Don’t Give Up on Our Kids!

Strengthening the Behavioral Health Safety Net for Allegheny County Adolescents

Prepared by the Jewish Healthcare Foundation

for the Adolescent Behavioral Health Initiative

March 28, 2018

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We Are Failing Our Kids

How a society helps those most at risk navigate this journey, particularly when it is roughest – when a teen's ship can overturn or head in the wrong direction – predicts its future.

A nation's health rests on its rising generations. Our young adults will be the parents, workforce and creative energy shaping our future. At their healthiest, they will build on the best of the past, honoring tradition; they will also challenge our traditions and move us to a higher plane.
But they must first sail into early adulthood on a sea of successful adolescence. This is the challenge before us. For some, passage from childhood can be fraught with turbulence and danger.

If successful navigation is the measure, the United States' future is more uncertain than ever. One in five adolescents have a behavioral health (BH) condition. Suicide is now the #2 killer of teens nationwide; rates for girls are at a 40-year high. In Allegheny County, a third of hospitalized 12-17 year-olds had a principal diagnosis of a mental health or substance use disorder [i]. More than a third of County teens reported intentionally hurting themselves in the past year.[ii] These numbers don't even begin to capture the number of teens whose often trauma-triggered behavior health problems have landed them not in the mental health system, but the juvenile justice system. Nationally, between 60 and 70 percent of adjudicated youth are estimated to have a behavioral health condition, a third of which are considered to be severe.[iii] Saying that a lot of teens are in crisis, and that the situation is getting worse, is a woeful understatement.

If the numbers in need were rising along with sufficient and effective services and supports, we'd have a different problem. But nationally, fewer than half of teens with serious depression are even getting treatment. In Allegheny County, one in five 12-18-year-olds enrolled in Medicaid do not receive any services, even 90 days after the county's main mobile mental health crisis provider responded to a crisis call

The facts reveal this sad reality – of distraught teens who have no idea where to turn; of families living in terror that their child will hurt themselves or others while they struggle to find appropriate, timely *and* effective care; and of worried, helpless teachers and peers. The impact can profoundly influence a child's entire life trajectory. Half of all students 14 and older with a mental illness ultimately drop out of high school.[iv] For some, adolescence will be the beginning of what will become a lifelong journey learning to manage a chronic mental health condition. Assistance in learning how to manage the condition can make living a satisfying life possible.[v]

Although for the past six years, we at the Jewish Healthcare Foundation have been intensely involved in initiatives to prepare primary care physicians to screen for and treat common behavioral health conditions, we are relative newcomers to the field of adolescent behavioral health. And yet, we found we had no choice.

In partnership with a 60-person community advisory group, we began in 2016 by organizing around the problem of ensuring a rapid response to the most immediate, acute and profoundly dangerous time in a teen's life – when he or she is at risk of harming themselves or others.

We learned from our partners – some of the region's leading behavioral health service providers, non-profit leaders, academic researchers, insurers, funders, family and patient advocates, and state and county leaders – that the adolescent behavioral health crisis is a 'wicked problem.' Without a single name or cause, the roots of behavioral health problems extend well beyond biological predisposition and the nature of adolescence. They include: A high prevalence of childhood adverse life events or lived trauma experiences. Unsafe neighborhoods with violence and limited

opportunities for developing healthy behaviors such as good nutrition and exercise. Turning to unhelpful coping mechanisms such as internet or mobile phone addictions, marijuana or opiates. Being a victim of and/or perpetrator of bullying, especially cyberbullying. A lack of parenting support to guide young parents in nurturing behavioral development, which can prevent mental health problems. Medical and mental healthcare systems that are isolated from each other. Schools ill-equipped to identify and respond to an emerging crisis. A juvenile justice system that punishes, rather than treats, youth offenders. An opaque mental health system which is far too challenging for families to navigate. Perhaps worst of all, at-risk teens who are sent back into their homes and communities to seek treatment that may be delayed, hard to locate, or simply unavailable.

> "Adolescent behavioral health is a wicked problem, that is, a societal problem for which there is no clear and formal definition. There's incomplete or contradictory information—pieces of the puzzle are missing.... Often, we look for simple solutions. We need to come to terms that there is no silver bullet. This is going to call for a variety of interventions, each of which may make incremental differences—2% here, 4% there. But if you put 4-5 of those in play, you have an impact." ~ *Brad Stein, MD, PhD, MPH, Senior Physician Researcher at RAND Pittsburgh*

Making a difference, even an incremental difference, must become the goal. Adolescent behavioral health became a new area of focus in response to increasing reports that teens in crisis were not getting timely treatment, and, that families don't know where to turn for help. We heard too many family reports of long waits for help during a crisis, of being turned away by hospitals whose beds are full or by providers whose patient dockets are full, or who don't accept their insurance, or charge more than families can afford, and of stressful confusion during poorly coordinated post-crisis care.

This White Paper provides a snapshot of what we have learned so far. The "data" we share to support our conclusions about what needs to be done, for the most part, are the voices of the young adults who shared their struggles with mental illness, of parents who persisted in looking for solutions, and of the over 100 professionals who continue to bring their skills and experiences to work together as a community to craft solutions.

> *This White Paper reflects the learnings from a community-wide adolescent behavioral health initiative. These findings have spurred a* ***Call to Action***
> *Please, Get Involved!*
> ***Don't Give Up on Our Kids!***

We discovered gaps in needed services abetted by a shortage of resources: personnel, facilities, knowledge and understanding. We understood that these gaps are also widened by inappropriate use of resources that creates bottlenecks: by psychiatrists whose patients include too many teens who could be effectively treated by primary care providers; and, by overcrowded psychiatric emergency rooms that have to triage many teens who would have been better served with outpatient crisis support in their communities. Surrounding all is an opaque net of partial or missing information that challenges even parents with deep financial resources and a lot of time to figure out what to do to help their kids after the crisis passes.

These gaping holes have serious implications for teens, and for all of us. They are the back story behind both horrific newspaper headlines and 'small' stories of terrible family losses. They are the drivers behind the lost future potential of too many young people. Our nation's future depends on the health and resilience of the next generation: our current teens. And they are hurting.

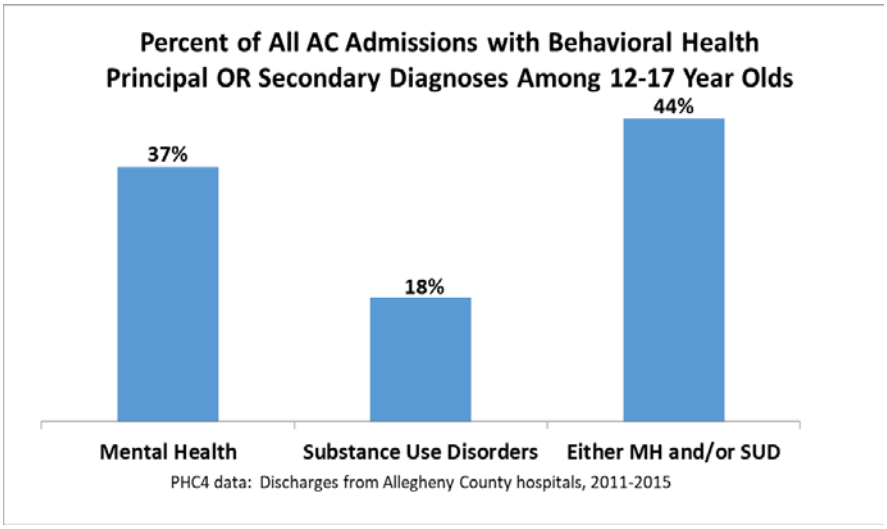
Recognizing that we can't do everything at once, and that the problems won't be solved by simple, prescriptive steps, we nevertheless share three community strategies to get us started. We understand that the problem defies easy or conventional solutions, and that none of us has the

complete picture. But the risk of not getting it exactly right does not excuse the larger moral lapse of not at least trying. We completely reject the notion that the status quo cannot be improved. We must act.

I. Listening & Observing: Overview of the Initiative

Following a six-year journey working to integrate behavioral healthcare screening and treatment into primary care settings for adults, in 2015, JHF committed $500,000 for future behavioral health initiatives. This funding opened the door to respond to the terrible statistics we were reading and the devastating stories we were hearing from teens and their families who had experienced behavioral health crises. Beginning with a staff retreat in early 2016, we began to organize to respond to what is in reality a public health crisis.

Before moving full steam ahead, JHF partnered with the Staunton Farm Foundation and The Pittsburgh Foundation, embarking on an exploratory research phase to understand the context of the adolescent behavioral health system in Allegheny County (AC). We delved into the system's strengths, existing resources, and improvement opportunities. We confirmed that the adolescent behavioral health crisis was not just a national phenomenon, but a local one as well.



Our own analysis of Pennsylvania Health Care Cost Containment Council (PHC4) hospital discharge data from Allegheny County hospitals (2011-2015) found that behavioral health conditions are a very common reason for hospitalizing adolescents. One in three hospitalized 12-17 year-olds had a principal diagnosis of a mental health or substance use disorder, and for nearly half (44%) of 12-24 year-olds a behavioral health (BH) diagnosis was either the principal contributing secondary cause for the admission (see graphic). We focused our attention on adolescents between the ages of 12 and 17 with BH issues (including either mental health and/or unhealthy substance use) living in Allegheny County.

A complex, multi-dimensional problem requires input from diverse stakeholders. So, we geared up to listen and to observe. We turned to the following groups for information and insight.

- LISTENED TO:
  - Mental health experts, researchers and activists – both as members of an Advisory Group and as individual informants
  - Young adults who as teens experienced a behavioral health crisis, and family members of teens with behavioral health conditions through focus groups and collection of solicited stories

- OBSERVED:
  - On-site observations at Western Psychiatric Institute and Clinic's Diagnostic Evaluation Center (DEC) and at *resolve Crisis Services'* phone room, walk-in center, and mobile crisis services

The findings of these sources are explained below. In the following section II, Learning: Barriers to Better Care, we show that findings from multiple sources converge around specific barriers that prevent too many adolescents experiencing a behavioral health crisis – and their families – from getting support and treatment rapidly. In the third section, Responding: Turning Findings into Action, we lay out some of the most critical short- and longer-term actions needed as part of a Community Response Plan. Several of these are fleshed out in detail in two, interrelated demonstration projects.

A. Listening to Experts

Advisory Committee

As a first step, JHF formed a 60-member advisory group that met from 2016 through 2017 (see Appendix A for a list of members). Participants include some of the region's leading behavioral health and substance use providers, social service and health plan representatives, family and patient advocates, state and county representatives and policy makers, and researchers. In small and large discussions and brainstorming, we undertook the collective challenge of envisioning an ideal adolescent behavioral health system, unbound by historical or conventional restraints, and then to identify the barriers that we as a community would need to hurdle to achieve it. In other words, we asked, 'What would it take to create an accessible, accountable, and high-quality adolescent behavioral health treatment and prevention system?'

The discussions, over multiple meetings, spanned a host of solutions to the shortcomings participants identified: investing in the workforce, investing in evidence-based interventions, improving access in both the public and privately funded systems, creating information about the sources of help in Allegheny County, reducing stigma, identifying and addressing systems as early as elementary school, engaging and mentoring teens, immediately responding to teens in crisis, supporting parents, increasing care management especially for families who are accessing care for the first time or transitioning between types of care, creating meaningful quality measures, increasing perinatal depression screening and treatment, and supporting the integration of physical and behavioral health in healthcare services.

Advisory Committee Meeting, January 27, 2017

There were so many opportunities for improvement that the advisory group suggested an initial focus on what teens and families experience during an actual crisis – during which teens are at risk of harming themselves or others. While the recommendations we share in this White Paper span the gamut of needed repairs – from prevention to long-term support and treatment – the imperative of repairing holes in services available to teens and families during a crisis is a top priority, often a matter of life and death.

The stakeholders weighed components of an ideal crisis care system. The ideal could be then be compared to the real or, in the language of quality improvement, to 'the current condition' of crisis services. Staff began mapping the continuum of existing services in Allegheny County and identifying evidence-based improvement approaches used elsewhere.

Importantly, they also offered to share their own experiences in in-depth interviews, and recommended hearing from teens and families to learn what works and doesn't work for them.

Expert Informants

For more in-depth input from Advisory Committee members and others, staff interviewed 12 key informants – from psychiatrists and researchers to public safety experts (see Appendix B). Their insights and suggestions will be featured in the Responding [internal hyperlink] section to follow.

Teens and Families

In response to the suggestions to listen to families and adolescents about what's needed, we engaged the University of Pittsburgh Graduate School of Public Health's Department of Behavioral and Community Health Sciences to conduct three focus groups. JHF and Pitt Public Health, with Jessie Burke, PhD as the principal investigator, designed the focus groups to explore the continuum and effectiveness of services from crisis to stabilization. Six parents and five young adults who experienced a behavioral health crisis as adolescents participated in three different focus groups – one with the young adults and two with parents.

In addition, the Patients' View Institute[vi] – a non-profit organization committed to organizing and amplifying the patient voice in order to influence healthcare quality – collected 100, first-person stories about people's experience with adolescent BH crises. Among the stories – shared by teens and family members (20 of whom come from Pennsylvania) – are powerful recollections. While some people shared positive experiences, most reported difficulties with safety, information, empowerment, affordability, respect, and accountability during a crisis.

B. Observing Crisis Services

A number of services are central to the safety net for adolescents in Allegheny County. They include WPIC and its Diagnostic Evaluation Center (DEC); UPMC's resolve Crisis Services' phone room, walk-in center, and mobile crisis services; Southwood Psychiatric Hospital; and resolve Crisis Services' CACTIS program (Child and Adolescent Crisis Team Intervention Service), providing crisis services to enrolled children and adolescents and their families. Key to understanding teen and family experiences during crisis is to observe the actual provision of services. Two JHF staff members trained in our Lean-based quality improvement methodology called Perfecting Patient Care[SM], conducted on-site observations at Western Psychiatric Institute and Clinic's DEC and accompanied resolve's crisis team.

Diagnostic Evaluation Center (DEC)

The primary emergency psychiatric clinic in Allegheny County is Diagnostic Evaluation Center (DEC) at Western Psychiatric Institute and Clinic (WPIC). The DEC, providing emergency and crisis intervention services to people of all ages 24 hours a day, saw more than 15,500 patients in 2016. Located in the Oakland neighborhood of the City of Pittsburgh, in times of crisis, teens from all over Allegheny County and beyond often begin a psychiatric hospitalization with a visit to the DEC. Individuals may walk into the DEC without a referral. Others may come with parents or caregivers, with a mobile crisis team or the police. A teen may come in with or without a parent, in response to the recommendation of, for example, a teacher or a physician (although confidentiality laws in Pennsylvania permit teens to receive mental health care without parental consent). Each patient, whether adult or child, meets a team of behavioral health experts, including a nurse, clinician, and psychiatrist. The team then works with the individual and family to determine the best treatment options. Peer navigators have been part of these teams since 2016.

About 60% of those who go to the DEC need outpatient care; 40% require an inpatient admission to an adolescent hospital bed. Services also include peer navigators, and PsychCare Plus, added in April 2017 to triage calls and directly admit patients by bypassing the DEC when appropriate.

The DEC's dashboard allows WPIC staff to know where each patient is in each step of the process, and how long they had been there. And WPIC nurses use an in-house computerized system to track the hospital's inpatient beds.

resolve Crisis Services

resolve Crisis Services is a 24-hour, 365-day crisis service that is free to residents of Allegheny County, regardless of ability to pay. The program is sponsored by Allegheny County and Community Care Behavioral Health. The program provides a 24-hour crisis phone service, mobile crisis teams, as well as walk-in and residential services. Over several observation visits, JHF staff met with both supervisory and clinical staff, observed staff responding to crisis calls, and accompanied the mobile crisis team.

The crisis line, staffed by 16 counselors, offers round-the-clock crisis response from callers of all ages who are having a bad day or who are frightened or suicidal. The crisis line typically receives between 8,000-10,000 calls per month. During JHF observations, staff answered calls, ensured that callers were safe, de-escalated situations, and dispatched mobile crisis teams when needed.

The organization maintains visual dashboards to track call volume, call length, and wait times. Mobile crisis teams were clearly tracked with their own dashboard, enabling counselors to know at a glance whether a team was on a call, or was available to take a new case. The dashboard also allowed them to see where the teams were geographically located and how long they had been at that site. Supervisors also facilitated check-ins on their mobile teams. At times, call volume can surpass the number of available phone counselors, and during those times, a "surge" alert goes out to all resolve staff in the building. Any available staff trained in crisis phone counseling will temporarily come to the phone room to assist with the surge in calls.

The mobile crisis teams (two trained counselors per vehicle) also provide 24-hour service throughout Allegheny County, and respond to 800-900 calls per month. Once they arrive, the counselors assess the safety and threat level, develop rapport, gain understanding about the situation, and complete a brief assessment to determine if the person requires inpatient services or if they can be referred to outpatient services. Whenever possible, the teams prefer to handle crises in the community, rather than in a hospital setting. In January of 2017, for example, the mobile crisis teams responded to 896 calls, 78% of which were addressed in the community and did not require hospitalization. Recently, mobile crisis has seen a large increase in calls from schools and has added a school-specific team to address the heightened demand for their services.

II. Learning: Barriers to Better Care

At the heart of the Adolescent Behavioral Health Initiative is the urgency of making sure that adolescents in the midst of a behavioral health crisis get help and are stabilized as fast as possible. To this we need to:

- Goal #1 → Know <u>when</u> a teen needs behavioral health services and <u>where</u> to get help.
- Goal #2 → Get safe, supportive care to teens in crisis, and their families, faster.
- Goal #3 → Use the crisis as an opportunity to put in place the ongoing supports needed to prevent or better cope with the next BH crisis.

The key question is: Why aren't these things already happening? To explain why not, we chose to highlight the voices – to directly quote – members of the Advisory Group, key informants, young adults reflecting on past behavioral health crisis, and parents. With personal and professional experience, they are best able to point out the barriers that stand in the way. The strategies that we describe at the conclusion of this paper are meant to overcome at least some of these barriers. Together they form an urgent Call to Action.

GOAL 1: KNOW WHEN A TEEN NEEDS BEHAVIORAL HEALTH SERVICES & WHERE TO TURN FOR HELP

Before teens reach a place of being a danger to themselves or others, there are typically many signs and symptoms of a pending behavioral health crisis. Recognizing these signs and moving quickly to help means either preventing a crisis or moving a crisis to stability much faster. Below are the barriers we uncovered that make Goal #1 challenging to achieve.

➔ Barrier: Not enough services are where teens spend most of their time – i.e., in schools.

- "Most of my therapy experience was in school so I liked that. I didn't have to worry about getting out of school or getting places. When I went into partial [residential treatment], my school was really supportive."
  ~ Focus Group Participant

- "The more that we can have services in the places where adolescents go, that target their mental health, the better. To me, that would mean bolstering support for adolescents in schools – whether that's a crisis counselor that's in the school, onsite and available – similar to what many college mental health offices may have. Also, [recommend doing the same] in the pediatric medical offices and the Children's Hospital, because in my experience, some adolescents get referred to the DEC or directly to psychiatric services, but many get referred first to their pediatrician or to the Children's Hospital, when in crisis. I think we could do a better job of serving them directly there."
  ~ Sara Harmon, MD, Resident in Psychiatry (Western Psychiatric Institute and Clinic) and Pediatrics (Children's Hospital of Pittsburgh) at UPMC

> "We shouldn't have to get to the point where someone has to take their child to the DEC or the Emergency Department. We should be able to stop it before then in many cases." *–Denise Macerelli, Deputy Director for the Office of Behavioral Health (OBH) in the Allegheny County Department of Human Services*

➔ Barrier: Not enough services are where teens spend most of their time – i.e., on social media.

- "I think that because many social interactions among adolescents today occur through social media or online, that's a way for providers to interact with adolescents to maintain the adolescent's comfort. So, providing support and guidance via text messages or a messaging app might enable adolescents to open up a little bit more….. I would love to see families and schools have more tools to support the safe and beneficial use of social media in their adolescents, and, certainly, also educating school-age children and children entering adolescence about responsible social media use, and how to respond to a crisis, either in themselves or in a friend."
  ~ Sara Harmon, MD

➔ Barrier: Schools need more resources and training to act as early warning, provide mental health information, or offer mental health services. Parents and teens alike look to teachers, guidance counselors and others as potential sources of support and help.

- “It would be nice to know who to talk to – a teacher, a counselor, a principal? … Who are the main people [at school] we should talk to about problems going on?”
  ~ Focus Group Participant, Parent

- “I think more training and more understanding [is needed] for the teachers, the guidance counselors, even for the principal, everyone there. Even if it was the janitor that needed to recognize that a student who is crying in the halls all the time and that they should tell someone and that’s something that needs to be reported.”
  ~ Focus Group Participant, Young Adult

- “I think to work with adolescents you should go through some sort of training to help your students. I think that’s something that is lacking.”
  ~ Focus Group Participant, Young Adult

- “[W]e have to pay attention to what we see before the crisis that might give us an indication that a youth is in difficulty. I talk a lot about mental health first aid—for the lay community. It’s for parents, teachers, bus drivers, librarians, concerned adults in a community, police. It’s about identifying the signs and indications that a youth may be in trouble, before they attempt an action.”
  ~ Denise Macerelli, Deputy Director for the Office of Behavioral Health (OBH) in the Allegheny County Department of Human Services

- “Society expects students and their families to navigate mental health issues on their own, many times having no background knowledge of what to expect or where to go for help. One missing piece is that we do not consistently educate our youth on suicide prevention and mental health resources. If kids don’t know the warning signs of depression/suicide, how are they going to help one another? When schools are trained in Suicide Prevention, they are better equipped to educate their students and families in mental health resources and suicide prevention.”
  ~ Alicia Chico, MSW, social worker for the Allegheny Intermediate Unit

- “After an emergency evaluation, we referred my son to school-based therapy, which was very helpful to him. He was seen by a therapist in school during the next year, and also seen at their neighborhood clinic in the summer months. I am happy to say that my son not only survived this experience, but became stronger as a result. The school-based therapy was a lifesaver, because otherwise, he may not have been seen as frequently at the clinic due to parent work schedules. The school’s Student Assistance Program (SAP) also was helpful in identifying my son's anxiety, and following up with us over the year.”
  ~ Parent Interview, Pittsburgh

➔ Barrier: Too often teens, parents, teachers, school counselors, and physicians don't know where to turn during a crisis.

- "When parents are in crisis …and dealing with someone who has an active addiction and that person says, 'I want to go to rehab,' you don't have the time to search websites, or compare what would be the best place….Trying to find out about available services, and accessing them is confusing, hard and frustrating. There should be an easier way to find out what's available and how to access the appropriate service. And schools should be more informed and better referral sources. Payment for services is still a confusing issue to me."
  ~ PVI Parent Story (Pittsburgh)

- "Even today, with all my knowledge, it's hard to find….therapists who work in the substance abuse field….And if you do find them, they might not take your insurance"
  ~ PVI Parent Story (Pittsburgh)

➔ Barrier: Too few PCPs have the training or resources to screen, provide brief interventions and refer teens, as needed, to treatment.

- "There are variations in people's ability to assess suicidality. [But] even if you have people that disclosed [their suicidality], and every mental health clinician was perfectly gifted, [for] most people who die by suicide, their last health contact is not in the mental health sector but in the primary care sector."[vii]
  ~ David Brent, MD, Academic Chief of Child and Adolescent Psychiatry, Western Psychiatric Institute and Clinic, and Professor of Psychiatry, Pediatrics & Epidemiology, University of Pittsburgh School of Medicine

- "[S]creening in primary care along with a quick referral to evidence based treatment can probably avert a lot of these crises. [P]eople who kill themselves or make attempts, usually have been having problems for a long time and then usually something intervenes – such as a loss of support or an additional stressor – that pushes them in that direction. The precursors are often there for years. If we could identify people earlier, I would say primary care or schools are a good place to do so."
  ~ David Brent, MD

> "My experience has been that there is limited time window to engage adolescents in treatment or in an activity, and so, the quicker that we can be responsive to an adolescent's needs, the more success we'll have in engaging them. So time is really a factor in terms of being able to respond and connect an adolescent to the resources that they might need."
> *~ Sara Harmon, MD*

- "There's a lot going on in someone's life. That's why I enjoy doing integrated care in adolescent clinic, because we work alongside social workers. We think about the whole person. We get to ask what other medical illnesses do you have? What's going on in the school setting? What's going on in your family? What are the different resources that are needed? We try to get them and the team to prepare about the teen's transition to adult medical care and future resources."
  ~ Ana Radovic, MD, MSc, Assistant Professor of Pediatrics, Children's Hospital of Pittsburgh of UPMC, Division of Adolescent and Young Adult Medicine

➔ Barrier: Teen mental health problems in especially at-risk communities aren't anticipated or quickly addressed.

- "Communities in which kids are exposed to a lot of true trauma have a different level of crisis. I personally know two kids who have been murdered or shot. The kids I deal with in my suburban environment, they don't have that kind of experience. The kids I deal with in an urban environment, they all have that experience. And so there is a trauma contagion."
  ~ Alan Axelson, MD, child and adolescent psychiatrist

GOAL 2: GET SAFE, SUPPORTIVE CARE FASTER TO TEENS IN CRISIS, AND THEIR FAMILIES.

Teens, families, primary care physicians and schools, when they figure out where to call, too often experience unresponsiveness, delays, service bottlenecks, eligibility restrictions or insufficient service capacity (i.e., too few inpatient beds).

➔ Barrier: Slow response of mobile crisis teams.

- Multiple forces – from increasing need to widely dispersed geographic areas to high volume particular times of day to increasing calls from schools for help – all contribute to this barrier.

- "My adopted daughter has several [mental illnesses]. While she has made strides, the mental health community is not an easy one to navigate, nor does it provide the services it claims. For acute psychiatric symptoms…we tried to use [the behavioral health crisis services] on many occasions, to avoid calling the police. On every occasion, they did not have a team available to dispatch. Usually, after four or five hours (when a team might finally be sent) the crisis had calmed down on its own."
  ~ PVI Parent Story

- "When you tell them that he's suicidal, they tell you to take him to the ER. When you go to the ER, they say there's not a doctor available right now. You can spend 12 hours in a…psychiatric unit until there's a bed available…Then, you finally find a psychiatrist who knows his medicine…Then you see the therapist, and you can only hope that they actually communicate with the psychiatrist."
  ~ PVI Parent Story

➔ Barrier: Bottleneck at WPIC's Diagnostic Evaluation Center (DEC)

- Wait time is a huge issue – generated by a shortage of beds and the growing number of adolescents coming to the DEC. Every year since 2009, the DEC has seen an increase of over 500 patients per year, and the child and adolescent beds are usually filled to capacity. At the DEC, children, adolescents, adults, and their families typically wait for hours in what can be a potentially crowded and chaotic environment. After the wait, many are told they do not meet the criteria for inpatient admission, and are discharged to the community where they must fend for themselves to find outpatient treatment or other continuing care. In fact, in 2016 roughly 1,800 children and adolescents traveled to the DEC for services, only to be referred to outpatient services.

- For those who will ultimately receive outpatient treatment – the 60% - their average wait time at the DEC is 3.5 hours. The other 40% need an inpatient admission, with an

average wait time of six hours at the DEC. Insurance issues can also lead to longer than expected wait times. When the DEC is especially busy, children, adolescents, and adults are all mixed in the waiting area, leading to frustrating and even frightening experiences for teens and families.
~ JHF Staff Observations

➔ Barrier: Families report difficulty finding child psychiatrists who have patient openings and/or who accept the patient's insurance.

- "It is … quite difficult to find a qualified child psychiatrist, psychologist, or therapist that can treat the child without delay. Most of the good ones have waiting lists."
~ PVI Parent Story

- "The biggest problem is that the day that your child says, 'I'm depressed, I want to kill myself,' you can't get help. You want to avoid hospitalization because that's really scary. You call your doctor and they say he needs to see a psychiatrist. Then the psychiatrist says, 'we're not accepting new patients; your child is under 18 and we see only patients who are at least 19, and anyway, there's a six-month waiting list. Then you go back to your PCP and insurance company and say that you need a list of psychiatrists. And then you start calling."
~ Parent Interview (Pittsburgh)

- "I'm a child psychiatrist. We should usually be seeing kids who appear to be developing schizophrenia, or have bipolar disorder, or who have treatment-resistant depression. These are kids whom no one else can treat. If I'm seeing a kid who has straightforward ADHD, from the perspective of a community, that's often a terrible waste of a resource because the majority of these kids can be treated equally effectively by a pediatrician – and there are a lot more pediatricians that child psychiatrists…."
~ Brad Stein, MD, PhD, MPH, Senior Physician Researcher at RAND Pittsburgh

- "Child psychiatrists can often talk to pediatricians on the phone 5-10 minutes and help to make sure they're managing a case appropriately. By doing that, you've helped clear child psychiatrists' schedules so that when kids are in crisis, are suicidal, are psychotic, there isn't a 3 week to 6 month waiting list—we can get them in to treatment. But we can't get them in if half the kids that child psychiatrists treat have straightforward ADHD or depression that is well controlled and in remission, and we can't get them in if we continue to have kids coming into the system who could have had an earlier intervention and stabilized them."
~ Brad Stein, MD, PhD, MPH

➔ Barrier: If an inpatient hospitalization is deemed necessary, age appropriate settings that do not worsen the situation are needed.

- "My daughter wasn't cutting herself until she went to [an assessment and treatment center]…They had older kids in there. My daughter was 12 and the oldest was like 16, so they're in their groups talking about what they do, and one of the girls started talking about she cut herself to relieve the pain. The next thing I knew my daughter had cuts on her arm."
~ Focus Group Participant, Parent

- Basically, I was in a room for a week with about ten other girls who were 14 to 18, which is a terrible range for girls, from all walks of life. We were in a cement walled room and the only form of entertainment we had was a TV, which was constantly on. There was no form of therapy given and there was no skills training. It was awful…I had done it because I had just attempted suicide…I felt trapped and I couldn't wait to get out of there."
  ~ Focus Group Participant, Young Adult

GOAL 3: PREVENT, OR BETTER COPE WITH, THE NEXT BH CRISIS

Very often a behavioral health crisis isn't a one-time event. Even for behavioral health problems that will ultimately be time-limited, ongoing supportive mental health services are needed. For some teens, a crisis represents one in what will be the ongoing exacerbations of a lifelong chronic illness. Not connecting teens to ongoing, coordinated and effective care following a crisis is a huge missed opportunity for preventing or better coping with the next crisis.

➔ Barrier: Clearly written and conveyed, step-by-step education and guidance – during crisis and beyond – is lacking about diagnoses, where to turn for help, treatments, and recovery expectations.

- "When my children are hospitalized for asthma attacks, they take a million steps to educate parents on how to prevent and treat asthma. There's an asthma class and about 6 videos with quizzes after. They give you handouts and sign you up with a nurse to stop in your home 3 times …to make sure you understand….This isn't how it works with mental health. No one brings you a book or a video on how to recognize or treat the rollercoaster your child is on emotionally. They literally get your child safe and send them home telling you to follow up with your doctor in a few days."
  ~ PVI Parent Story

➔ Barrier: The need for better communication with and coordination among providers was raised frequently in focus groups and in PVI stories.

- "Teach me from step one from all the way down. Don't just start throwing stuff at me and thinking that I know exactly what you're talking about. Talk to me like a kid almost until like I can say okay I got it. I'm with you."
  ~ Focus Group Participant, Parent

- "If I'm real upset, I can't concentrate on what somebody's saying to me, so then I have to go and ask over and then I feel stupid because they already told me once, my head is only so big, but I'm just concentrating on my kid right in front of me. I think all the programs pretty well work, they just got to give you feedback about why they made the decision they made in terminology that we can understand."
  ~ Focus Group Participant, Parent

- "If you get like a therapist, a doctor, a nurse, they all tend to say something different. And you're like, which one am I supposed to listen to? That happens a lot with me."
  ~ Focus Group Participant, Young Adult

- "[T]here is very little communication among the treatment providers. For example, the psychiatrist (who is mainly prescribing drugs) does not communicate with the therapist, nor does the typical therapist communicate with the school counselor or pediatrician (all releases were signed). This leads to fragmented care and sometimes inappropriate care."
  ~ PVI Parent Story

- "I no longer feel powerless [in helping son with schizophrenia]. I am still frustrated by the fragmentation and lack of coordination in our behavioral health system, but I have hope."
  ~ PVI Parent Story (southwestern PA)

- "The problem with therapy is it's all individual. Nobody talks to one another, it doesn't tie together…I fill in [the medical and mental health care providers]."
  ~ PVI Mother's Story (Pittsburgh)

➔ Barrier: Missed opportunities to integrate parents as part of the treatment team, attending to their needs as well.

- "You're just sitting there, and they take your kid in there [for evaluation]. Then they talk to you, they make their diagnosis, and they tell you to take your kid to this place or this place. What led them to their diagnosis …when I didn't really tell them anything? There should be more feedback."
  ~ Focus Group Participant, Parent

- "The healthcare system is so complex and you are dealing often with a family and a kid – where the basic problem is "I'm not listening to you" – This is different from an adult crisis or a pediatric crisis with a 9-year-old type thing. So you need to have a system that remains available and engaged to whomever in that system is functioning [e.g., child or family member]….You need to have a capacity for sustained engagement. This is where the communications system comes in. It has to be able to maintain that engagement – with the family or child…and with the various components of the system."
  ~ Alan Axelson, MD, child and adolescent psychiatrist

➔ Barrier: Missed opportunities to engage peers as *positive* supports and information, for both teens and parents.

- "Whenever you're first faced with [a child's serious mental illness], you don't know enough and there's no book out there to teach it to you. The best thing that a parent can do is talk to other parents who have been through it."
  ~ PVI Story, Parent

- "I just call [the Youth Advocate Program] and talk to them…They make me feel good. I love that program…In the summer time, they will come to your house and take your kids to the park to get them to interact."
  ~ Focus Group Participant, Parent

- "As a 13-year-old, when I didn't have a sense of self or much self-confidence at all, when I walked into that room [at Western Psych] it would have been extremely helpful to have an advocate to come and be with me. I'm thinking of PAAR how they have advocates trained to be with you. Maybe if you had adolescent advocates who are trained to be with people who are being evaluated."
  ~ Focus Group Participant, Young Adult

➔ Barrier: Mental health clinicians don't always use evidence-based treatment approaches.

"We know that many mental health clinicians are not using therapies that have been proven to be effective. Studies suggest that the average therapy used by the average mental health clinician may be about as effective as a placebo. We have an increasing

number of therapies that we know work. So what are we doing to get them out there and used more widely? Technology that can help to train clinicians and teams and support implementation of effective interventions may be part of the answer."
~ Brad Stein, MD, PhD, MPH, Senior Physician Researcher at RAND Pittsburgh

- "You haven't done anything that you said you would do, and you've charged me $800 for my insurance co-pay."
~ PVI Parent Story

- "Instead of optimizing the intervention, we minimize the intervention. Because there's a fear of maximizing – which is what we used to do in putting kids in high levels of care for extended periods of time. *'Does not meet criteria.'* This is not what a family wants to hear, and this is not what a referring physician, or school teacher or school principal wants to hear. What they want to hear is, "I'll help you. Let's work together to make the situation better."
~ Alan Axelson, MD, child and adolescent psychiatrist

➔ Barrier: Cost of Care

- "For 10 years I ran a capitated health system [InterCare]. We 'owned' 140,000 people. If they had a psychiatric crisis, it was our responsibility to manage it. So we had both a professional and financial interest to get it right the first time. Because, if not, we'd have a second crisis. So you have an alignment of economic, professional and patient-centered goals. The patient and the family want to get it right. The professional wants to feel like they've done the right thing and have made a difference. And the system wants to use health resources in a way that's valuable, that uses enough resources that you moved the person further along by providing continuing, healthy support."
~ Alan Axelson, MD

- The tension is, are the payment systems about organizing and delivering efficient health care or are they about paying claims? If they are about paying claims, that's short term."
~ Alan Axelson, MD

III. Responding: A Call to Action – Don't Give Up On Our Kids!

It is clear that strengthening the behavioral health system for adolescents and their families will require executing multiple strategies. But we need to start somewhere. The barriers to getting fast, effective and coordinated care to teens in crisis – revealed by those who shared their experiences and expertise – represent both failings in the behavioral healthcare 'system' *and* real improvement opportunities. Focusing on the opportunities, we first propose a series of short- and longer-term paths to overcoming these barriers for each of this initiative's goals. Because we can't put all these paths in motion simultaneously, we then call on the community to commit to change by organizing itself to develop and implement three strategies that respond to many of these recommendations. Described below, these strategies will be the opening volleys in a Call to Action in Allegheny County: ***Don't Give Up On Our Kids!***

PATHS TO IMPROVEMENT

Goal 1: Know When a Teen Needs Behavioral Health Services & Where to Turn for Help

Adolescents are most likely to be observed at their schools and by their primary care physicians. If we want to reach teens, we must reach schools and PCPs. Leveraging both as sources of early warning, information, support, referral and treatment is essential.

Paths to Improvement:

1. Enhance the role of schools as sources of behavioral health information, referral and treatment. Pay special attention to schools located in areas in which teens experience heightened levels of violence and trauma.
2. Prepare families, friends and school staff to be able to recognize a developing BH crisis and to know where to turn for help.
3. Outside of schools, PCPs, together with their nurses and medical assistants, are the most likely professional group to encounter teens with behavioral health problems (although PCPs are reporting that more adolescents are substituting Med Express for regular preventive care). Expand efforts to integrate behavioral health screening, brief interventions and referrals to treatment in primary care practices and promote adolescent well-visits to increase the number of teens who are seen by their PCP.

Goal 2: Get safe, supportive care to teens in crisis, and their families, faster.

Delays in getting safe and supportive care to adolescents in crisis unnecessarily heighten fear and anxiety and can be dangerous to both the teen and to others. Among our most important findings is that, too often, teens and their families experience wait times for crisis care, only to finally get a diagnosis and recommendation and then (for some) encounter an unacceptable shortage of inpatient beds and longer-term community support. These delays are abetted by a shortage of community services and child psychiatrists (the latter caused both by shortages and by patient panels filled with teens who could be treated in primary care settings).

Paths to Improvement:

1. Increase capacity of current crisis response teams and/or find alternatives to rapid crisis response.
2. Reduce bottlenecks at the DEC by diverting, when appropriate, more teens to community-based care.
3. Advocate for an increase in inpatient bed capacity for adolescents experiencing behavioral health crises that cannot safely be managed in the community.
4. Ensure that the experience of adolescents and families during a crisis doesn't add to the stress of the crisis. Consideration, for example, should be given to creating a separate child and adolescent section at the DEC.
5. Reimbursement for the BH workforce is significantly lower than for physical health providers. Health plans could help alleviate BH provider shortages by providing higher reimbursement, paying for performance, and/or making peer BH supports paid positions. In addition, offering additional training to all providers on dealing with BH crises could help ensure that more adolescents could be effectively treated in primary care settings.

6. Increase access of primary care physicians to BH consultations by getting more information to providers about the PA TiPS (Telephonic Psychiatric Consultation Service Program) program and expanding coverage for this service beyond Medicaid to include private insurers.[viii]

Goal 3: Use the crisis as an opportunity to put in place the ongoing supports needed to prevent or better cope with the next BH crisis.

Once a teen has moved from crisis to stabilization, too many families can't get accurate and consistent information about – or access to – well-coordinated, effective, ongoing treatment, appropriate providers and/or insurance and financial assistance.

Paths to Improvement:

1. Provide peer-to-peer support post-crisis for teens, parents and caregivers.
2. As a first step toward addressing communication and coordination problems, developing mechanisms for sharing information among providers and with the teen and family caregivers is essential.
3. Identify and test workforce models and processes that promote optimal coordination of care from the point of crisis to long-term stabilization.
4. Ensure that PCPs, peer supports, and schools can help families develop safety plans post-crisis.

A CALL TO ACTION: THREE PROPOSED STRATEGIES

Clearly opportunities to strengthen behavioral health care for teens abound. There are policy, regulatory, educational and practice solutions to getting adolescents and their families faster and better care before, during and after a crisis. In response to the barriers identified as part of this initiative, at a minimum, our community needs to:

- **Locate and Demand Information on Services:** Parents, teachers, and teens themselves often don't know what's available when they need help during or on the verge of a crisis. Families also have a right to know whether the services are sufficient, of high quality, racially and culturally sensitive, and family-friendly. They often don't even know when to seek help, since it is difficult to distinguish between what is normal teen behavior and what's a sign of a serious problem.

- **Make Emergency Services Available Immediately to ALL Teens Who Need Them**: Even when those in a teen's life correctly identify warning signs of a developing crisis, too often they are not successful at engaging early intervention support to prevent the teen who is spiraling to a disaster. These services need to be adequately resourced.

- **Make Resources Available for All Critical Components of Crisis Care:** We need to identify what services are most essential and effective and then to ensure that they are adequately financed and also committed to the highest quality. They must be affordable, compassionate, and accessible. This could include everything from crisis response services to inpatient psychiatric beds to community care and ongoing supports.

- **Think Along a Service Continuum Leading to Resolution and Stabilization**. This means strengthening the whole continuum – from crisis response services to inpatient psychiatric beds

to community care and ongoing supports, and from creative pre-crisis/ safety-net services to informal networks of family caregivers and teens.

We understand that the adolescent behavioral health crisis defies easy or conventional causes or solutions, and that none of us has the complete picture. But we need to start somewhere, and we need to start urgently. Three strategies will get us started.

> "I think more training and more understanding is needed for the teachers, the guidance counselors, even for the principal, everyone there. Even if it was the janitor that needed to recognize that a student who is crying in the halls all the time and that they should tell someone and that's something that needs to be reported."
> *~ Focus Group Participant, Young Adult*

- **Don't Give Up on Our Kids!** – Advocating for Policy, Resource and Regulatory Changes
- **Keep Cool in a Crisis** – Increasing awareness of where and when to turn for help
- **Our Kids** – Demonstrating an enhanced community-based crisis and post-crisis support model

Strategy 1 → *Don't Give Up on Our Kids!* – Advocating for Policy, Resource and Regulatory Changes

The seriousness of this public health problem is not in dispute, nor are its devastating consequences. Nevertheless, solutions are under-resourced and inadequately assessed. We must mobilize a diverse range of stakeholders – legislators, foundations, nonprofit organizations, government bodies, families, and teens themselves – around an urgent call to action. The ***Don't Give Up on Our Kids!*** strategy will be a statewide effort to engage media, providers, parents, and community stakeholders to rally around an urgent call to advocate for additional resources for teen behavioral health and crisis services in Pennsylvania.

We will form new, or identify existing, action groups of parents and committed professionals to expose the extent of the problem and rally our legislators and administrators to act. We will engage with national and statewide advocacy groups, as well as health funders and community partners. We will work with and be guided by families and teens with lived experience to change policies so that we have sufficient resources. We will listen to families, teens and professionals—and review existing data—to suggest what works and what doesn't work, and we will ensure the constant monitoring of both the provision and quality of services. We will test new ideas, while husbanding precious resources. In short, by aligning with bipartisan legislative candidates and change agents, this state-wide initiative will:

- Activate media, providers, parents, and community stakeholders to rally around an urgent call to action.
- Advocate for additional resources for teen behavioral health and crisis services in Pennsylvania.
- Engage health funders, consumers, and community partners, learning from other effective advocacy campaigns, including the very effective efforts to increase resources for children with autism.
- Seek support from public and private health plans to fund services that evidence indicates should be financed.
- Demand transparent strategies for ensuring the quality of behavioral health services, beginning with an initiative to invite patient and family feedback on their experiences receiving behavioral health care.

Strategy 2 → *Keep Cool in a Crisis* – Increasing Awareness of Where and When to Turn for Help

Keep Cool in a Crisis responds to the need for information about where to turn during a crisis shared by adolescents and family members. Friends, teachers, parents and caregivers don't know whether they should call the police, their doctor, or their child's school. If they decide to call the school, should they call the teacher, the social worker, or the principal? Should they go to the Emergency Room, and if so, to which one?

In addition to confusion about services options, the very language and terminology used to describe those services confounds. Despite the fact that families are told what to do using such terminology, many do not understand, for example, what a 'diversion and stabilization unit' actually is, and if it is a higher or lower level of care than a 'partial hospitalization' program. Parents have been told to bring their child 'to the DEC' and had no idea what or where the 'DEC' actually is. The alphabet soup known to behavioral health insiders – DEC, DAS, PHP[ix] – can add unnecessarily to the frustration, anxiety, confusion, anger and fear experienced by teens and families during and after a crisis.

Keep Cool in a Crisis is a community awareness campaign for getting the right information to the right people at the right time. Its goals are:

Better Prediction. Are there signs of a pending crisis before teens are in a place of being a danger to themselves or others? Can we recognize and share these symptoms and warning signs with parents and teachers and teens themselves?

Better Community Education. Friends, teachers, parents and caregivers don't know whether they should call the police, their doctor, or their child's school when they know or suspect that a teen is in crisis. All of this confusion is compounded by the stress of the crisis itself. Messages about where to get help can be targeted for various audiences.

Better Navigation. There is uncertainty about service options, eligibility requirements and confusion with the very language and terms used to describe those services.

Engaging Schools. Getting information and services to schools – the place where teens spend most of their time – is crucial. Many organizations provide prevention/intervention services in public schools, including information resources, small intervention groups, classroom presentations, both parent and staff workshops, and peer support networks.

Strategy 3 → *Our Kids* – a Crisis Response Demonstration

Delays in getting safe and supportive care are dangerous to both the teen and to others. Too often teens and their families experience wait times for crisis care, only to finally get a diagnosis and recommendation and then encounter an unacceptable shortage of inpatient beds, and – for longer-term support – a shortage of child psychiatrists and community services. Therefore, beyond advocacy and education, we need to take concrete steps to get care to teens and their families faster. Towards this goal, we propose a demonstration project called, ***Our Kids***. Its goal would not only be to get care faster to teens in crisis, but to help guide the teen and family from crisis to stabilization.

In the current system, after a child or adolescent receives crisis services, many families are left to fend for themselves to find continuing care in a complex and confusing behavioral health system. The ***Our Kids*** model uses process improvement methodologies to strengthen collaborative partnerships between existing crisis services, community-based providers, and peer support to improve care pathways.

The model will explore workforce development strategies to help families: navigate the complexities of behavioral health services and care coordination during and following the crisis; connect with consulting psychiatrists to respond to questions regarding medication and more complex diagnoses; connect with a primary care providers; and, engage with family peer specialists with lived experience to support family caregivers, helping them understand what to expect and how to advocate for their child, and to offer a shoulder to lean on.

Finally, because schools are so central in the lives of teens, the ***Our Kids*** model will identify ways to better connect with the county's Student Assistance Program, ensuring that schools are aware of what's going on, that staff are prepared to interact appropriately with teens and families, and that any community providers located at the school can be enlisted to support the teens and families.

Our Kids specifically responds to findings on the importance of schools in the lives of adolescents and their families; the value of having peer support during and beyond crises; and the need for information and support when bridging crisis and post-crisis care. Finally, the model would allow us to determine whether decentralizing and expanding crisis services would divert some sub-acute crises to the community, reducing wait times and unnecessary ER utilization, while improving both the response time and the care experience for adolescents and their families.

IV. Parting Thanks

Adolescent behavioral health crises are becoming more common and more dangerous to teens and others in our communities – as reflected not only in statistics on depression, mental illness, suicide, and self-harm, but also in our daily newspapers. More than 100 people over the past two years – from behavioral health clinicians, physicians and researchers, to family members and young adults who shared their personal stories – have exposed serious barriers to getting fast, safe, effective and well-coordinated crisis and post-crisis care to teens and their families.

On the other hand, their involvement has also revealed their true dedication to making Allegheny County a community that understands and responds effectively to the behavioral health needs of its adolescents. In their honor, we have outlined a Call to Action that will move our community towards a behavioral system that ensures that adolescents in crisis and their families get that fastest and best help possible. This is the best way we know for thanking them all.

APPENDICES

APPENDIX A: Advisory Board Members

Dale Adair, MD	PA Department of Human Services
Harriet Baum, MEd	
Boris Birmaher, MD	University of Pittsburgh
David Brent, MD	University of Pittsburgh Medical Center
Diana Bucco	The Buhl Foundation
Debra Caplan, MPA	Jewish Healthcare Foundation
Dennis Daley, PhD	UPMC, Insurance Division
Mark DeRubeis, MBA	Premier Medical Associates
Kathi Elliott, DNP, MSW, CRNP	Gwen's Girls, Inc.
Maggie Feinstein, LPC	Allegheny Health Network
Karen Feinstein, PhD	Jewish Healthcare Foundation
Sheila Fine	LEAD Pittsburgh
Ruth Fox	Allegheny Family Network
Dana Gold	Jewish Family & Children's Service
Dave Grabowski, LCSW	Wesley Spectrum
Karen Hacker, MD, MPH	Allegheny County Health Department
Camellia Herisko, DNP, MSN, RN, PMHCNS-BC, CRNP	Western Psychiatric Institute and Clinic of UPMC
Gordon Hodas, MD	Pennsylvania Department of Human Services
Jessica Levenson, PhD	University of Pittsburgh
John Lovelace, MS, MSIS	UPMC Insurance Services Division
Beatriz Luna, PhD	University of Pittsburgh Medical Center
Denise Macerelli, LSW, ACSW	Allegheny County Department of Human Services
Michael Madden, MD	Gateway Health Plan
Tamara Marsico, RN, MSN	The Children's Institute
Michelle McMurray, MSW	The Pittsburgh Foundation
Christine Michaels, MSHSA	NAMI Southwestern Pennsylvania
Elizabeth Miller, MD, PhD	Children’s Hospital of Pittsburgh
Marge Petruska, MSW	
Brandi Phillips, MS	Allegheny HealthChoices Inc.
Ana Radovic, MD, MSc	Children’s Hospital of Pittsburgh of UPMC
Duke Ruktanonchai, MD, FAPA	Highmark, Inc.
James Schuster, MD, MBA	Community Care Behavioral Health
Joni Schwager, MSW	Staunton Farm Foundation
Walter Smith, PhD	Allegheny County Department of Human Services
Brad Stein, MD, PhD, MPH	RAND Pittsburgh
Ken Thompson, MD	PA Psychiatric Leadership Council
Charlene Tissenbaum, PT	
Dara Ware Allen, PhD	Pittsburgh Public Schools
Susan Weiner, MBA	Forging Futures

APPENDIX B: Key Informant Interviews

Alan Axelson, MD, Principal, InterCare Psychiatric Services

David Brent, MD, Endowed Chair in Suicide Studies and Professor of Psychiatry, Pediatrics, Epidemiology, and Clinical and Translational Science, UPMC

Alicia Chico, MSW, LSW, Educational Consultant/ Social Worker, Equitable Participation/ Pupil Services, Allegheny Intermediate Unit

Sara Harmon, MD, Resident in Psychiatry (Western Psychiatric Institute and Clinic) and Pediatrics (Children's Hospital of Pittsburgh) at UPMC

Denise Macerelli, LSW, ACSW, Deputy Director of Behavioral Health, Allegheny County Department of Human Services

Ana Radovic, MD, MSc, Assistant Professor of Pediatrics, Children's Hospital of Pittsburgh of UPMC

Brad Stein, MD, PhD, MPH, Senior Physician Researcher at RAND Pittsburgh

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