). Administrative, clinical, and ethical issues surrounding the use of waiting lists in the delivery of mental health services. *The Journal of Behavioral Health Services & Research*, 29(2), 217-28.

doi:http://dx.doi.org.proxy.library.upenn.edu/10.1007/BF02287708

- Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). *Crises and crisis management: Integration, interpretation, and research development*. Elsevier Science Inc.

 doi:10.1177/0149206316680030
- Christensen, S. L., & Kohls, J. (2003). Ethical decision making in times of organizational crisis.

 *Business and Society, 42(3), 328-358.
- Cunningham, P. J. (2009). Beyond parity: Primary care physicians' perspectives on access to mental health care. Health Affairs, 28, S1-S12. doi:10.1377/hlthaff.28.3.w490
- Fegert, J. M., Vitiello, B., Plener, P. L., & Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child and Adolescent Psychiatry and Mental Health*, *14*(1). https://doi.org/10.1186/s13034-020-00329-3
- Fishman, M. E., Kessel, W., Heppel, D. E., Brannon, M. E., Papai, J. J., Bryn, S. D., . . . Hutchins, V. L. (1997). *Collaborative office rounds: Continuing education in the psychosocial/developmental aspects of child health. Pediatrics*, 99, e5. doi:10.1542/peds.99.4.e5
- Gallucci, G., Swartz, W., & Hackerman, F. (2005). Impact of the wait for an initial appointment on the rate of kept appointments at a mental health center. *Psychiatric Services*, *56*(3), 344-346. doi:http://dx.doi.org.proxy.library.upenn.edu/10.1176/appi.ps.56.3.344

- Gerrity, M. S., Williams, J. W., Dietrich, A. J., & Olson, A. L. (2001). *Identifying physicians likely to benefit from depression education: A challenge for health care organizations*. Lippincott.
- Golberstein E, Wen H, Miller BF. Coronavirus Disease 2019 (COVID-19) and Mental Health for Children and Adolescents. *JAMA Pediatr*. 2020;174(9):819–820. doi:10.1001/jamapediatrics.2020.1456
- Harter, T. D., Iltis, A., Clay, M. C., & Aulisio, M. (2020). *Covid-19 and financial vulnerability:*What health care organizations and society owe each other. Taylor & Francis.

 doi:10.1080/15265161.2020.1764143
- Hicks, C., & Hickman, G. (1994). The impact of waiting-list times on client attendance for relationship counselling. Careers Research and Advisory Centre. doi:10.1080/03069889408260312
- Krist, A. H., DeVoe, J. E., Cheng, A., Ehrlich, T., & Jones, S. M. (2020). Redesigning primary care to address the Covid-19 pandemic in the midst of the pandemic. Annals of Family Medicine. doi:10.1370/afm.2557
- Kowalewski, K., McLennan, J. D., & McGrath, P. J. (2011). A preliminary investigation of wait times for child and adolescent mental health services in canada. *Journal of the Canadian Academy of Child and Adolescent Psychiatry / Journal De L'Académie Canadienne De Psychiatrie De L'Enfant Et De L'Adolescent*, 20(2), 112-119. PMCID: PMC3085670

- Livingston, M. A. (2016). Senior leadership response to organizational crises: Exploring the relationship between sensemaking and organizational resiliency (D.Mgt.). Available from ABI/INFORM Global, ProQuest Dissertations & Theses Global: Business, ProQuest Dissertations & Theses Global: Social Sciences. (1820071863). Retrieved from https://proxy.library.upenn.edu/docview/1820071863?accountid=14707
- Marques, L., Bartuska, A. D., Cohen, J. N., & Youn, S. J. (2020). Three steps to flatten the mental health need curve amid the COVID-19 pandemic. *Depression and anxiety*, *37*(5), 405–406. https://doi.org/10.1002/da.23031
- Marques de Miranda, D., da Silva Athanasio, B., Sena Oliveira, A. C., & Simoes-e-Silva, A. C. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents? *International Journal of Disaster Risk Reduction*, *51*, 101845. doi:https://doi.org/10.1016/j.ijdrr.2020.101845
- McDowell, M. (2018). Bringing evidence into practice: Lessons from a behavioral health care model redesign. Doctoral Dissertation, Harvard Medical School.
 https://dash.harvard.edu/handle/1/41973483
- National Research council and Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington, DC:

 National Academies Press, Washington, DC. Retrieved from

 https://proxy.library.upenn.edu/login?url=https://proxy.library.upenn.edu:2072/docview/622

 065663?accountid=14707

- Perkins, R. H. (2006). The effectiveness of one session of therapy using a single-session therapy approach for children and adolescents with mental health problems. Leicester, England]:

 British Psychological Society.
- Perkins, R., & Scarlett, G. (2008). The effectiveness of single session therapy in child and adolescent mental health. Part 2: An 18-month follow-up study. *Psychology and Psychotherapy: Theory, Research and Practice, 81*(2), 143-156.

 doi:http://dx.doi.org.proxy.library.upenn.edu/10.1348/147608308X280995
- Pfefferbaum, B., & North, C. S. (2020). Mental Health and the Covid-19 Pandemic. *The New England journal of medicine*, 383(6), 510-512. https://doi.org/10.1056/NEJMp2008017
- Phelps, C., & Sperry, L. L. (2020). Children and the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(S1), S73–S75. https://doi.org/10.1037/tra0000861
- Roberts, A. R. (1990). *Crisis intervention handbook: Assessment, treatment and research.* Belmont, CA: Wadsworth.
- Roberts, A. R. (1995). *Crisis intervention and time-limited cognitive treatment*. Thousand Oaks, CA: Sage Publications.
- Robinson, P. J., & Reiter, J. T. (2007). Behavioral consultation and primary care: A guide to integrating services. New York: Springer Science

- Steinman, K. J., Shoben, A. B., Dembe, A. E., & Kelleher, K. J. (2015). *How long do adolescents wait for psychiatry appointments?*. New York etc.]: Springer. doi:10.1007/s10597-015-9897-x
- Whaibeh, E., Mahmoud, H. & Naal, H. Telemental Health in the Context of a Pandemic: the COVID-19 Experience. *Current Treatment Options Psych* **7**, 198–202 (2020). https://doi.org/10.1007/s40501-020-00210-2
- Waddell, C., McEwan, K., Shepherd, C. A., Offord, D. R., & Hua, J. M. (2005). *A public health* strategy to improve the mental health of Canadian children. Canadian Psychiatric Association. doi:10.1177/070674370505000406
- Weitzman, C. C., & Leventhal, J. M. (2006). Screening for behavioral health problems in primary care. Current Opinion in Pediatrics, 18, 641-648.

 doi:10.1097/MOP.0b013e3280108292
- Williams, J., Shore, S. E., & Foy, J. M. (2006). Co-location of mental health professionals in primary care settings: Three North Carolina models. *Clinical Pediatrics*, 45(6), 537-543. doi:2155/10.1177/0009922806290608
- Williams, M. E., Latta, J., & Conversano, P. (2008). Eliminating the wait for mental health services. *The Journal of Behavioral Health Services & Research*, *35*(1), 107-14. doi:http://dx.doi.org.proxy.library.upenn.edu/10.1007/s11414-007-9091-1

Appendix A

Pediatric Provider Experience Survey Monkey Script

Pediatric Provider Experience Survey:

How helpful have you found the Embedded Therapy program?

- Not at all helpful
- Not so helpful
- Somewhat helpful
- Very helpful
- Extremely helpful

How helpful have you found the Consulting Psychiatry program?

- Not at all helpful
- Not so helpful
- Somewhat helpful
- Very helpful
- Extremely helpful

What are the areas you feel have been the most effective about the program? (open response field)

Any other feedback? (open response field)

Appendix B

Pediatric Patient Parent Questionnaire

Atrius Health Dedham & Medford Pediatric and Behavioral Health Services Questionnaire (January 2020)

| Overall, how satisfied were you with t (check one rating below) | he Behavioral | Health service | s your child receive | ed? | |
|---|------------------------------------|--------------------------|------------------------------------|-----------------------|------------------------|
| Very satisfied,Somewhat satisfied,Neither satisfied nor dissatisfiedSomewhat dissatisfied,Very dissatisfied | ed, | | | | |
| 1a. Please record the reason(s) for your rating: | | | | | |
| 2. How satisfied were you with the follow | wing (check or | ne rating for ea | och item)? | | |
| | <u>Very</u> <u>Dissatisfied</u> | Somewhat Dissatisfied | Neither Satisfied Nor Dissatisfied | Somewhat Satisfied | <u>Very</u> Satisfi |
| Ability to get an appointment for behavioral nealth services when you wanted | | | | | |
| Coordination of care between Pediatrics and Behavioral Health departments | | | | | |
| Sensitivity of Behavioral Health team to you/your child's needs | | | | | |
| Connection with helpful resources (e.g., list examples) | | | | | |
| Overall support in managing behavioral health ssue(s) | | | | | |
| 2a. Please record the reasons for your rat above: | _ | | | | |
| | | | | | |

3. Location where behavioral health services were received (check all that apply):

| | within the Pediatric departmentwithin the Behavioral Health departmentexternally within a Community Health services location |
|----|--|
| 4. | Site where behavioral health services were received (check one):DedhamMedford |
| | nme otional): |
| | (If you have questions about your child's care, please contact the office directly.) |

Thank you for your feedback. Please return this page in the enclosed postage-paid envelope.

Appendix C

MyHealth Tip Sheet: Anxiety Helpful Tips

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Anxiety Helpful Tips

Anxiety is the brain's way of protecting us from danger. We have an alarm system in our brain that helps warn us of danger and when this system is activated it propels our body to respond in one of three ways: fight (get angry), flight (run away/avoid), or freeze (deny). Our bodies prepare for these reactions with physical symptoms including increased heart rate, increased breathing rate, elevated body temperature, digestive restriction (which leads to belly aches), muscle tension (which leads to headaches), and simplistic or overly rigid thought patterns. When we are faced with imminent danger to our survival these responses help us avoid the danger and live to tell the tale! In times of perceived danger the alarm system misfires and we misinterpret signals in our environment causing us to feel anxious. Our Thinking Brain gets turned off and Feeling Brain takes over making us feel like things are super intense and scary even though in reality things are just uncertain or not as we had expected.

Sometimes when we feel anxious, instead of showing worry we show anger, or we want to run away from things or people. It isn't unusual for anxiety to make us have difficulty sleeping, or be more emotional, or struggle with focus and concentration. Anxiety takes up a LOT of energy in our brain because the danger system is desperate to get our attention, and it can be tricky to know what to do to turn it off.

The antidote to anxiety is the Relaxation Response. There are several things we can do to activate the Relaxation Response to help our bodies remember that we are safe and in control of our immediate surroundings.

Take a breath...or three!

Deep, diaphragmatic breathing is one of the fastest ways to elicit the Relaxation Response. The key components of diaphragmatic breathing (so named because you use the diaphragm muscle in your abdomen to do it!) include using your belly to draw the air into your abdomen until it is nice and big and round, and then steadily exhaling for slightly longer than your in-breath.

Belly breathing is your friend when it comes to helping manage anxiety. Regular practice throughout the day is a great habit to develop, but takes some work so you may want to consider making a visual reminder to help build the habit (a cue card on the mirrors in your home, notes in conspicuous places around the house, alarms/reminders on your smart speakers or phones, etc.) and connecting the practice to daily activities like eating, dressing, and brushing teeth.

Get into the zone...

Repetition helps to elicit the Relaxation Response by inducing a trance-like state in our brains which helps to slow down the limbic system (the part of our brain responsible for the fight/flight/freeze response). There are lots of ways to 'get into the zone' by using repetition...walking, swinging, running, and jumping are easy ways to elicit the Relaxation Response while simultaneously offloading some of the extra energy we have built up from being anxious. Nothing better than a two-for-one deal! Tapping hands on alternating legs, swinging legs back and forth while sitting, drawing, and coloring are other non-strenuous examples of repetition that will also serve to elicit the Relaxation Response.

Brain Trick to the Rescue!

Much of what contributes to our worried and anxious thoughts has to do with the rigid and overly simplistic thought patterns that feed into our misinterpretation of our environment. In order to help move out of allostasis (the fancy word for stress and anxiety), it is important that we get our Thinking Brain back online and firing on all cylinders. If we have used our belly breathing and done something to Get Into the Zone, our brains are likely now calm enough to be open to thinking about things in a new, more rational, way. This is the time to remind ourselves (either quietly or out loud so our brains can hear it!) that we are safe and while things are not ideal (or just not the way we wanted/hoped!), we are not in danger and we will be ok. Reframing is a brain trick that can help us think in new ways and allows our Thinking Brain to get back in charge.

There are other ways to help calm your brain down from being stressed and anxious. These include use of mindfulness techniques. Mindfulness is a fancy way of saying slowing our brains down to be fully present in the here and now. By taking a moment to connect to the present moment, our danger system is able to quiet down and our Thinking Brain is once again able to see that we are safe. There are several tips and ideas below for how to use mindfulness for anxiety.

The Color Game - Pick any color of the rainbow. Then focus on your surroundings and name everything you see that is that color. This helps to focus your mind on your surroundings, not the worrisome thoughts.

The Senses Countdown - Name 5 things you see, 5 things you hear and 5 things you feel (such as my feet on the ground or my hands on my lap). Next name 4 different things you see, hear and

feel, then 3 different things you see, hear and feel then 2 and finally 1. This process takes some time and helps bring your focus to the present moment.

Cosmic Kids Yoga and Mindfulness YouTube (appropriate for young children) https://www.youtube.com/user/CosmicKidsYoga

A 6 Minute Mindful Progressive Muscle Relaxation (appropriate for older children and teenagers)

https://www.youtube.com/watch?v=9x3tl81NW3w

Guided meditations for Sleep Sleepy Cottage

Https://www.youtube.com/watch?v=WOXz6KuwZJ4

Land of the Unicorns

https://www.youtube.com/watch?v=g69cyia-aKI

Jason Stephenson - Sleep Meditation Music Channel on You Tube https://www.youtube.com/channel/UCqPYhcdFgrlUXiGmPRAej1

Books are also a great way to help understand and work through anxiety. Below you will find several books that might be useful for you and your family to read together.

Wilma Jean the Worry Machine, by Julia Cook Jack's Worry, by Sam Zuppardi The Don't Worry Book, by Todd Parr Up and Down the Worry Hill, by Aureen Pinto Wagner What To Do When You Worry Too Much, by Dawn Huebner Stella Rae the Brave, by Kevin Henkes The Anxiety Workbook for Teens, by Lisa Schab

As mentioned above, Belly Breathing is the first step to helping settle your brain down from anxiety. Below is an introduction to belly breathing and a fun video

Guided Belly Breathing and Link:

Sit in a comfortable position. You can close your eyes if you like.

Place your hands on your belly button and pretend there is a balloon behind your belly button. As you breathe in imagine you are inflating your balloon until it is nice and round so that your belly expands.

As you exhale, let the air out of your balloon steadily and allow your belly to fall back toward your spine. Let's practice:

Breathe in and fill your belly like a big balloon, nice and round.

Breathe in for a count of 1, 2, 3, 4.

Breathe out and let all the air out of your balloon, 1, 2, 3,4, 5.

Breathe in again 1, 2, 3, 4.

Out 1,2, 3, 4, 5.
One more time. In, 1, 2, 3, 4.
And out 1, 2, 3, 4, 5.
Notice how you are feeling and keep practicing!

Sesame Street: Elmo, Common & Colbie Caillat - Belly Breathe with Elmo! $https://youtu.be/_mZbzDOpylA$

Appendix D

MyHealth Tip Sheet: Anxiety About Covid-19

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (fill in number).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Anxiety About COVID-19

The majority of the population is experiencing some measure of anxiety in the context of COVID-19. There is a lot that is different about our everyday life, and not much that is known about when we can return to familiar routines. These changes can be hard to tolerate, or feel scary, or make us feel insecure in our world. When we are not sure what is going to happen next, our brains try desperately to figure it out and this can lead to something called hypervigilance (a fancy way of saying being on high alert). When we are hypervigilant, we may notice every little thing in our surroundings and ourselves. We may start to notice every time someone coughs, or wipes their nose. Alternately we may start to be extra aware of slight changes in our own bodies, like if our ears start to tingle, or we have a slightly scratchy throat. This level of alertness is exhausting mentally and physically and takes a significant toll on our bodies and brains. When it happens in the context of a family, hypervigilance and increased anxiety in one member can raise the level of arousal in other members of the family making for a very stressed out household.

Anxiety is the brain's way of protecting us from danger. We have an alarm system in our brain that helps warn us of danger and when this system is activated it propels our body to respond in one of three ways: fight(get angry), flight(run away/avoid), or freeze(deny). Our bodies prepare for these reactions with physical symptoms including increased heart rate, increased breathing rate, elevated body temperature, digestive restriction (which leads to belly aches), muscle tension (which leads to headaches), and simplistic or overly rigid thought patterns. When we are faced with imminent danger to our survival these responses help us avoid the danger and live to tell the tale! In times of perceived danger the alarm system misfires and we misinterpret signals in our environment causing us to feel anxious. Our Thinking Brain gets turned off and Feeling Brain

takes over making us feel like things are super intense and scary even though in reality things are just highly uncertain and unpredictable. The antidote to anxiety is something called the Relaxation Response and knowing how to elicit it is key to managing anxiety effectively.

While it is expected to experience increased anxiety in the midst of the pandemic, there are things you can do to not feel overwhelmed by your stress and anxiety.

First, it is important to calm your brain. Using diaphragmatic breathing (so named because you use the diaphragm muscle in your abdomen to do it!) will quickly turn off the alarms in your brain and activate the Relaxation Response. The main features of diaphragmatic breathing include using your belly to draw the air into your abdomen until it is nice and big and round, and then steadily exhaling for slightly longer than your in-breath. Belly breathing is your friend when it comes to managing anxiety.

Next, get your body moving to help offload some of the built up energy from all of that stress and anxiety. Repetition will help to boost the benefits of belly breathing and things like walking, swinging, running, and jumping are easy ways to elicit the Relaxation Response, Tapping hands on alternating legs, swinging legs back and forth while sitting, drawing, and coloring are other non-strenuous examples of repetition that will also serve to elicit the Relaxation Response.

Now that your brain is no longer in full anxiety mode, you can take the opportunity to use some Brain Tricks to help remind yourself of all the ways you are staying safe and are capable of being in control.

The first of these is Remember the Facts. It is important to take necessary precautions and be aware of the real risks associated with COVID-19. Frequent and proper hand washing, appropriate cough/sneeze etiquette, maintaining physical distancing, and wearing a protective face cloth or covering when out in public are all concrete steps you can take to reduce your risk of exposure. It can be very helpful to Remember the Fact that you are doing all of things you need to do to limit your risk and increase your health and well-being.

Another Brain Trick is Reframe the Situation to focus on what you can control. By shifting your attention onto the precautions you are taking, you help your brain move away from your somatic (bodily) experiences. Reframing the Situation to consider where things are the same rather than different helps you to remember where you DO have control rather than allowing your brain to focus on all of the uncertainty.

There are other things to keep in mind as you navigate anxiety in the context of COVID-19. All of these will help to enhance a sense of agency and control which will in turn serve to reduce the intensity of your distress. These are challenging times and some distress is likely to persist, however the goal is to limit the intensity so that you and your family do not become overwhelmed by these feelings.

Limit exposure to news and social media, particularly when with young children

Develop a regular, somewhat predictable routine. Even if things change day to day, knowing what is going to happen next will go a long way to minimizing a child's anxiety and will help the family unit function more effectively.

Be sure to have a consistent sleep schedule. Anxiety can often disrupt sleep habits and this may be further complicated by the lack of regular structure. Disrupted sleep can further exacerbate anxiety leading to a vicious cycle. To the extent possible try for a consistent bedtime and wake time.

Offer regular opportunities to discuss the changes and restrictions related to COVID-19 with your child(ren), and allow space for questions. Answer with age-appropriate explanations, leaving out graphic details. Simple explanations will suffice for young children, while older children have the cognitive skills necessary to understand more information. See the links below for helpful ways to discuss COVID-19 with children of different ages.

Keep track of things that are the same, not just things that are different. Noticing things that are the same helps remind kids (and adults) of familiar routines and experiences. It can be quite grounding and reassuring to see all the ways that their life is the same as 'before'.

Get outside daily if possible. Engaging your body will help to release the built up stress and prevent things from accumulating. Nature is intrinsically calming, and movement in open air will help to combat any burgeoning feelings of being trapped or restricted.

Connect with family members and friends through video calls, phone calls, texting, emails, and pen pal exchanges. We can still feel together even if we have to be physically apart.

This is a stressful and anxiety provoking time for all of us, so it makes sense that you may be feeling anxious in a way that you haven't before. Be gentle with yourself and your family members as you navigate this unlit path together. Your continued love and support will be a light along the way for your child.

Resources:

Talking with children about the "New Normal" as we enter into months 6 and 7 of the pandemic, not to mention a new school year!

https://www.wakehealth.edu/Stories/Podcasts/BestHealth-Podcasts/Talking-to-children-about-our-new-normal-during-COVID19

CDC Fact Sheet - Spread Facts Not Fear

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/share-facts.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fshare-facts.html

CDC: Talking with Children about COVID-19

https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/talking-with-children.html

WHO: Helping Children Cope with Stress

https://www.who.int/docs/default-source/coronaviruse/helping-children-cope-with-stress-print.pdf

American Psychological Association: Tips for Quarantined Parents

https://www.apa.org/topics/covid-19/quarantine-parents-tips

National Association of School Psychologists: Parent Resource on Talking to Children About COVID-19

https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/health-crisis-resources/talking-to-children-about-covid-19-(coronavirus)-a-parent-resource

Talking to Children About COVID-19

https://parenting.nytimes.com/childrens-health/coronavirus-kids-talk?module=latest-filters-feed&action=click&rank=1&position=

National Child Traumatic Stress Network: Parent/Caregiver Guide to Helping Families Cope with COVID-19

https://www.nctsn.org/resources/parent-caregiver-guide-to-helping-families-cope-with-the-coronavirus-disease-2019

Tips for Caregivers on Infectious Disease Outbreaks https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-01-01-006-508.pdf

Resources for Supporting Children's Emotional Well Being During COVID-19 https://www.childtrends.org/publications/resources-for-supporting-childrens-emotional-well-being-during-the-covid-19-pandemic

Centers for Disease Control: Helping Parents Manage Stress and Anxiety https://www.cdc.gov/coronavirus/2019-ncov/prepare/managing-stress-anxiety.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fcoping.html

National Child Traumatic Stress Network: Age Related Reactions to Traumatic Events https://www.nctsn.org/resources/age-related-reactions-traumatic-event

NPR: Illustration to Help Describe COVID-19 (appropriate for children aged 12y and older) https://www.npr.org/sections/goatsandsoda/2020/02/28/809580453/just-for-kids-a-comic-exploring-the-new-coronavirus

Brain Pop video on COVID-19 (appropriate for children aged 6y-11y) https://www.brainpop.com/health/diseasesinjuriesandconditions/coronavirus/

COVIBOOK: A Social Story About COVID-19 (appropriate for children aged 5y and under) https://www.mindheart.co/descargables

Fighting the Big Virus: Trinka and Sam and Littletown Work Together (appropriate for schoolaged children)

https://piploproductions.com/trinka-and-sam-virus/

As mentioned above, Belly Breathing is the first step to helping settle your brain down from anxiety. Below is an introduction to belly breathing and a fun video

Guided Belly Breathing:

Sit in a comfortable position. You can close your eyes if you like.

Place your hands on your belly button and pretend there is a balloon behind your belly button. As you breathe in imagine you are inflating your balloon until it is nice and round so that your belly expands.

As you exhale, let the air out of your balloon steadily and allow your belly to fall back toward your spine. Let's practice:

Breathe in and fill your belly like a big balloon, nice and round.

Breathe in for a count of 1, 2, 3, 4.

Breathe out and let all the air out of your balloon, 1, 2, 3, 4, 5.

Breathe in again 1, 2, 3, 4.

Out 1, 2, 3, 4, 5.

One more time. In, 1, 2, 3, 4.

And out 1, 2, 3, 4, 5.

Notice how you are feeling and keep practicing!

Sesame Street: Elmo, Common & Colbie Caillat - Belly Breathe with Elmo! https://youtu.be/_mZbzDOpylA

Mindfulness can be a wonderful way to counteract the effects of anxiety and elicit the Relaxation Response. Mindfulness is the act of bringing your attention to the present moment without judgment. There are several ways of beginning this practice, below are just a few:

The Color Game - Pick any color of the rainbow. Then focus on your surroundings and name everything you see that is that color. This helps to focus your mind on your surroundings, not the worrisome thoughts.

The Senses Countdown - Name 5 things you see, 5 things you hear and 5 things you feel (such as my feet on the ground or my hands on my lap). Next name 4 different things you see, hear and feel, then 3 different things you see, hear and feel then 2 and finally 1. This process takes some time (intentionally) and helps bring your focus to the present moment.

Cosmic Kids Yoga and Mindfulness YouTube (appropriate for young children) https://www.youtube.com/user/CosmicKidsYoga

A 6 Minute Mindful Progressive Muscle Relaxation (appropriate for older children and teenagers)

https://www.youtube.com/watch?v=9x3tl81NW3w

Guided meditations for Sleep

Sleepy Cottage Https://www.youtube.com/watch?v=WOXz6KuwZJ4

Land of the Unicorns https://www.youtube.com/watch?v=g69cyia-aKI

Jason Stephenson - Sleep Meditation Music Channel on You Tube https://www.youtube.com/channel/UCqPYhcdFgrlUXiGmPRAej1

Books are also a great way to help understand and work through anxiety. Below you will find several books that might be useful for you and your family to read together.

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Appendix E

MyHealth Tip Sheet: Emotional and Behavioral Regulation

IMPORTANT INFORMATION FOR ALL PATIENTS

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If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***)

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Emotional and Behavioral Regulation Tip Sheet

Children tend to be soothed and organized by consistency, predictability and routine. It helps them feel safe and secure and provides a strong foundation upon which they can grow, explore, and develop. When life becomes uncertain and unpredictable, or routines are upended it can challenge one's sense of security and safety. For many children and teenagers this feeling of insecurity can be challenging to navigate because they don't have the language, insight, or awareness to be able to express their distress directly and instead demonstrate their emotions through their behavior. Typically, the more intense the emotional disruption, the more intense the correlating behavioral disruption.

It is not uncommon to see immature or regressed behavior emerge in these situations, as well as acting out or attention seeking behavior. Parents may notice tantrums, irritability, oppositional or defiant behavior, increased emotionality and emotional fragility, or even verbal and physical aggressiveness. This is called emotional and behavioral dysregulation and it can be quite challenging to parent.

Emotional and Behavioral Dysregulation tends to pull for strong responses from parents/caregivers. These responses typically involve harsh punishment and strict discipline. Punishment and discipline in turn further escalate the dysregulation for the child and things can quickly get out of hand causing the entire family to feel miserable and out of sorts. The reason that punishment and strict discipline tend to worsen things is because those approaches do not help to soothe the internal distress that the child is experiencing and only serve to exacerbate the feeling of unpredictability and insecurity for the child.

When in Doubt Stay Silent

When faced with a child who is struggling to regulate their emotions and behavior it is important to remember that their brain is filled with insecurity and fear, even if they aren't able to name it as such. To their brain the world has become unpredictable, and an unpredictable world is an unsafe world, and this is a scary thought to a growing brain. Scared brains tend not to be open to listening to direction. Silence is your friend here.

Be Predictable and Empathic

As much as possible, provide consistency and routine. Having a sense of predictability will ease some of the distress that is contributing to your child's dysregulation. In addition, it will be important to avoid getting pulled into the child's distress, which will only make things worse. Active ignoring is the term that is often used to describe this, and can be a helpful approach. However, active ignoring assumes a position of confrontation rather than collaboration and, more importantly, can be challenging to maintain as the child's emotional storm ramps up. If you are able to assume a position of empathic responsiveness rather than confrontational power, it will make it much easier to maintain a sense of calm and neutrality in the midst of the child's emotional storm. Cultivating empathy for the difficulty and distress your child is experiencing, but not expressing verbally, will allow you the freedom to be more attuned to their needs and find a way to work together to make things easier.

Mantra Makes Magic

How do you do achieve this magic ability to stay calm while your child is pitching a fit and crying uncontrollably, or throwing things across the room, or screaming until you pay attention to them? Well, first is to acknowledge that it is hard work to be a source of calm for your child, yet it is important work. Finding a mantra, or repeating phrase, can be invaluable as you adopt a position of empathic curiosity about your child's distress.

You might say to yourself on repeat, "This too is passing", or "I am the calm in the storm" or "Be kind or be quiet", or some other self-statement that will help you get the emotional distance you need to assume the empathic responsive position required.

Say it to yourself as often as you need to get to the calm space.

Keep saying it to yourself to stay there.

Be Curious

Once you have gotten yourself to this regulated space you can move forward with offering support to your child. Your approach will likely vary depending on the specific behavior. If there is a safety concern, you must step in and ensure the child's safety as well as everyone else in the room/area. If there are no safety concerns, it can be helpful to try to engage the child in such a way as to indirectly deescalate them. Telling them to "calm down" probably won't get you the result you are looking for, but asking them what would help make things better might shift things a little. Be curious. Not about what is wrong, because it is possible - likely even - that the child or teenager won't be able to articulate why they are upset., or the reason won't be nearly explanation enough for the intensity of their reaction. This has the potential to a) make them even more upset because now they are frustrated about their inability to explain themselves, and b) make YOU even more upset because why are they pitching such a big fit about a missing sock?! Instead, be curious about what would help the situation, how they want things to be different, what they think could have led to a different outcome, what else might be bothering them, what they think about that other thing that happened earlier but didn't make them this upset and why was THAT different? Be curious. Curiosity assumes nothing. It is open to learning something. It is open to listening. Curiosity is empathy.

Jedi Mind Trick

The interesting thing about using the above approach is that by regulating yourself, and seeking understanding of your child's experience from their perspective, you will help to regulate your child. There is a concept known as co-regulation which suggests that children and parents have a symbiotic relationship and the emotions of one impact the emotions of the other. Essentially, the idea of co-regulation is that if you stay calm, your child will calm. Alternately if you get agitated, your child will get agitated. This is why it is incredibly important for you to use your Mantra Magic to help you get to a calm(ish) place in the face of a dysregulated child or teenager. Not only will you be modeling emotional and behavioral regulation and self-control (both good things!), but you will also be helping to co-regulate your child by regulating yourself. (Who knew you had Jedi Mind Tricks up your sleeve?)

Self-Regulation

Clearly, it is also incredibly important for children and teenagers to have methods for self-regulation. The basic tenets of self-regulation involve recognition of the distressing emotion in its early stages, and then doing some intervention to help calm. There are typically increasing levels of intervention for increasing levels of distress and kids are taught how to recognize the progression as well as how to give themselves time to settle once at a highly escalated state. There are several programs that have been developed and are widely used. Many schools use some of these programs, so the language will be familiar to your child if you choose to use them. The Zones of Regulation uses colors to help differentiate between the various levels of emotional arousal. It helps kids connect the feeling word, the facial expressions associated with these, and child specific strategies to help them calm or maintain those feelings. Learn more about Zones of Regulation here (https://hes-extraordinary.com/zones-of-regulation-activities)

RULER is an approach to emotional regulation and uses an acronym to help kids learn the necessary skills to Recognize, Understand, Label, Express, and Regulate their emotional experiences. Kids can use this acronym to help walk through difficult moments and better manage the situation without behavioral dysregulation. Learn more about RULER here (http://ei.yale.edu/ruler/ruler-overview/)

Mindfulness offers a simple and easy to use method for self-regulation. Mindfulness is not meditation, but involves bringing your attention to the present moment without judgment. Just the simple gesture of shifting your focus to your feet and attending to all of the sensations in your feet can allow for self-regulation to begin. Other mindfulness techniques include:

The Color Game - Pick any color of the rainbow. Then focus on your surroundings and name everything you see that is that color. This helps to focus your mind on your surroundings, not the distressing feelings.

The Senses Countdown - Name 5 things you see, 5 things you hear and 5 things you feel (such as my feet on the ground or my hands on my lap). Next name 4 different things you see, hear and feel, then 3 different things you see, hear and feel then 2 and finally 1. This process takes some time and helps bring your focus to the present moment.

Smiling Mind is a free mindfulness app that was developed with children and teenagers in mind. There are other similar apps that offer guided mindfulness and relaxation scripts to help with self-soothing.

Introduction to Mindfulness

https://www.youtube.com/watch?v=HB16XYD2huo

Progressive Muscle Relaxation

https://www.youtube.com/watch?v=aaTDNYjk-Gw&t=511s

Guided Belly Breathing:

Sit in a comfortable position. You can close your eyes if you like.

Place your hands on your belly button and pretend there is a balloon behind your belly button. As you breathe in imagine you are inflating your balloon until it is nice and round so that your belly expands.

As you exhale, let the air out of your balloon steadily and allow your belly to fall back toward your spine. Let's practice:

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Notice how you are feeling and keep practicing!

Sesame Street: Elmo, Common & Colbie Caillat - Belly Breathe with Elmo!

https://youtu.be/_mZbzDOpylA

Appendix F

MyHealth Pediatric Behavioral Health Tip Sheet: Executive Function and Remote Learning

IMPORTANT INFORMATION FOR ALL PATIENTS

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If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavior Health Executive Function and Remote Learning

The effects of Executive Function vulnerabilities, including ADHD, can be challenging for remote learning, where kids need to sit still, listen to a screen, and complete self-directed work. While there will be less distractions from other students, kids may have difficulty sustaining attention and picking up on all the information. Kids with Executive Function challenges will likely need some extra help to stay on track.

Get Moving!

Exercise is arguably the best intervention for inattention and hyperactivity, as it increases both blood-flow to the brain and the various chemicals necessary for regulating attention and inhibiting impulses.

Given the extent to which kids will be depending on screens for both education and entertainment it is increasingly important to have opportunities for physical exercise and activity. Note that for there to be cognitive benefits, exercise must be aerobic in nature (meaning that the activity gets your heart rate up and blood pumping through your body). This is especially important during pandemic learning with the heavy reliance upon screens for teaching. Beyond playing sports or going to the gym, it is useful to seek out opportunities to be active, (walk or ride a bicycle instead of driving, take the stairs instead of the elevator). Between tasks, brief, intermittent work-outs can be performed, ranging from simple jumping jacks to something more structured, such as the "Seven-Minute Workout." How long? Well, try for 30 minutes, 3-4 times per week or two 10-minute periods of exercise every day. A 10-minute brisk walk increases energy for 60-120 minutes! Try to get to 10,000

steps per day (5 miles). (NOTE: These guidelines are not universal -- the intensity level of your exercise must be matched to your level of fitness and with consideration of any medical issues. Consultation with your doctor(s) may be advised.)

Avoiding sedentary habits by using a stand-up desk (or you can consider alternating standing and sitting), sitting on an exercise ball, or other methods of activating core muscles are also known to support attentional functioning. When planning home classroom seating, consider wiggle cushions or flex seating options. Give your child the option of standing at the table rather than sitting in the chair the entire time. ALL movement is good movement!

Rest!

Sleep is essential for adequate attention. Beyond meeting the recommended age-based hour-minimums (see Dr. Craig Canapari's website in the resource list below for a helpful table), establishing routines of going to sleep and waking up at the same times every day is helpful. The more you can anchor mealtimes to sleep/wake times the more you can secure the circadian rhythm which only improves sleep patterns and routines.

It is ideal to set a soothing bedtime routine for winding down, one that is free of "screen time," as light has an alerting effect and may "trick" the brain into thinking it is daytime (the blue light inherent in screens prevents release of our melatonin hormone).

Exercise during the day (as well as daylight exposure) is linked with improved sleep, and therefore, attention.

Create a Daily Schedule

Kids of all ages benefit from visual reminders and it also is a connection to their school routine. Develop a visual calendar that is largely task based but also has time components. This will vary by age of your child, with heavier focus on the clear marking of time the younger the child is. (9a-9:30a morning meeting; 9:30a-10a Fundations) For older children and adolescents it will be more heavily focused on the task and the parts of the task that are required to signal completion (9a zoom math class: need Chrome Book, math folder, calculator - finished when all problems are completed and submitted on Google Classroom)

To the extent that you are able, build in breaks after each sitting session (remember they are working hard to sit through class, reward this with a brief break so they can get some of that energy out). Alternately consider flexible seating or allow your child to stand while in class meetings/completing school work.

For expectations: focus on the most important behaviors by creating a short and straight forward list (example: "complete math homework sheet" instead of "homework").

Remember that kids do best with predictability and this is particularly true for kids with Executive Function concerns. Establishing a routine for homework, meals, playing, bedtime and preparing for school can help. Using visual/verbal pairings for reminders of these routines will go a long way toward enforcing the routine! (Hint: clipboards and checklists are your friends here!)

Break Large Tasks into Smaller Parts

When a task feels daunting, breaking it down helps it feel more manageable. Instead of "clean your room", break it down in sections- "first, let's start with picking up the toys off the floor", "now go ahead and straighten your sheets and comforter to make your bed".

For expectations: focus on the most important behaviors by creating a short and straight forward list (example: "complete math homework sheet" instead of "homework").

For tasks that can't be easily broken down, set time limits for how long each work session will last or give a logical stopping point for a given work session.

Establish a Designated Area for School Time

Create a clear school space at home (not the bedroom if possible). Consider other areas of your home to set up this work space: dining room, living room, spare room, or kitchen. (Generally the less overlap between work and sleeping space the less disruption you can expect to sleep patterns and routines!) The more that tasks can feel separated the easier the transitions will be.

If possible, create the space away from TV or other distractions. TV or break time can be built into the day when kids aren't requited to be logged in. If it is necessary to have the school space in the same room as the TV, consider covering the TV if it becomes a distraction. At a minimum remove the remote controls from the room.

Make sure there is enough table or counter space for the children to place their materials and spread out.

Have chairs (or your flexible seating option) set up ahead of time for your child to sit and also one for you to join your child in case they need help with something.

Take Frequent Breaks throughout the Day

If the class schedule allows, try to build in at least 1, ten minute break every hour.

Use this break for a short physical activity to get some energy out (examples: 10 jumping jacks, wall pushups, quick sprints up the stairs)

Avoid electronics during this time

Check- In with Kids Frequently

Ask how they are doing throughout the day. Consider creating a nonverbal system to communicate need for assistance. This could be a colored cue card your child puts out when in need of support.

If they are stuck, don't give them answer but help them create a plan to find the answer by asking leading questions. For example: How would you start this? Where are your notes from when you learned this?

Kids with EF difficulties often struggle to organize their thoughts sometimes causing them to miss the first steps of the problem- this is what you can help them find.

Reinforce the effort not the performance: Praise your child for their work ethic and perseverance. You can say, "Nice work!" or "I'm proud of how hard you are working!" to highlight their effort without connecting it to the outcome of their performance. Reminding them of what a "hard worker" they are can help shape their identity as someone who tries even when it's hard. It is the persistence and resiliency that we are trying to reinforce rather than the outcome of a particular grade or performance.

Reinforcing Behavior

Connecting action with consequence is something that take time and experience. When kids make mistakes the most effective way for them to learn from those mistakes is to experience a natural and logical consequence of that action. Allowing the child to experience the natural consequence is a challenge for many parents as it can be distressing and messy. It is, however, a

highly effective learning strategy for children and offers the opportunity to develop self-efficacy and esteem, as well as reinforcing the behavior you are looking to encourage. Examples of natural consequences include having to clean up the mess they made, apologizing for hurting someone's feelings, loss of use of the thrown toy, taking age-appropriate action to repair something that was damaged in a tantrum, etc. Be careful to consider the child's age and developmental level when looking for natural consequences - these are not punishments, but the natural outcomes of the child's mistake.

If you are interested in using a reward system, be clear about what you are rewarding. The more specific the behavior, the more successful the reward system will be. "Being good" is unlikely to be an effective or long-lasting reward system, while "Putting my backpack on the hook" will have more longevity and likelihood for success. Rewards are more effective than punishment to motivate a kid to change their behavior.

Reward systems can be as simple as a token for each day of the week a specific target behavior is completed (which can then be exchanged for a reward).

Talk with your child to figure out what reward they want and then determine how many tokens it will cost.

Use Penalties Effectively

As mentioned above, it is usually most effective for children to learn through natural consequences rather than by penalties or punishment, however this takes time and experience and requires consistency from the adults which can be a challenge, particularly during pandemic learning. Many parents feel they must have a line to hold for egregious acting out. Consider the reason for the penalty and if a natural consequence would be a better fit for the situation. If you do feel you must set a penalty be careful not to overextend the penalty - it is important to take a moment to collect yourself and not dole out the penalty in a moment of distress. Rather, pause and breathe. Think about what you are trying to teach and communicate with the penalty and use that as your guide. Remember penalties can be added not just subtracted. For example-instead of taking something away- add another task- clear the dishes from the table.

Mindfulness

Mindfulness is a fancy way of saying slowing our brains down to be fully present in the here and now. It can be really helpful for kids who struggle with inattention or hyperactivity because it trains the brain to focus. The traditional way of using mindfulness is to use breathing and imagination, however this can be tricky for kids with hyperactivity, or just basic wiggliness. There are body based mindfulness activities that can be just as effective. These include walking, swinging, jumping, and swaying. When you combine these activities with a guided relaxation script (see below resources list for apps that can provide these scripts) the impact is enhanced. Ocean Breathing is an example of mindfulness: a skill to help calm down your mind and body from moving too fast

Close your eyes and imagine ocean waves. Each wave crashes onto the shore and then gently rolls back into the ocean

Breathe in slowly through your nose. Imagine the sound of breathing in as a wave rolling back into the ocean

Put your lips together like you are blowing through a straw, and slowly breathe out. Imagine the sound of breathing out as an ocean wave crashing onto the shore.

Keep breathing in through your nose and out through your lips, imagining ocean waves. Practice for 1 minute.

Problem Solving 101- do this collaboratively with your child to help them plan & organize Problem Solving means coming up with new ways to deal with challenges. Sometimes you have to try a bunch of different solutions before finding what works best.

- 1. Clearly explain the problem (example: I keep losing my homework before turning it in)
- 2. Think of a few different ways to solve the problem (example: 1. create a special folder for my homework. Homework "to do" goes in the left pocket, "completed" homework goes in the right.
- 2. Have a grown-up review homework and put it in my backpack).
- 3. Pick your favorite solution and try it for a few days. If it isn't working, try making changes. (Example: I tried the homework folder first. One day I forgot the folder at home, so I made a rule that it always stays in my backpack.)
- 4. Review if the solution worked. If it did, great! If not, try one of your other solutions.

Resources:

Craig Canapari, MD: How Much Sleep Do Kids Need https://drcraigcanapari.com/how-much-sleep-do-kids-need-with-bonus-grown-up-info/

Stop, Breathe & Think - Kids! https://www.stopbreathethink.com/kids/

Headspace - Meditation for Kids https://www.headspace.com/meditation/kids

CHADD

https://chadd.org/when-children-with-adhd-attend-school-from-home-an-experts-tips/

Cognitive Connections - Executive Function Games https://efpractice.com/resources/games

Appendix G

MyHealth Pediatric Behavioral Health Tip Sheet: Grief and Loss

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Grief and Loss Tip Sheet

COVID-19 has caused significant amounts of stress, distress, and worry in the lives of children, teenagers, and families. The extended school closures, cancellations of sports and activities, social isolation from family and friends due to physical distancing efforts, work and recreation restrictions related to the Stay-At-Home order, uncertainty about how long these restrictions will remain in place, concerns about financial security, contagion and illness contraction, and even the death of loved ones who have succumbed to the illness have all contributed to a widespread sense of loss, both existential and concrete, as we all navigate the pandemic.

There are a lot of feelings that loss conjures up - anger, sadness, resentment, confusion, yet the feeling that best captures the experience of loss is grief. It is grief that many of us are struggling to navigate through and it is grief that many children are carrying as well. While this widespread loss is challenging for adults to navigate, it is even more challenging and confusing for children to understand and can be difficult for parents to know how to best support their child through this period of mourning.

Grief is an emotional experience not an intellectual experience. You FEEL grief, you don't ponder it. Adults tend to have well developed emotional control wired into their brains, whereas children have not yet fully developed this capacity for emotional control. When children feel things, they show it in their behavior. Grief is the epitome of this largely because it is such a deep and complicated emotional experience.

It is important to recognize the ways in which kids grieve differently than adults. Some behaviors you may notice in children in the context of grief and loss include:

Rapidly changing moods. Children may quickly shift between moods - being sad about missing Grandpa one minute to playing happily the next. This reflects a primary coping mechanism in childhood and is the child's way of preventing them from getting overwhelmed.

Regressed behavior (this may include aggressiveness like biting or hitting)

Toileting accidents (daytime and nighttime)

Behavioral dysregulation (tantrums)

Older children may become more irritable or withdrawn, or alternately may be clingier and seek out more attention.

Children of all ages may begin to act in ways that demand attention because of the intensity of the behavior.

For many of us it is easy to notice the obvious sources of grief and loss. When a loved one has been ill and died, the loss and grief is clearly recognized. The death of a loved one in the context of the pandemic is complicated by the subsequent loss of the familial connection during the course of the illness, the death and by the lack of a traditional funeral or other mourning ritual. Saying goodbye from afar robs us of the support we crave at a most vulnerable time.

There are many other losses that children and teenagers are mourning that are important to note as well. These include, but are not limited to:

Loss of daily routine. Routines are organizing and soothing for kids, without them things can feel 'just not the same'. Beyond the schedule is the routine of putting things away in your cubby, finding your spot in the cafeteria, saying hello to the bus driver, or chatting with the cafeteria worker. Routines are the rhythm of life and help us feel connected to ours.

Loss of social connection. Kids may be able to video chat, text, or connect via social media yet these are not replacements for face to face interactions with family, friends, teachers, and classmates in which shared experiences occur and nonverbal communication conveys meaning and tone. In addition, many children are not able to visit with extended family members and may be missing the feeling of snuggling in grandparents arms, or cuddling with aunts and uncles, or playing with cousins.

Loss of activities. Many kids had their spring sports seasons cut short, or cancelled altogether. Spring theatre productions were cancelled in most high schools. For some, this may have been something they were looking forward to all year, and for others it may have been another source of connection to friends that is now no longer an option. For children who have had birthdays during the Stay-At-Home order parties that were planned ahead of time are now cancelled. Loss of milestone moments. For kids in transitional grades, spring semester brings many milestone and coming-of-age moments which will not happen. There are moving up events in elementary school, milestone field trips in middle school, and major events in high school like prom, senior internships, and even possibly graduation ceremonies that have been, or are anticipated to be, cancelled.

The first step toward supporting your child in their grief is recognizing your own. Your kids know you and will be able to tell if you aren't being truthful about your own pain. There is no need to share everything, after all they are still kids! But be authentic with the emotional

experience by saying something like, "I've been feeling really sad about the fact that we can't go play with our friends, even though I understand why, it's still really really hard." Or "I miss Grandma a lot too and wish we could go play at her house. That's why we are doing everything we can to be safe, so we will be able to go back and play with her as soon as we are able" or "I was bummed for you when I heard that prom was cancelled, this really stinks! Want to talk about it?"

Giving kids a space to talk about their feelings allows them the opportunity to explore the complicated aspects of grief, and offers a space of shared emotional experience which eases the burden for you both. Remember that it is expected and normal to feel fear and sadness right now. Your child is no different and is likely feeling these things as well.

When talking with children about their feelings, it is important to consider the source of their grief. If you have had a loved one die, consider the age of the child to determine how much information to provide. Generally it is best to answer questions rather than offer information blindly. When doing so, be sure to answer the question that was asked, not the question you THINK was asked. Try not to read into the question, instead answer with clear and simple responses. Be direct and avoid using euphemisms, which only cloud one's ability to cope effectively with challenging emotional subjects. If you indicate that Grandpa died in his sleep, bedtime may become a very scary experience for your child.

Young children tend not to understand the permanence of death and harbor beliefs about the loved one coming back as if from a vacation. Older children will understand that death is forever but may have other questions about the cause and reason for the death.

In the context of COVID-19 and given the tendency for young children to be quite literal in their understanding of the explanations of death, you may want to consider how to approach explaining the death of a loved from COVID-19. Children may worry that they may contract the virus and die, or will become ill from some other virus and die. Instead of saying that your loved one got sick and died, you can state that since this is such a new virus there is no vaccine to prevent it and no medicine to treat it effectively. Explain that your loved one was so very sick with this new virus that the doctors were not able to use medicine to help like they usually are when people get sick. That since it is such a contagious illness your family is doing everything it can to keep everyone as safe as possible. It will also be helpful to mention that many people who get sick with COVID-19 recover along with the fact that not every illness makes everyone this sick, and not everyone with COVID-19 gets so sick that they die. Highlight the precautions you and your family are taking.

Again, answer as clearly as you can with honest information. When you don't know or can't say tell your kids that. Being truthful and authentic is the most important piece of this task.

Coping with grief is as unique as the individual experiencing it. There are some helpful ways to provide support to a grieving child:

Talk about your feelings. Offering opportunities to express emotion is critical to the processing of grief. This can take the form of verbal expression, but can also be done through journaling,

shared journaling (whereby the child writes an entry, the parent responds, and so forth), texting, music or artistic expression.

Identify a goodbye ritual. This is particularly useful in the case of a death, especially in the absence of a traditional mourning ritual. Memory boxes, tree plantings, and scrapbooks are all helpful methods of saying goodbye to a loved one. There is no one way to say goodbye. Find what works for you and your family.

Be truthful with your kids about the facts about COVID-19. Speak in plain language, highlighting the actions that we can all take to increase our health and safety. Fear is a normal reaction to the pandemic, but it will be worsened with confusing or inaccurate information. Create an alternate version of lost experiences. This can be useful as a replacement of sorts for cancelled activities or events. Zoom dance class, Dry Dock swim lessons, virtual cruises, are all creative ways to have a virtual replacement for a cancelled event. Many theatre groups are hosting virtual productions of their spring musicals as a way for the teenagers to feel a sense of completion for the work they have put in to the project and offers a way to reclaim a sense of normalcy. Additionally, writing letters to family members, doing regular video chats with friends or family, having virtual story time with grandparents, are all options for how to recreate social connection within support networks but without physical contact.

Provide consistency and routine. As discussed above, routine is organizing and soothing for kids. Routines have also been largely lost as a result of the pandemic restrictions. To the extent possible try to develop a routine for your household. This does not have to be highly regimented or structured, but it does need to be predictable in order to be helpful. If there are opportunities to recreate routines that your child had at school (like calendar time, or having a story read aloud during snack time) build those in if you are able. This will enhance a sense of order and normalcy for your child and the entire household.

Start a daily gratitude practice. This can be as simple as going around the dinner table having each family member make note of one thing they were grateful for that day. This simple shift of attention can help to counteract some of the grief and pain we are all carrying.

Remember that these are little people with big feelings who are confused about why their world is turned upside down. This will take time for everyone to heal and recover, and each one of us will have our own path to light. You can help offer guidance and support to your children by continuing to provide love and compassion. Be patient with yourself, and with them.

CDC Fact Sheet - Spread Facts Not Fear https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/share-facts.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fshare-facts.html

National Alliance for Grieving Children: Responding to Change and Loss Workbook https://indd.adobe.com/view/924b5436-fca0-4a15-901a-9233134766e4

The Grief Recovery Method: How to Talk to Your Kids About Coronavirus https://www.griefrecoverymethod.com/blog/2020/03/how-talk-your-kids-about-coronavirus

Our House Grief Support Center: When Someone Dies of COVID-19 https://www.ourhouse-grief.org/grief-pages/grieving-teens/when-someone-dies-of-covid-19/

The Dougy Center: National Center for Grieving Children and Families https://www.dougy.com

Below are several books related to death, loss and grief that are appropriate for children

The Goodbye Book, by Todd Parr

When Someone Very Special Dies: Children Can Learn to Cope with Grief, by Marge Eaton Heegard

The Purple Balloon, by Chris Raschka

The Funeral, by Matt James

The Invisible String, by Patrice Karst

Where Are You: A Child's Book About Loss, by Laura Oliveri The Hugging Tree: A Story About Resilience, by Jill Neimark

A Terrible Thing Happened, by Margaret Holmes

A Little Spot of Patience: A Story About How to Enjoy Waiting, by Diane Alber

Appendix H:

MyHealth Pediatric Behavioral Health Tip Sheet: Return to School

IMPORTANT INFORMATION FOR ALL PATIENTS

If you are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team.

You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication as prescribed. Contact your PCP or behavioral health prescriber before making any changes.

Return to School 2020-2021

Here we are, preparing to head into a new school year. Regardless of if your district decided to do an all-remote, hybrid, or in-person model you and your child are sure to have plenty of feelings about what is going to be a different and interesting year ahead. Below are some tips for how to handle the transition back to school for a hybrid/in-person model, as well as how to navigate various aspects of reentry into the world.

This year, the first day has been pushed into the middle of September which has highlighted how different this academic year will be - even though most school aged kids are rejoicing in the extra few weeks of summer break! First day jitters are now combined with uncertainty about how to navigate being around larger groups of people, seeing adults outside our family, wearing masks for extended periods of time, and other things related to pandemic learning. Families are waiting with bated breath to see what the schedules will look like for remote learning and hybrid models, while everyone tries to figure out how to fit a classroom into their house.

It will be important to lean on your support network so that the stress and distress you, as parents, may be feeling is managed and not shared too much with your children. The way in which you talk about school will set the tone for how your child(ren) will feel about school.

How to Set up a Learning Space at Home

Some parents may be wondering how to transition their "summer home" environment into a "classroom environment." Don't stress too much about this aspect of remote learning because

you are not expected to create a classroom in your home that mimics exactly what it's like in school for your children. Here are some tips and ways you can create an easy and fun(!) remote learning environment right at home:

Create a clear school space at home (not the bedroom if possible). Consider other areas of your home to set up this work space: dining room, living room, spare room, or kitchen. (Generally the less overlap between work and sleeping space the less disruption you can expect to sleep patterns and routines!) The more that tasks can feel separated the easier the transitions will be.

If possible, create the space away from TV or other distractions. TV or break time can be built into the day when kids aren't requited to be logged in.

Make sure there is enough table or counter space for the children to place their materials and spread out.

Have chairs set up ahead of time for your child to sit and also one for you to join your child in case they need help with something.

Develop a realistic, flexible routine that is task based for older kids, time based for younger kids. Use visual cues and signals - develop a routine for remote learning to help everyone 'get into set' for school. (These could be as simple as different colored construction paper signs to signal work time versus break time; or you and your child could make "School Zone" posters that get hung up after breakfast to cue the start of the school day). Kids of all ages benefit from visual reminders and it also is a connection to their school routine.

Consider setting up a chalkboard or dry erase board where you can write or draw out the schedule for each school day. Make it fun and add pictures or stickers!

Ask your kids what they might like to have in their school space, have them help and be involved in the school set up! They might be more invested and excited about being in their school space if they have a chance to help create it.

Routines, Routines!

Talk about how school at home will be different but it will also still be school - don't forecast out too far (no talking about 'in spring it will be better'), focus on this is how we are doing it for now. Everyone is focused on keeping each other safe and we will do our part too. If we don't talk about what could or should happen in the future, it can help to keep our kids (and ourselves) present and focus on what we have to do now as opposed to in the future. Focusing on the present moment can also help to reduce anxiety about what may come in the future! Keep as many routines the same (use the backpack for storage; pack a lunch in lunchbox; get dressed for school each morning). Continue on with morning routines as you would if your child had to go in person to school (get up around same time every day, brush teeth, have breakfast, get dressed, check to make sure they have homework, etc.)

Start sleep schedule adjustments now since we have a few weeks until school actually begins, this will make it easier for your family to adjust to earlier wake times come beginning of school. There are links below to Dr. Craig Canapari, a pediatric sleep medicine specialist, with helpful information on how much sleep is appropriate and necessary for children, teenagers and adults. Practice extended mask wearing for kids going to school for hybrid (while watching tv, around the house, during bike riding, going for walks, while reading a book, etc.) This can help them adjust to wearing a face covering for longer periods of time and can also reduce worry thoughts

about having to wear a mask (they can see that they can still breathe even when wearing a mask for longer periods!)

Staying Connected to Others...and Each Other

As we enter into another school year, it continues to be important to stay connected to family and friends (whether virtually or through proper social distancing). This may be more challenging for children who have been isolated from people since March and it is not unexpected to see apprehension or nervousness about reconnecting with friends and peers. Finding ways to safely have social interaction will be important to seek out to the extent that you are able. Finding ways to reconnect with your child and within your family is equally important. Here are some general tips about moving into a new school year and how you and your family can stay connected to others and each other:

Schedule times throughout the week to see friends or family online or outside. If scheduling a video meetup, consider the age range of the kids involved. You may want to structure the date somewhat with an activity to help maintain the focus and keep stress for the adults at a minimum. If arranging to see others in person, be sure to keep safety considerations in mind: remember to stay at least 6 feet away and wear your mask at all times. Practice proper hand washing techniques after seeing others to protect you and your family.

Consider developing new weekly rituals that help to mark the passage of time and mark the transitions between weekday and weekend. Examples include: Friday night celebrations, ice cream for dinner, pajama day, Saturday night living room campouts...whatever makes your family's heart sing.

Try to build in outside time every day. Connection to nature is intrinsically resiliency building and a proven source of stress relief for everyone. Most remote learning plans include breaks during the day for movement and screen-free time - this is your chance to go outside! If there are other kids in your neighborhood, consider scheduling an after-school running race or hopscotch tournament so that the kids can play together but still have physical distancing while getting physical activity outside.

As much as you can, try to boost calming rituals and routines to help you and your family get into the habit of self-care. Walking, yoga, and mindfulness activities are all simple ways to build in calm to a chaotic day. For kids who have been sitting all day, consider jumping or swinging as more active versions of mindfulness.

Wherever possible, bring joy and playfulness into your life. Make time for dance parties, or snuggle-fests, family joke time, or opportunities for silliness. Humor and joy are wonderful antidotes to stress.

Limit the amount of news and social media that is consumed in your home. Be mindful of the media your children are consuming and to the extent that you are able, limit their media to age appropriate content.

Secure Your Own Mask

It is also critically important that you take steps to care for yourself. Children rely on their parents for evaluating how to react and respond to the world around them. If you are feeling overly burdened by consumption of news media and feeling fearful about COVID-19, or

reopening of schools, as a result, it is likely that the primary mood in your household will be similar. This is not to make you feel worse, instead it is a gentle reminder that you are important too and as your child's parent, you must take care of yourself first so that you will have adequate emotional and mental reserves to care for the rest of your family. Much like in the airline safety speech, you must secure your own mask before helping others. Only this time it isn't oxygen, it's an active, consistent, and persistent reminder to yourself that you are doing the best you can. Taking care of yourself is part of this process.

The secret is that by taking care of yourself, you ARE taking care of your kids. Not only are you modeling healthy coping skills but also because of a concept known as co-regulation which suggests that children and parents have a symbiotic relationship and the emotions of one impact the emotions of the other. Essentially, the idea of co-regulation is that if you stay calm, your child will calm. Alternately if you get stressed, your child will get stressed. This is why when you take the time and space to take care of your emotional needs, your resiliency will expand AND your child's capacity for resiliency will expand. Gotta love a two for one deal!

It is also important to remember that now that some restrictions have loosened their grip on society, there are opportunities to engage in certain activities outside that can improve mood and overall well-being (just remember to always wear your mask!) For example, you might consider taking a walk or jog once per day in order to have a moment to yourself. Exercising can improve mood, increase energy, jump-start your metabolism, and give you instant stress relief.

Who Wears Masks? Superheroes!

As kids are going back to school the new normal of wearing a mask may be a difficult process for them to understand. In general it will be important to validate their frustration and irritation while also gently yet firmly reminding them of the need to continue to practice wearing masks. Many kids, especially younger ones may be hesitant or unsure but parents can help ease this feeling by trying to make wearing masks more normal and even fun.

There are multiple ways that parents can help kids get used to/more comfortable wearing a mask Modeling mask wearing will go a long way toward normalizing the behavior. Who wears masks? My whole family! If everyone in the family is wearing their masks when at home it becomes a normal part of the routine and an expected part of the attire - socks, shoes, pants, shirt, mask. You can explain that it is a rule for us to wear a mask. Relating it to other rules for clothing can be helpful (eg: "we have to wear shoes outside, in stores, and in school, for now it's a rule to wear face masks").

Teach your child how to properly wear one and how to take it on and off. This will allow the child to understand what it is like wearing a mask, but allow them to do so in the comfort of their own home. Again, practicing as a family normalizes this process and helps all of the children learn together and teach each other.

Look for masks that allow the child to personalize it in any way. This can include picking their favorite color or character on it. But if those are hard to find you can get ones that the child can decorate with markers and stickers. Be sure to have several on hand and a system for transporting them to and from school. Lanyards can be very effective mask holders.

For younger children, masks can be incorporated into their play time. This can be done in several ways. Masks can be put on their stuffed animals or toys (you can even find doll-sized masks!). And playing doctor or nurse during playtime while wearing their mask.

Chances are your child is going to have a lot of questions, and feelings, about why they have to wear a mask all day at school (and any public place they go). It is important to make space for them to talk about how they are feeling and validate their perspective but try to keep a positive outlook and explain to them in ways that they would best understand for their age.

Show your child that everyone is wearing masks by pulling up pictures of people they might know with masks on and even people they don't know. You could make it a game to try to guess the familiar people based on visible parts of the face only.

We all read emotions primarily by facial expression, much of which is covered when wearing a mask, making it harder to read a person's nonverbal communication cues. This can be particularly challenging for young children. Explain that even though your face is hidden (like a superhero!) friendly smiles are still underneath the soft fabric of the mask. Practice looking for smiling eyes if you aren't able to use clearview masks.

Masks can be uncomfortable, hot, or itchy, especially when they have to be worn for a long period of time. If your child is complaining about how their mask is uncomfortable maybe try several different styles. It might take some trial and error to find one that your child likes. Again, it will be important to acknowledge that it is in fact uncomfortable to wear masks for prolonged periods of time, however it will also be important to highlight both the safety reasons ("germs can go from our body to someone else's when we cough, sneeze, spit, or breathe too close to someone else and a mask helps keep our germs to ourselves") and the benefits of mask wearing (we get to be in school with some of our friends).

It is also important to explain to your child the proper steps when wearing their masks. If they understand why they shouldn't touch their face and why it has to go over both their mouth and nose they might better remember to do these things.

Initially, it will be especially important to use praise and rewards if your child is wearing their mask properly during the long school days to help reinforce their efforts and prosocial behavior. With older children and teenagers it will be important to highlight the way in which they are supporting their community and demonstrating greater maturity by being able to effectively and independently wear their mask when around others.

Depending on how old your child is, another way to normalize masks is by having coloring sheets where the character is wearing a mask or by singing songs. There are printable coloring pages on the below websites and an original song by a Massachusetts based musician geared toward children.

https://cookchildrens.org/coronavirus/protect/Pages/kids-wearmasks.aspx https://lovewoolies.com/blogs/news/kids-wearing-face-masks-coloring-page https://www.youtube.com/watch?feature=youtu.be&v=4-LNfVwvMuI&app=desktop

Fun Face Masks:

https://www.crayola.com/faq/online-shopping/does-crayola-sell-face-masks-for-kids-parents-and-teachers/

https://shopcamp.com/products/camp-kids-mask-4-pack https://cubcoats.com/products/2-pack-protective-face-masks https://www.shopdisney.com/face-

masks/?start=0&sz=24&LSID=8842431%7C13227368%7Ckidsfacemasks%40%40xid%40%25 fr1595431835943gbf&CMP=AFL-

AffLSGen_5126067&att=LSGenAffl&EFC=224510&cjevent=b5eee515cc3011ea825a01a60a24 060f

Fun Face Shield:

https://www.thevisionvisor.com/shop

Additional Resources:

Massachusetts Department of Elementary and Secondary Education Guidelines on Remote Learning

http://www.doe.mass.edu/covid19/learn-at-home.html

http://www.doe.mass.edu/covid19/remote-learning/?section=resources#view-list

Homeschooling ADHD

https://chadd.org/wp-content/uploads/2018/06/ATTN_12_14_HOMESCHOOLING.pdf

Learning During COVID19 - Resources for Home Learning

https://www.schoolentrancetests.com/2020/03/online-resources-home-learning-during-covid-19/

American Psychological Association: Tips for Quarantined Parents https://www.apa.org/topics/covid-19/quarantine-parents-tips

Seven Guidelines for Parents Who are Divorced/Separated and Sharing Custody of Children During COVID

https://www.mediate.com/articles/Co-ParentingDuringCovid-19.cfm

Cosmic Kids Yoga and Mindfulness YouTube (appropriate for young children) https://www.youtube.com/user/CosmicKidsYoga

A 6 Minute Mindful Progressive Muscle Relaxation (appropriate for older children and teenagers)

https://www.youtube.com/watch?v=9x3tl81NW3w

Craig Canapari, MD: How Much Sleep Do Kids Need

https://drcraigcanapari.com/how-much-sleep-do-kids-need-with-bonus-grown-up-info/

Appendix I

MyHealth Pediatric Behavioral Health Tip Sheet: OCD

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Obsessive Compulsive Disorder (OCD)

The majority of the population is experiencing some measure of anxiety in the context of COVID-19. There is a lot that is different about our everyday life, and not much that is known about when we can return to familiar routines. These changes can be hard to tolerate, or feel scary, or make us feel insecure in our world. When we are not sure what is going to happen next, our brains try desperately to figure it out and this can lead to something called hypervigilance (a fancy way of saying being on high alert). When we are hypervigilant, we may notice every little thing in our surroundings and ourselves. We may start to notice every time someone coughs, or how many bottles of hand soap we have. Alternately we may start to be extra aware of slight changes in our own bodies, like if our ears start to tingle, or we have a slightly scratchy throat. This level of alertness is exhausting mentally and physically and takes a significant toll on our bodies and brains. When it happens in the context of a family, hypervigilance and increased anxiety in one member can raise the level of arousal in other members of the family making for a very stressed out household. For those who struggle with Obsessive Compulsive Disorder (OCD) hypervigilance may exacerbate those symptoms, or cause old symptoms to flare up anew.

Anxiety is the brain's way of protecting us from danger. We have an alarm system in our brain that helps warn us of danger and when this system is activated it propels our body to respond in one of three ways: fight(get angry), flight(run away/avoid), or freeze(deny). Our bodies prepare for these reactions with physical symptoms including increased heart rate, increased breathing rate, elevated body temperature, digestive restriction (which leads to belly aches), muscle tension (which leads to headaches), and simplistic or overly rigid thought patterns. When we are faced with imminent danger to our survival these responses help us avoid the danger and live to tell the tale! In times of perceived danger the alarm system misfires and we misinterpret signals in our

environment causing us to feel anxious. Our Thinking Brain gets turned off and Feeling Brain takes over making us feel like things are super intense and scary even though in reality things are just highly uncertain and unpredictable.

In the case of OCD, our thoughts become irrational and obsessive, like a song that is on repeat compelling us to act in such a way as to rid ourselves of that thought. In the context of the pandemic, there may be a focus on hygiene or hoarding of supplies, however you may find that new obsessions and compulsions unrelated to the pandemic emerge or that old obsessions and compulsions return.

Core features of OCD

Intrusive obsessive thoughts that get stuck in your head

Feeling compelled to do certain things to lessen anxiety and/or to get rid of obsessive thoughts Intense anxiety accompanied by trying to ignore or resist obsessions and compulsions Black-and-white thinking, including perfectionism or needing to do things "just right" Hoarding behaviors, especially around collecting cleaning products and other products that have been difficult to obtain during COVID-19

Some emotional symptoms of anxiety and OCD

Feelings of apprehension or dread

Feeling tense and jittery

Restlessness or irritability

Anticipating the worst

Increased and overwhelming fears about the future

Fear or worry about your health or the health of your loved ones

Feeling numb or that nothing matters

Sense of helplessness/hopelessness

Some physical symptoms of anxiety and OCD

Pounding or racing heart

Shortness of breath

Upset stomach

Frequent urination or diarrhea

Sweating, tremors, and twitches

Headaches, fatigue

Changes in sleeping or eating patterns

Difficulty sleeping or concentrating

Increase in drug or alcohol use

Worsening of chronic health problems

Worsening of chronic mental health problems

While it is expected to experience increased anxiety in the midst of the pandemic, there are things you can do to not feel overwhelmed by your stress and anxiety. Drawing upon your existing coping skills and learning new ones will help you to manage your symptoms. One way to remember your coping skills is to use the acrononym EASE:

Education: Think about what you know about anxiety and OCD and use that information to empower you! Armed with knowledge, it will be easier to differentiate between a rational

thought and an OCD thought. Use one of the self-help books listed below or an informational website.

Address Accommodation: Try to limit the accommodation (or 'giving in' to) of OCD behaviors to prevent them from becoming worse. Ask yourself if you're doing things to change your routine or daily habits for the sake of OCD. Also pay attention to whether you're asking others to change their routines or behaviors to accommodate the OCD.

Skills: Use your relaxation skills to help manage your anxiety. Use cognitive re-framing (seeing it from a different perspective) or de-fusion skills (breaking apart the tangle of thoughts that go into one obsessive thought or worry) to help manage obsessive thoughts and worries.

Exposures: This is the most important intervention for OCD and should be addressed with your clinician. How can you challenge yourself to face the stress of not engaging with an OCD behavior? You might consider setting up a series of exposures for any obsession or compulsion that's troubling you. You could also complete exposures that you have completed in past treatment.

There are other things to keep in mind as you navigate anxiety in the context of COVID-19. All of these will help to enhance a sense of agency and control which will in turn serve to reduce the intensity of your distress. These are challenging times and some distress is likely to persist, however the goal is to limit the intensity so that you and your family do not become overwhelmed by these feelings.

Limit exposure to news and social media, particularly when with young children Develop a regular, somewhat predictable routine. Even if things change day to day, knowing what is going to happen next will go a long way to minimizing a child's anxiety and will help the family unit function more effectively.

Be sure to have a consistent sleep schedule. Anxiety can often disrupt sleep habits and this may be further complicated by the lack of regular structure. Disrupted sleep can further exacerbate anxiety leading to a vicious cycle. To the extent possible try for a consistent bedtime and wake time.

Offer regular opportunities to discuss the changes and restrictions related to COVID-19 with your child(ren), and allow space for questions. Answer with age-appropriate explanations, leaving out graphic details. Simple explanations will suffice for young children, while older children have the cognitive skills necessary to understand more information. See the links below for helpful ways to discuss COVID-19 with children of different ages.

Keep track of things that are the same, not just things that are different. Noticing things that are the same helps remind kids (and adults) of familiar routines and experiences. It can be quite grounding and reassuring to see all the ways that their life is the same as 'before'.

Get outside daily if possible. Engaging your body will help to release the built up stress and prevent things from accumulating. Nature is intrinsically calming, and movement in open air will help to combat any burgeoning feelings of being trapped or restricted.

Connect with family members and friends through video calls, phone calls, texting, emails, and pen pal exchanges. We can still feel together even if we have to be physically apart.

You will find even more skills, webinars, and support groups at www.iocdf.org (International OCD Foundation).

This is a stressful and anxiety provoking time for all of us, so it makes sense that you may be feeling anxious in a way that you haven't before. Be gentle with yourself and your family members as you navigate this unlit path together. Your continued love and support will be a light along the way for your child.

CDC Fact Sheet - Spread Facts Not Fear

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/share-facts.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fshare-facts.html

CDC: Children and COVID-19

https://www.cdc.gov/coronavirus/2019-ncov/faq.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fchildren-faq.html

WHO: Helping Children Cope with Stress

https://www.who.int/docs/default-source/coronaviruse/helping-children-cope-with-stress-print.pdf

National Association of School Psychologists: Parent Resource on Talking to Children About COVID-19

https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-climate-safety-and-crisis/health-crisis-resources/talking-to-children-about-covid-19-(coronavirus)-a-parent-resource

Talking to Children About COVID-19

https://parenting.nytimes.com/childrens-health/coronavirus-kids-talk?module=latest-filters-feed&action=click&rank=1&position=

National Child Traumatic Stress Network: Parent/Caregiver Guide to Helping Families Cope with COVID-19

https://www.nctsn.org/resources/parent-caregiver-guide-to-helping-families-cope-with-the-coronavirus-disease-2019

Tips for Caregivers on Infectious Disease Outbreaks

 $https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-01-01-006-508.pdf$

Resources for Supporting Children's Emotional Well Being During COVID-19 https://www.childtrends.org/publications/resources-for-supporting-childrens-emotional-well-being-during-the-covid-19-pandemic

Centers for Disease Control: Helping Parents Manage Stress and Anxiety https://www.cdc.gov/coronavirus/2019-ncov/prepare/managing-stress-anxiety.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fcoping.html

National Child Traumatic Stress Network: Age Related Reactions to Traumatic Events https://www.nctsn.org/resources/age-related-reactions-traumatic-event

New York Times: Helping Anxious Kids

https://www.nytimes.com/2020/04/01/parenting/coronavirus-help-anxious-

kid.html?algo=identity&fellback=false&imp_id=469116562&imp_id=15916700&action=click&module=Smarter%20Living&pgtype=Homepage

NPR: Illustration to Help Describe COVID-19 (appropriate for children aged 12y and older) https://www.npr.org/sections/goatsandsoda/2020/02/28/809580453/just-for-kids-a-comic-exploring-the-new-coronavirus

Brain Pop video on COVID-19 (appropriate for children aged 6y-11y) https://www.brainpop.com/health/diseasesinjuriesandconditions/coronavirus/

COVIBOOK: A Social Story About COVID-19 (appropriate for children aged 5y and under) https://www.mindheart.co/descargables

As mentioned above, Belly Breathing is the first step to helping settle your brain down from anxiety. Below is an introduction to belly breathing and a fun video

Guided Belly Breathing:

Sit in a comfortable position. You can close your eyes if you like.

Place your hands on your belly button and pretend there is a balloon behind your belly button. As you breathe in imagine you are inflating your balloon until it is nice and round so that your belly expands.

As you exhale, let the air out of your balloon steadily and allow your belly to fall back toward your spine. Let's practice:

Breathe in and fill your belly like a big balloon, nice and round.

Breathe in for a count of 1, 2, 3, 4.

Breathe out and let all the air out of your balloon, 1, 2, 3, 4, 5.

Breathe in again 1, 2, 3, 4.

Out 1, 2, 3, 4, 5.

One more time. In, 1, 2, 3, 4.

And out 1, 2, 3, 4, 5.

Notice how you are feeling and keep practicing!

Sesame Street: Elmo, Common & Colbie Caillat - Belly Breathe with Elmo! https://youtu.be/_mZbzDOpylA

Mindfulness can be a wonderful way to counteract the effects of anxiety and elicit the Relaxation Response. Mindfulness is the act of bringing your attention to the present moment without judgment. There are several ways of beginning this practice, below are just a few:

The Color Game - Pick any color of the rainbow. Then focus on your surroundings and name everything you see that is that color. This helps to focus your mind on your surroundings, not the worrisome thoughts.

The Senses Countdown - Name 5 things you see, 5 things you hear and 5 things you feel (such as my feet on the ground or my hands on my lap). Next name 4 different things you see, hear and feel, then 3 different things you see, hear and feel then 2 and finally 1. This process takes some time (intentionally) and helps bring your focus to the present moment.

Cosmic Kids Yoga and Mindfulness YouTube (appropriate for young children) https://www.youtube.com/user/CosmicKidsYoga

A 6 Minute Mindful Progressive Muscle Relaxation (appropriate for older children and teenagers)

https://www.youtube.com/watch?v=9x3tl81NW3w

Guided meditations for Sleep

Sleepy Cottage

Https://www.youtube.com/watch?v=WOXz6KuwZJ4

Land of the Unicorns

https://www.youtube.com/watch?v=g69cyia-aKI

Jason Stephenson - Sleep Meditation Music Channel on You Tube https://www.youtube.com/channel/UCqPYhcdFgrlUXiGmPRAej1

Books are also a great way to help understand and work through anxiety. Below you will find several books that might be useful for you and your family to read together.

Blink, Blink, Clop, Clop, Why We Do Things We Can't Stop by E Katia Mortiz & Jennifer Jablonsky

Wilma Jean the Worry Machine, by Julia Cook

Jack's Worry, by Sam Zuppardi

The Don't Worry Book, by Todd Parr

Up and Down the Worry Hill, by Aureen Pinto Wagner

What To Do When You Worry Too Much, by Dawn Huebner

Stella Rae the Brave, by Kevin Henkes

Chrysthanemum, by Kevin Henkes

What to Do When Mistakes Make You Quake: A Kid's Guide to Accepting Imperfection by Claire Freeland

What to Do When Your Brain Gets Stuck: A Kid's Guide to Overcoming OCD by Dawn Huebner

Conquer Your Fears and Phobias for Teens: How to Build Courage and Stop Fear from Holding You Back by Andrea Umbach PsyD

The Anxiety Workbook for Teens, by Lisa Schab

You and Your Anxious Child: Free Your Child from Fears and Worries and Create a Joyful Family Life by Anne Marie Albano and Leslie Pepper

References

Brewer, Alexandra. "EASE Social Anxiety: Parent-Child CBT for Pediatric Social Anxiety Disorder." Order No. 10270839 William James College, 2017. Ann Arbor: ProQuest.

Appendix J

MyHealth Pediatric Behavioral Health Tip Sheet: Parenting in a Pandemic

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Parenting in a Pandemic

Parenting is hard. Parenting in the midst of a global pandemic? Astronomically hard. There has been a steady progression of restriction on daily life starting in early March culminating in Governor Baker's Stay-at-Home order on March 23, 2020. With these restrictions came a shifting of the normal rhythms of life, and for many families it has brought significant disruption and stress.

Many parents were already struggling to meet the competing demands of work, school, social engagement, and extracurricular activities. Those who were struggling before may feel even more stressed now, and those who weren't having difficulty previously are likely now encountering challenges given the constancy of the needs. The majority of parents are having difficulty with some aspect of the pandemic, and it is an expected response to feel worried, sad, and overwhelmed by all of the competing demands.

In March, many parents and families most likely did not think the lock-down orders and changes to daily life would last many months. As our society approaches a new school year and the summer's end, life continues to change daily. Given these changes and the thought that children and families will most likely have to continue to work from home and engage in virtual learning, it is understandable that stress and anxiety levels may rise.

Less IS More

Ironically, with the cessation of external events comes an increase in demands, most of which compete for our time and attention. Parents are most likely going to continue to work from home

come Fall and Winter 2020. Given this, parents are now tasked (again!) with managing the confusing, and, at times, intense expectations of remote learning. They are also attempting to keep up with ceaseless barrage of household chores because everyone is home all the time. They are navigating the stress of how to navigate the newly stressful process of grocery shopping, which has become its own unique pandemic experience. For families who have a child with special needs, the challenges are different and increase based on the intensity of the child's level of services they had been receiving but may not be currently, and the extent to which the child's need impacted their schoolwork and daily functioning. There is also the challenge of how to somehow structure the family day (12-16 hours in most households!) so that everyone has time to get work done, but also has time together without the benefit of a break from each other - ever - and oh yeah...there's this global pandemic that is contributing to escalating levels of anxiety over family member's health and safety, worry about continued access to necessary supplies, sleep disruption, financial strain, and grief. Sigh. Somehow, with less happening we have more to do.

Carry On, Carry On

Before we can try to begin to make things more manageable it is important to recognize that there is no trick to making parenting work in the midst of a pandemic. The idea that there are tips you can follow to help your family 'thrive' during this unimaginably stressful time only contributes to the very stress that is causing families to feel frayed to begin with. This is not a time to thrive. This is a time to make it through. This is a time to build resilience and foster strength through hardship. Resilience is the idea that you carry on doing the best you can despite challenges - through hardship comes growth. It may seem impossible at times to continue on; that is understandable to say the least because you are only human! You were able to adjust to all of the changes in March with even less information than we have now. With the school year looming, you might be wondering how you can do it all again. Remember, you did it before and you can do it again! It won't be perfect, but nothing is perfect in this world, right?

Thriving may be possible for some, but it is certainly NOT the goal and it is not in your best interest to hold it up as one. This may be a real struggle for some parents since parenting can be a competitive sport in which some are looking for, or afraid of, feedback from the crowd more than others. If that is the case for you, this is your opportunity to take a knee and set aside all the inner judgement about what you believe you should or shouldn't be doing. Do what you can to make it to tomorrow, reflect with heaping doses of self-compassion at the end of the day and make adjustments. Repeat.

Secure Your Own Mask

It is also critically important that you take steps to care for yourself. Children rely on their parents for evaluating how to react and respond to the world around them. If you are feeling overly burdened by consumption of news media and feeling fearful about COVID-19, or reopening of schools, or return to work, as a result, it is likely that the primary mood in your household will be similar. This is not to make you feel worse, instead it is a gentle reminder that you are important too and as your child's parent, you must take care of yourself first so that you will have adequate emotional and mental reserves to care for the rest of your family. Much like in the airline safety speech, you must secure your own mask before helping others. Only this

time it isn't oxygen, it's an active, consistent, and persistent reminder to yourself that you are doing the best you can. Taking care of yourself is part of this process.

The secret is that by taking care of yourself, you ARE taking care of your kids. Not only are you modeling healthy coping skills but also because of a concept known as co-regulation which suggests that children and parents have a symbiotic relationship and the emotions of one impact the emotions of the other. Essentially, the idea of co-regulation is that if you stay calm, your child will calm. Alternately if you get stressed, your child will get stressed. This is why when you take the time and space to take care of your emotional needs, your resiliency will expand AND your child's capacity for resiliency will expand. Gotta love a two for one deal!

It is also important to remember that now that some restrictions have loosened their grip on society, there are opportunities to engage in certain activities outside that can improve mood and overall well-being (just remember to always wear your mask!) For example, you might consider taking a walk or jog once per day in order to have a moment to yourself. Exercising can improve mood, increase energy, jump-start your metabolism, and give you instant stress relief.

Grown-Up Talk and Kid Talk

While it is important to have opportunities for open family conversation about the facts of COVID-19, it is equally important to limit discussion of the impact or possible consequences of the pandemic to adult only times.

When it comes to discussing the very real consequences of the pandemic, including illness, death, loss of financial security, food insecurity, lack of access to necessary supplies, or your own fears and worries, it is critical that these topics are reserved for adult only time. The same applies to all of the uncertainty and rapidly changing landscape with regard to reopening of schools. The consequences of these reopening plans, along with your emotions and thoughts about the teachers and administrators, are best kept to grown up time. Given the time everyone is spending together, it can be hard to limit these discussions to after the kids go to bed, or when they are fully involved in other things and securely out of earshot, but to the extent possible it is best for the emotional well-being of your children, and your family, to keep grown-up conversation with the grown-ups.

Children and teenagers must have a truthful, age-appropriate understanding of the illness and the pandemic in order to feel less confused and scared. Offer regular opportunities to discuss the changes and restrictions related to COVID-19 with your children, and allow space for questions. Answer with age-appropriate explanations, leaving out graphic details. Simple explanations will suffice for young children, while older children have the cognitive skills necessary to understand more information. It is also helpful to allow space for ongoing conversation with your children to be sure that their questions are being answered as honestly as you can. When you don't know the answer, say so and figure out together if it is necessary to find out the information.

That Feeling...Is Grief

You may notice that your children may be acting up in ways that are not typical for them, or are reminiscent of their younger selves. It is not uncommon to see immature or regressed behavior emerge in these situations, as well as acting out or attention seeking behavior. Parents may notice

tantrums, irritability, toileting accidents, oppositional or defiant behavior, increased emotionality and emotional fragility, or even verbal and physical aggressiveness.

There are many reasons this might be happening. Between the changing routines, the loss of connection to friends, the missed activities and events, the stress of remote learning, the uncertainty of the school year to come, and the need for a break from their siblings, many children and teenagers are finding that the accumulating stress is taking a toll. The other contributing piece to the disrupted behavior is a profound sense of loss.

There are a lot of feelings that loss conjures up - anger, sadness, resentment, confusion; yet the feeling that best captures the experience of loss is grief. It is grief that many of us are struggling to navigate through and it is grief that many children are carrying as well. While this widespread loss is challenging for adults to navigate, it is even more challenging and confusing for children to understand. In addition to the more obvious sources of loss, like the death of a loved one, there are many other losses that children and teenagers are mourning that are important to note as well including cancelled summer plans, milestone school transitions, familiar routines and experiences, and physical connection to friends and family.

Supporting your child by talking with them about their feelings, establishing predictability where you can, creating alternate versions of missed events, developing virtual options for connection, and establishing your own goodbye rituals are all ways to help process these feelings of grief.

In addition, given that society has been living through this pandemic for almost 6 months now, it is especially important to continue to process your child's feelings (and process your own, too!). They may have newfound questions or concerns given how long the pandemic has lasted. They may have increased anxiety about the upcoming school year. All of this is normal and it is also normal for feelings and emotions to shift suddenly throughout the "COVID grief process."

Stay Connected

It might feel like it's all too much and you might be feeling like giving up on trying to make it work. While this may feel like the easiest way to make it through this most challenging time, it will only make things more challenging emotionally and could contribute to real difficulties as you eventually transition back to regular life. Despite the fact that there are no tricks, there are strategies to making things feel less overwhelming and insurmountable. Keep these ideas in mind as you find your way through this pandemic, keeping yourself intact emotionally and firmly connected to your children.

Limit the amount of news and social media that is consumed in your home. Be mindful of the media your children are consuming and to the extent that you are able, limit their media to age appropriate content.

It is easy to let sleep schedules slide, particularly in the absence of external structure. Having consistent sleep and wake times will be incredibly helpful for emotional regulation, behavioral control, as well as focus/concentration and mental organization. These sleep and wake times do NOT need to be the same as they were for your typical school and work schedules, however be mindful of having to transition back to those times...and plan accordingly. If you are able to anchor your wake times with consistent meal times you can secure circadian rhythms and

enhance your body's natural routine. There are links below to Dr. Craig Canapari, a pediatric sleep medicine specialist, with helpful information on how much sleep is appropriate and necessary for children, teenagers and adults.

Use visual calendars as much as possible. Kids of all ages benefit from visual reminders and it also is a connection to their school routine. In addition, have visual cues for working time/not working time.

Don't try to do too much and be patient (with yourself and your kids) when things don't go as planned.

Develop a realistic, flexible routine that is task based for older kids, time based for younger kids. If possible have delineated spaces in the home for school/work and play. The more that tasks can feel separated the easier the transitions will be.

Consider developing new weekly rituals that help to mark the passage of time and mark the transitions between weekday and weekend. Examples include: Friday night celebrations, ice cream for dinner, pajama day, Thursday night living room campouts...whatever makes your family's heart sing.

Try to build in outside time every day. Connection to nature is intrinsically resiliency building and a proven source of stress relief for everyone. Most remote learning plans allow for a screen-free break during the day - this is your chance to get outside!

As much as you can, try to boost calming rituals and routines to help you and your family get into the habit of self-care. Walking, yoga, and mindfulness activities are all simple ways to build in calm to a chaotic day. Jumping and swinging are more active versions of mindfulness for kids who have been sitting all day.

Wherever possible, bring joy and playfulness into your life. Make time for dance parties, or snuggle-fests, family joke time, or opportunities for silliness. Humor and joy are wonderful antidotes to stress.

Don't stress about distance learning expectations. Seriously. The emotional well-being of your child is infinitely more important than any academic work they will, or will not, be completing right now. It is worrisome to consider how your child's hard work may be impacted, however in the absence of emotional well-being, no learning will occur and ALL academic achievement will be compromised. Most districts have enhanced their social-emotional supports with the knowledge that many kids will return to school with emotional difficulties. Ask for help before it is a red alert situation. Focus on emotional functioning and academic functioning will be retained. Do as much as you can, seek support when needed, and let go of the rest. Be flexible! With schools reopening with a mixture of full remote, hybrid and full in person learning models, you and your family may have to adjust your schedules and change around where and when you performed certain activities in the Spring. It may also take time to adjust to yet another "new normal." Give yourself that time.

Passion Project

Even with the demands of distance learning and working from home, there is a lot more open time in people's daily life given that all extracurricular activities have been suspended. This extra time offers an opportunity for families to find new ways of connecting. One way of using this time, and building connection, is developing a Passion Project. A Passion Project is an extended activity on a topic of your choosing that allows for exploration and learning. It can be on anything that sparks joy for your family - learning an instrument; researching best ways to garden in your microclimate; learning CPR or ASL; teaching yourselves a new language; writing

a play or musical with original music; learning how to cook from different regions of the world; baking bread by feel; making crossword puzzles...literally anything! If you choose to pursue a Passion Project (or two or three), consider carving time out every day to work on it as a family. It may be that individual members of the family work on the Passion Project independently and then at different points during the week the group comes together to share what they've learned.

There doesn't need to be a set amount of time for the Passion Project - if you are on a time-based schedule, consider setting 30 minutes aside as a minimum for younger children, while older children may be able to spend longer periods of time. It may take up to 2 weeks to complete the Passion Project, but could take longer depending on the level of complexity. Be creative and challenge yourselves!

Passion Projects take time, allow your family to have dedicated space to connect over a shared interest, offer a sense of purpose and an opportunity for families to learn together. In a time of significant loss, Passion Projects offer an opportunity for creation.

Parenting Your Way

Never before have our daily rituals, routines, and rhythms of life been challenged and compromised as much as they have been since the onset of the COVID-19 pandemic. Many of us are working double and triple time just to get through the day. Our parenting will be challenged to grow and adapt in ways we never thought possible. And it WILL grow and adapt. We will all make it through this and will be stronger versions of ourselves (if not more tired). Give yourself the permission and freedom to parent the way that is best for YOU and YOUR FAMILY. Nobody else.

When we make it to the other side we will be faced with a choice. Will we adopt our pre-COVID parenting approach, or will we incorporate some of the new ways we have learned to parent our children, care for ourselves, and connect with our family? Those choices don't have a clear or right answer. There is no should, there is only choice. Trust that you will know how to make the best choice for your family.

Be kind to yourselves.

Resources:

CDC Fact Sheet - Spread Facts Not Fear https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/share-

facts.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fabout%2Fshare-facts.html

American Psychological Association: Tips for Quarantined Parents https://www.apa.org/topics/covid-19/quarantine-parents-tips

Seven Guidelines for Parents Who are Divorced/Separated and Sharing Custody of Children During COVID

https://www.mediate.com/articles/Co-ParentingDuringCovid-19.cfm

Cosmic Kids Yoga and Mindfulness YouTube (appropriate for young children) https://www.youtube.com/user/CosmicKidsYoga

A 6 Minute Mindful Progressive Muscle Relaxation (appropriate for older children and teenagers)

https://www.youtube.com/watch?v=9x3tl81NW3w

Baby Shark "How to Wash your Hands" (appropriate for younger children) https://www.youtube.com/watch?v=L89nN03pBzI&t=2s

Craig Canapari, MD: How Much Sleep Do Kids Need

https://drcraigcanapari.com/how-much-sleep-do-kids-need-with-bonus-grown-up-info/

Guided meditations for Sleep

Sleepy Cottage

Https://www.youtube.com/watch?v=WOXz6KuwZJ4

Land of the Unicorns

https://www.youtube.com/watch?v=g69cyia-aKI

Jason Stephenson - Sleep Meditation Music Channel on You Tube https://www.youtube.com/channel/UCqPYhcdFgrlUXiGmPRAej1

Guided Belly Breathing:

Sit in a comfortable position. You can close your eyes if you like.

Place your hands on your belly button and pretend there is a balloon behind your belly button. As you breathe in imagine you are inflating your balloon until it is nice and round so that your belly expands.

As you exhale, let the air out of your balloon steadily and allow your belly to fall back toward your spine. Let's practice:

Breathe in and fill your belly like a big balloon, nice and round.

Breathe in for a count of 1, 2, 3, 4.

Breathe out and let all the air out of your balloon, 1, 2, 3, 4, 5.

Breathe in again 1, 2, 3, 4.

Out 1, 2, 3, 4, 5.

One more time. In, 1, 2, 3, 4.

And out 1, 2, 3, 4, 5.

Enjoy the sense of ease you may feel.

Sesame Street: Elmo, Common & Colbie Caillat - Belly Breathe with Elmo! https://youtu.be/_mZbzDOpylA

The Hugging Tree: A Story About Resilience, by Jill Neimark

A Terrible Thing Happened, by Margaret Holmes

A Little Spot of Patience: A Story About How to Enjoy Waiting, by Diane Alber

Massachusetts Department of Elementary and Secondary Education Guidelines on Remote Learning

http://www.doe.mass.edu/covid19/learn-at-home.html

http://www.doe.mass.edu/covid19/remote-learning/?section=resources#view-list

Homeschooling ADHD

https://chadd.org/wp-content/uploads/2018/06/ATTN_12_14_HOMESCHOOLING.pdf

Learning During COVID19 - Resources for Home Learning

https://www.schoolentrancetests.com/2020/03/online-resources-home-learning-during-covid-19/

Appendix K

MyHealth Pediatric Behavioral Health Tip Sheet: Routine and Structure

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

Atrius Pediatric Behavioral Health Daily Routine and Structure Tip Sheet

Routine and structure are a part of our daily life. For children and teenagers having a predictable daily routine helps not only with organization but with emotional regulation and behavioral control. Prior to the stay-at-home order, we all had well-established routines in our daily lives. With the restrictions related to COVID-19 have come a marked change to these routines, and the familiar structure of school and work has disappeared.

It can feel challenging to know where to start or how to establish a structure or routine. Whether you have chosen one or not, by now you have probably fallen into something of a routine. This is a good opportunity to evaluate if that routine is effective and if there are places you can enhance this routine to better serve the needs of your family.

Less is More.

When considering how to approach developing, or enhancing, your daily routine first be realistic in your expectations. This is an extremely stressful and challenging time. There is a sense that it should be a time to be highly productive and get to all those put-off tasks and projects, but such a mindset undermines the very real emotional burden we are all carrying. Be patient with yourself, your children, your family and set realistic expectations for your daily schedule. Less is more.

Block It Out

Rather than trying to organize an entire day, block the time into morning, afternoon, and evening 'periods'. This will be easier to keep track of mentally, and will also be familiar to children who are used to such a block schedule at school.

When considering how to fill the 'periods' be sure to include a mix of cognitive, physical and enjoyment activities. That is, space things out to have Work Time (cognitive), Play time (physical), and Choice Time (enjoyment) in each period throughout the day. Having a mix of activities will prevent rapid onset of boredom, is intrinsically regulating for children, allows opportunities for parents to have space to do their work from home (which could overlap with 'school time' for the kids for example), offers stress relief for everyone, and builds in time for intentional connection for families.

Time or Task - Be Sure to Talk

Now that you have the three periods of the day, consider the age of your kids in your family to determine how to proceed with the routine. Be sure to talk with your child about the routine and how your family plans to build the schedule. It is important that kids feel they are a part of the planning process and have a say. This is especially true given the lack of control many people feel in the context of the pandemic.

For younger children use time based scheduling. This means that activities will happen for predetermined lengths of time and the transitions are triggered by the time. The length of time can change each day, or for each activity, but the time is the basis for the movement through the day. (9am is calendar time, followed by Writing at 9:30a, then snack at 10a, and so forth.) Ask your kids what kinds of activities they may be interested in doing, and help them figure out which things they can do on their own versus which ones require more intense adult supervision/support.

For older children and teens task based scheduling is best and allows for greater autonomy in decision making. Task based scheduling, as the name suggests, is organized around tasks rather than time. With time based schedules a child is given a set amount of time to complete an activity. In task based scheduling, the older child/teenager chooses a task to complete during that period and when the task is completed, they are able to move on the next thing in the schedule/routine or choose another task. There is an opportunity to have a discussion with the child/teenager about how they are choosing their tasks and how accurate they are in their estimation of how long it will take them to complete. (It might be that they want to work on their math assignment during their morning work period today and feel it will consume the better part of the morning to complete, but tomorrow they feel they can get that writing assignment done in less time and will then be able to Face Time with friends.

Afterward you can discuss together to see if those estimations were accurate and if any adjustments need to be made moving forward.) These conversations can happen daily, weekly, or as often as necessary. The important part of the conversation is to be sure that the child/teenager feels that THEY have the autonomy to decide what to do, when, and for how long. The discussion is a means to facilitate thinking and independent decision making.

Sleep and Eat

Without the structure of school and work, it is easy to slide on our sleep habits. Having consistent sleep and wake times will be incredibly helpful for emotional regulation, behavioral control, as well as focus/concentration and mental organization. These sleep and wake times do NOT need to be the same as they were for your typical school and work schedules, however be mindful of having to transition back to those times...and plan accordingly. If you are able to anchor your wake times with consistent meal times you can secure circadian rhythms and

enhance your body's natural routine. There are links below to Dr. Craig Canapari, a pediatric sleep medicine specialist, with helpful information on how much sleep is appropriate and necessary for children, teenagers and adults.

Passion Project

Even with the demands of distance learning and working from home, there is a lot more open time in people's daily life given that all extracurricular activities have been suspended. This extra time offers an opportunity for families to find new ways of connecting. One way of using this time, and building connection, is developing a Passion Project. A Passion Project is an extended activity on a topic of your choosing that allows for exploration and learning. It can be on anything that sparks joy for your family - learning an instrument; researching best ways to garden in your microclimate; learning CPR or ASL; teaching yourselves a new language; writing a play or musical with original music; learning how to cook from different regions of the world; baking bread by feel; making crossword puzzles...literally anything! If you choose to pursue a Passion Project (or two or three), consider carving time out every day to work on it as a family. It may be that individual members of the family work on the Passion Project independently and then at different points during the week the group comes together to share what they've learned.

There doesn't need to be a set amount of time for the Passion Project - if you are on a time-based schedule, consider setting 30 minutes aside as a minimum for younger children, while older children may be able to spend longer periods of time. It may take up to 2 weeks to complete the Passion Project, but could take longer depending on the level of complexity. Be creative and challenge yourselves!

Passion Projects take time, allow your family to have dedicated space to connect over a shared interest, offer a sense of purpose and an opportunity for families to learn together. In a time of significant loss, Passion Projects offer an opportunity for creation.

Get Gritty

With all the focus on structure and routine it is easy to lose site of the very real emotional work that most kids and adults are doing in their daily lives right now. Developing grit (or resilience) is an integral part of any daily routine. There are simple ways to build resiliency in kids, most of which are built in to the steps above.

Having a consistent, predictable world allows kids to have a stable foundation and this stable foundation is inherently resilient.

Getting regular stress relief in the form of physical activity also builds resiliency.

Using calming strategies like diaphragmatic breathing to release stress can be built into your daily routine and fortifies a child's capacity for resilience

More importantly it is important to allow kids the opportunity for emotional expression and connection. Having a space in your routine for family connection, open discussion, and shared feelings will provide connection to each other that will serve to counteract the sense of uncertainty that is swirling around us all.

Massachusetts Department of Elementary and Secondary Education Guidelines on Remote Learning

http://www.doe.mass.edu/covid19/2020-0326remote-learning.docx

Making the Most of COVID-19 School Closures

https://nesca-newton.com/making-the-most-of-covid-19-school-closures/

How to Make School Closures Productive for Your Kids

https://educationpost.org/a-calendar-a-plan-and-friends-can-make-unexpected-school-closures-rewarding-and-productive-for-your-kids/

Sample Schedule for ADHD

https://www.additudemag.com/sample-schedule-adhd-morning-after-school-bedtime/

Homeschooling ADHD

https://chadd.org/wp-content/uploads/2018/06/ATTN_12_14_HOMESCHOOLING.pdf

Parents Working From Home Daily Routine Conversation Starters

(These can be written on a piece of paper and hung in a centrally located area of the home. Ideally the parent and child/children discuss the content together and these prompts serve as the start of a conversation. Be creative with the schedule - color code, use stickers, get the child involved as much as possible to help enhance a sense of agency and control.)

| Tomorrow we will | then | and fin | ally | If anything |
|---|-----------------|---------------|-----------------|--------------------|
| changes, I will let you know. Do you have any questions for me? | | | | |
| This morning I need to | from | to | During tl | hat time you |
| can,, o | r If y | ou need to cl | neck in with mo | e, please do it by |
| Do you have any | questions for m | e? | | |

Psychiatric Times: Healthy Routines During Unpredictable Times

https://www.psychiatrictimes.com/coronavirus/covid-19-pandemic-and-emotional-wellbeing-tips-healthy-routines-and-rhythms-during-unpredictable

Craig Canapari, MD: How Much Sleep Do Kids Need

https://drcraigcanapari.com/how-much-sleep-do-kids-need-with-bonus-grown-up-info/

Learning During COVID19 - Resources for Home Learning

https://www.schoolentrancetests.com/2020/03/online-resources-home-learning-during-covid-19/

As mentioned above diaphragmatic breathing helps with self-regulation and resiliency building. Below is a quick introduction to diaphragmatic breathing and a fun video.

Guided Belly Breathing and Link:

Sit in a comfortable position. You can close your eyes if you like.

Place your hands on your belly button and pretend there is a balloon behind your belly button. As you breathe in imagine you are inflating your balloon until it is nice and round so that your belly expands.

As you exhale, let the air out of your balloon steadily and allow your belly to fall back toward your spine. Let's practice:

Breathe in and fill your belly like a big balloon, nice and round.

Breathe in for a count of 1, 2, 3, 4.

Breathe out and let all the air out of your balloon, 1, 2, 3,4, 5.

Breathe in again 1, 2, 3, 4.

Out 1,2, 3, 4, 5.

One more time. In, 1, 2, 3, 4.

And out 1, 2, 3, 4, 5.

Notice how you are feeling and keep practicing!

Sesame Street: Elmo, Common & Colbie Caillat - Belly Breathe with Elmo! https://youtu.be/_mZbzDOpylA

Introduction to Mindfulness

https://www.youtube.com/watch?v=HB16XYD2huo

Appendix L

MyHealth Pediatric Behavioral Health Tip Sheet: Childhood Trauma and Stress During COVID-19

IMPORTANT INFORMATION FOR ALL PATIENTS

If you or your child are experiencing a mental health emergency or have thoughts of harming yourself or others, please call your local Emergency Service Program Crisis Team at 1-877-382-1609 to be connected with your local Mobile Crisis Team. You can also look up your local team directly at https://www.masspartnership.com/pdf/ESPflyerindividualsandfamilies.pdf.

If you or your child are experiencing a medical emergency, please call 911 or go to your nearest emergency room.

If you or your child need further mental health support, please contact Atrius at (***).

Please remember to continue taking all of your medication, and administering all of your child's medication, as prescribed. Contact your or your child's PCP or Behavioral Health prescriber before making any changes.

ATRIUS PEDIATRIC BEHAVIORAL HEALTH:

Childhood Trauma and Stress During COVID-19

Being involved in the COVID-19 pandemic can be overwhelmingly stressful for children. Children are experiencing significant adjustments to their routines (e.g., schools and child care closures, social distancing, home confinement), which may interfere with their sense of structure, predictability, and security. Additionally, children-even infants and toddlers-are keen observers of people and environments, and they notice and react to stress in their parents and other caregivers, peers, and community members. This can leave children of any age feeling overwhelmed by stress and trigger a wide range of intense emotions and physical or behavioral reactions. Children also may worry about their own safety and the safety of their loved ones, how they will get their basic needs met (e.g., food, shelter, clothing), and uncertainties for the future.

Children's responses to stressful events are unique and varied. New and challenging behaviors are natural responses, and adults can help by showing empathy and patience and by calmly setting limits when needed.

Common, Normal Reactions to Stressful Events Increased fearfulness (Fear of the dark, being alone, going to sleep, bad dreams, etc.)

Increased temper tantrums, whining or clinging behavior

Needing excessive reassurance

Increased aggression, anger, resentment and irritability

Crying and tearfulness

Changes in appetite/sleep

Complaints about physical discomfort (headaches, stomachaches) which may be due to stress

Isolating from peers and loved ones

Seeming more "hyper," distractible, difficulties with attention

Regression to earlier behavior in young children, such as bedwetting or thumb-sucking

How to Help

While children and teens are more vulnerable to the emotional impact of traumatic events that disrupt their daily lives, the good news is that, with the right caregiver support, children are able to recover faster. Most children will eventually return to their typical functioning when they receive consistent support from sensitive and responsive caregivers and there is plenty you can do to support and reassure a traumatized child. Using the following tips, you can help your child manage symptoms of traumatic stress, rebuild their sense of safety, and promote coping and resilience.

Talk about it

Start a conversation. Kids are listening all around them, learning constantly and filling in gaps, often in unhelpful and inaccurate ways.

Many people worry that talking to children about difficult topics will lead to increased anxiety, but talking together and providing age-appropriate information will help reduce their worries and feel more connected and supported.

Important messages to convey in discussion include: we know this will not last forever; most people who get sick get better; there are ways we can protect ourselves; and lots of people are working hard to fight the virus and helping to keep us all safe in the meantime.

Encourage children to ask questions, and answer those questions directly, but know that it's okay to say "I don't know."

The pandemic involves uncertainty and rapidly changing situations. Expect children to have new questions as time passes. Let them know you are ready to talk at any time.

Connection

Stable, responsive, nurturing relationships with caregivers contribute to children's sense of safety and is a significant protective factor during times of trauma and stress.

Give your child more hugs, hand holding, and opportunities for physical connection.

Find family activities to support positive connection. Throw a ball, play hide-and-seek, color, do a puzzle or play a board game together, have a dance party.

Find ways to give children a sense of purpose and control

Children often feel more in control when they can play an active role in helping themselves, their families, and their communities.

Create opportunities for children to conduct small acts of kindness, such as sending drawings or letters of thanks to medical personnel or first responders.

Validate emotions

It is important to give children a safe space to identify, express, and acknowledge the more challenging affects they are experiencing.

Check-in with children about how they are feeling about the pandemic. Validate these emotions. While parents may wish to say, "you don't need to worry" or "there is no need to be upset, we will be fine," it is extremely unlikely that this will change the emotion. Unintentionally it may result in children no longer sharing their feelings or believing that their emotions are not ok to have. It is important to acknowledge how they are feeling and to let children know all feelings are okay.

It is helpful for caregivers to acknowledge that they have difficult feelings too. You can share things like "I feel sad too that I can't give grandma a hug right now" or "I feel frustrated that we can't go to the beach in this nice weather."

Prevent or limit exposure to news coverage

This is especially critical with toddlers and school-aged children, as seeing disturbing events recounted on television or listening to them on the radio can make them seem to be ongoing.

Maintain routines

Kids feel calmer (and behave better!) when they feel that the grownups are in charge and will keep them safe. Consistent rules and predictable routines are even more important now than ever because they provide children with a sense of safety and predictability.

Try to maintain (or create new) manageable routines, including regular bedtimes and meals and daily schedules for learning and play.

Have fun

Help children enjoy themselves. Children manage stress through play and - for older children in particular - through social connection.

Laugh together whenever you can.

Instill hope and future focus

Children need to see the future to recover. While it is difficult to know or predict when the current circumstance created by COVID-19 will change, it is clear that change will come. Find moments to remind children that this will end.

Ask future-focused questions such as, "what is the first restaurant you would choose to eat at when things re-open?", "who is the first person you are going to go visit or hang out with when it is ok to do that?", etc.

References and Resources

National Child Traumatic Stress Network - fact sheet for families:

https://www.nctsn.org/sites/default/files/resources/fact-sheet/outbreak_factsheet_1.pdf The Simple Activities for Children and Adolescents offers activity ideas to parents and caregivers whose families are sheltering in place, social distancing, and homeschooling due to school closures amidst the COVID-19 outbreak.

https://www.nctsn.org/resources/simple-activities-children-and-adolescents

E-book for families to discuss COVID-19, by Ana Gomez:

 $https://childtrauma.ucsf.edu/sites/childtrauma.ucsf.edu/files/Corona\%20virus\%20 and \%20 me\%20 by \%20 Ana\%20 Gomez_1.pdf$

How to talk to very young children about the coronavirus by Zero to Three https://www.zerotothree.org/resources/3210-tips-for-families-talking-about-the-coronavirus

First Aid for Feelings- a coloring book from Scholastic + Yale Child Study Center to help children cope with coronavirus

http://teacher.scholastic.com/education/coronavirusworkbook/index.html

This story was developed to help young children and families talk about their experiences and feelings related to COVID-19 and the need to shelter in place.

"Fighting the Big Virus: Trinka, Sam, and Littletown Work Together."

Reader-friendly article about the intersection between complex trauma in childhood and COVID-19: https://www.complextrauma.org/coronavirus-covid-19-pandemic-%20coping-strategies-for-youth-with-a-history-of-complex-trauma/

Resources for Supporting Children's Emotional Well-being during the COVID-19 Pandemic: https://www.childtrends.org/publications/resources-for-supporting-childrens-emotional-well-being-during-the-covid-19-pandemic

Center for the Study of Traumatic Stress: Supporting Families of Healthcare Workers Exposed to COVID-19

 $https://www.cstsonline.org/assets/media/documents/CSTS_FS_Supporting_Families_of_Healthcare_Workers_Exposed_COVID19.pdf$

For caregivers who are essential/healthcare/frontline workers How to talk to your kids about COVID-19 and your role as a "Helper Hero"

Appendix M

MyHealth Pediatric Behavioral Health Tip Sheet: General Resources

American Academy of Child & Adolescent Psychiatry: Talking to Children About COVID19 https://www.aacap.org/App_Themes/AACAP/Docs/latest_news/2020/Coronavirus_COVID19__ Children.pdf

Tips for Caregivers During Infectious Disease Outbreaks https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-01-01-006-508.pdf

WHO: Coping with Stress Related to COVID19 https://www.who.int/docs/default-source/coronaviruse/coping-with-stress.pdf

WHO: Helping Children Cope with Stress Related to COVID19 https://www.who.int/docs/default-source/coronaviruse/helping-children-cope-with-stress-print.pdf

National Child Traumatic Stress Network: Age Related Reactions to Trauma https://www.nctsn.org/sites/default/files/resources/age_related_reactions_to_traumatic_events.pd f

New York Times Parenting article: 4 Ways to Help Your Anxious Child https://www.nytimes.com/2020/04/01/parenting/coronavirus-help-anxious-kid.html?algo=identity&fellback=false&imp_id=469116562&imp_id=15916700&action=click&module=Smarter%20Living&pgtype=Homepage

Family Mindfulness Schedule https://www.therapistaid.com/worksheets/family-mindfulness-schedule.pdf

COVIBOOK: A Social Story About COVID-19 (appropriate for children under aged 7y) https://www.mindheart.co/descargables

Brain Pop video on COVID-19 (appropriate for children aged 6y and older) https://www.brainpop.com/health/diseasesinjuriesandconditions/coronavirus/

NPR: Illustration to Help Describe COVID-19 (appropriate for children aged 10y and older) https://www.npr.org/sections/goatsandsoda/2020/02/28/809580453/just-for-kids-a-comic-exploring-the-new-coronavirus