headspace US Feasibility Report

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Adolescence and young adulthood are critical periods for the development of the whole person. Full brain maturation takes place during this time and, with additional social and emotional development, identity is further clarified. Unfortunately, the status of adolescent health and academic achievement in the United States reveals a youth population in crisis. Compared to other industrialized countries, US students are less likely to go to college and ultimately graduate. Twenty percent of our youth abuse alcohol on a monthly basis and rates of youth marijuana use in our county have never been higher. Our nation has the highest rates of teen pregnancy and STDs of all industrialized nations and we continue to put growing numbers of our young people in jails due to the high rates of youth violence across the US (Steinberg, 2014). A troubling number of US teens are experiencing traumatic life events such as violence, abuse, neglect and parental divorce or substance use. And in a 2013 survey, teens reported higher stress levels than adults and many also reported feeling overwhelmed, depressed or sad as a result of stress (Bethune, 2014). Something is clearly amiss in our youth culture.

It is significant to note that the primary morbidities adolescents face during this maturational phase are mental health related. In fact, half of all mental health problems have their onset by the age of 14 and three quarters by the age of 24 (Kessler, Berglund, Demler, Jin & Walters, 2005). Roughly half (49.5%) of adolescents in the United States meet the criteria for a mental disorder at some point, with anxiety disorders being the most common (31.9% anxiety, 14.3% mood, 19.6% behavior, and 11.4% substance use). The overall prevalence of disorders with severe impairment in the adolescent population is 22.2% (Merikangas et al., 2010). While one in 5 young people experience a mental health issue at any one time, over 75% of those identified as needing mental health services fail to access them (Kataoka, Zhang, & Wells, 2002). Nationwide, 17.0% of students have seriously considered attempting suicide in the prior 12 months, and 29.9% of high school students reported feeling so sad or hopeless almost every day for two or more weeks that they stopped doing some usual activities (Kann et al., 2014).

Despite the extreme prevalence of these serious mental health conditions, most adolescents do not receive treatment. According to SAMHSA's 2013 Behavioral Health Barometer, in 2012, 63% of youth aged 12-17 with a major depressive episode did NOT receive treatment. While data increasingly points to the long-term benefits and improved outcomes of early intervention for most mental health conditions, untreated mental illness remains shockingly prevalent among adolescents and the cost of such prevalent, untreated illness is high. In 2013, the estimated cost (including health care, use of services such as special education and juvenile justice, and decreased productivity) of mental disorders among persons under 24 years of age in the United States was \$247 billion annually (Perou et al., 2013).

Given these realities and the serious challenges facing US adolescents, it makes sense to put strong supports in place to protect the health of our adolescents during this tumultuous and stressful period, when so much is at stake and the potential development of mental health issues begin to emerge. Yet the United States lacks a comprehensive, reliable system of socio-emotional care and health support for young people. In contrast to other developed countries, the US lacks a true adolescent/young adult "health home" where young people can easily access early health and mental health services in an environment that speaks to the cultural needs of young people. School-based health centers and adolescent health clinics work to address these issues but they target only subsets of this critical population and have a

broader focus on reproductive health and primary care than the principal adolescent morbidity of early mental health issues. By neglecting to adequately support young people during this vulnerable time, as a society we are diminishing their quality of life, impeding their academic and professional success, and elevating their risk for mental illness, substance abuse, suicide, teen pregnancy, and many other adverse health and achievement outcomes that will follow them into adulthood This is cause for alarm and should serve as a clarion call for a cultural shift in how we approach adolescent health across the US.

Adolescent and Young Adult Mental Health in the US

The current health care model is falling short in meeting the needs of youth, with very serious health and academic consequences. This calls for a dramatic change. Psychologist Laurence Steinberg describes adolescence and young adulthood as the last critical opportunity we have to impact the development of our young people and move them towards the critical goal of "self-regulation." During this developmental phase, the adolescent brain is especially "malleable" to both positive and negative influences that can lock in lifelong patterns of action or inaction at the end of this phase. Dr. Steinberg believes we face a US public health crisis in providing appropriate and useful health supports for young people and claims that early interventions for mental health conditions have the best chance of being successful in keeping young people in school, employed, and on track for adult success (Steinberg, 2014).

National efforts increasingly call for a movement toward a "public health" framework for mental health care. Such a framework must emphasize the overall mental health of the population through broad-based outreach and education efforts and early identification and preventive intervention for mental health issues. Taking such a public health approach becomes even more urgent as the Institute of Medicine (IOM), National Institute of Mental Health (NIMH) and others call for a comprehensive developmental approach towards mental health condition onset. These national leaders in mental health point to the need for programs to provide broad-based outreach/education, anti-stigma efforts, reduction of known risks (i.e. poverty), and comprehensive early identification and intervention of the spectrum of mental health problems.

At the same time, the US faces many barriers to shifting the current system of mental health care in a new direction towards public mental health services for young people. To date, public health and primary care systems have not recognized mental health issues as part of their primary responsibility under the framework of "health," and current reimbursement models do not lead to sufficient payment for screening and treatment of mental health problems in primary care. Schools have been increasingly focused on meeting the educational requirements tied to multiple national and state test results and, as a result, have had less educational and financial resources available for ensuring that children with mental health issues are recognized and treated early, even though this might lead to improved test scores. Children's mental health systems have increasingly focused their scarce resources on children in state custody in foster care or juvenile justice systems, as well as those children with higher end serious emotional disorders. It is a challenge to find the governmental entity or health system for early education, screening, preventive intervention or early treatment for mental health conditions.

Further complicating the critical mental health service access crisis for young people is the reality that young people are reluctant to seek help. There are a variety of reasons adolescents and young adults have difficulty accessing services and staying engaged in mental health treatment:

- A lack of awareness and understanding of mental illness
- Stigma associated with mental illness
- A lack of age-appropriate, youth friendly mental health services
- · Concerns about confidentiality and embarrassment in disclosing health concerns
- · Doubts about the effectiveness of the treatment available
- A lack of affordable services and inadequate transportation to service locations

Compounding these hesitations to access services, the current US mental health system is not resourced to work with young people who have mild to moderate mental health issues like depression and anxiety. It is instead focused on treating children or adults with complex mental health problems. Early detection and prevention efforts are now standard medical practice for issues such as breast cancer, diabetes, heart disease, and obesity. But no comparable efforts exist within our health systems to detect and prevent emerging and mild to moderate mental health issues, despite their astonishing prevalence.

Young people with emerging mental health issues have difficulty finding timely treatment and a service system that can respond to their needs. Where support is available, young people rarely receive holistic services even though mental health problems often coexist with other physical, social and emotional problems. Because of this lack of early identification and intervention services, young people often do not reach our health, social service, or justice systems until their mental health problems have become more severe and often more difficult and costly to treat. In fact, recent information based on the experiences of patients new to the RAISE program in the US indicates that young people may be psychotic for an average of 17 months before they are connected to treatment, (Addington et al., 2015).

Given this combination of young people's reluctance to seek help and the inadequacy of available services, it is not surprising that young people's access and engagement with traditional mental health services is poor. Fifty percent of mental health disorders have their onset by the age of 14 and seventy five percent emerge before the age of 25 (Kessler et al, 2005). Youth are a vulnerable population, so getting help early is important to help prevent mental health issues from becoming more serious and longer lasting. Developing services which are responsive to the unique early mental health needs of adolescents using settings and communication methods that youth find engaging, supportive, and relevant is essential, along with increasing the awareness of young people and their family and friends about where to go to seek help. All of these factors highlight that a new stream of youth mental health care is needed in the US to tackle the issues that stand in the way of young people's access to appropriate health services.

A National Opportunity

Other countries have made decisions over the past few years to prioritize support for the early mental health needs of adolescents and young adults. One innovative example of a national commitment to early mental health support is **headspace**, an Australian model for treating adolescents with mild-to-moderate mental health needs, which has quickly become a significant component of that nation's mental health landscape. **headspace** was developed in response to the fact that, within Australia, mental health is the single biggest health issue facing young people, with one in four young people aged 16-24 years of age experiencing a mental health issue in any given year (Australian Bureau of Statistics, 2010). And just like youth in the US, Australian young people with mental health issue stypically do not seek help and fail to gain access to care (Rickwood, Deane, & Wilson, 2007).

headspace was created in response to calls from national experts in the mental health field for a new service delivery approach to bring early mental health services to the 12-25 year old population across Australia. In 2005, the Australian Government allocated \$54 million to establish a new nationwide youth mental health service, and conducted a request for proposal process. The National Youth Mental Health Foundation, **headspace**, was launched in 2006. **headspace** has been a huge national success in linking young people to early mental health services in an integrated care structure. **headspace** has grown to 86 sites across the country with a plan for 100 total sites by the end of 2016, with a national investment of \$500 million over 4 years. By now, **headspace** sites have easily overtaken the public health system by several factors as the place for young people across Australia to go for a full range of health services.

In the fall of 2014, the Robert Wood Johnson Foundation funded a small group of investigators to assess the potential for implementation of the **headspace** model in the US (see Appendix A). The team conducted a thorough examination of the **headspace** model, including a week-long site visit that included several days of interviews with national program staff, visits to numerous **headspace** centers, and meetings with regional, national, and governmental leaders in health and mental health.

The team also conducted numerous interviews and site visits to clinical programs in the US that provide different structures for adolescent and young adult mental health (see Appendix B). These sessions were designed to better understand the service provision and potential for flexibility in the US models, while providing the opportunity to identify modifications to the **headspace** model that the US marketplace would require. Combining the analysis of the **headspace** model with the assessment of the US context, the team constructed a preliminary clinical service model for **headspace** implementation as well as a financial model to quantify the operating costs and revenue of a US adaptation of a **headspace** center.

headspace Objectives

The Federal Department of Health (DoH) in Australia provided funding to **headspace** to improve the mental, social and emotional wellbeing of young people in Australia. The initiative aimed to fill a service delivery gap by treating young people who have mild to moderate mental health issues. With its focus on providing youth-developed supports to young people when and where they need them, **headspace** is revolutionizing a culture of adolescent health through engaging education and prevention efforts and early detection with linkages to a variety of health and social services. The objectives of **headspace**, as outlined by the DoH, are to:

- Promote early help seeking by young people 12-25 years old.
- · Contribute to an increase in the mental health literacy of young people.
- Facilitate access to best practice treatment for young people with mental health problems, including those with associated drug and alcohol problems.
- Enable better access to allied health services for young people.
- Support local, integrated approaches to meeting the needs of young people, particularly those with co-morbid mental health and drug and alcohol problems.
- Build the skills and confidence of general practitioners and other key providers of care and support in the community, in order to provide effective and appropriate mental health services to young people.

Developing the headspace model

The **headspace** model was developed by the consortium partners and supported by leading figures from the philanthropic, community and social services sectors.

The goal was to make sure services are available at the earliest possible point for young people when mental health problems emerge. A range of strategies was required to respond to the issues of access, engagement and service quality to deliver more positive outcomes for young people with mental health issues. The model that was developed was innovative and simple: to bring together consortia of existing health and other welfare organizations in identified communities, who would run a youth services 'one stop shop,' a community of youth services collocated to simplify access and maximize uptake. These services would be known as **headspace** centers.

Research into what young people want from a mental health service, along with **headspace** consultations, indicated that services needed to be (Muir et al., 2009 and Rickwood et al, 2014):

- Non-stigmatizing
- Confidential
- Youth friendly
- Not embarrassing
- Reaching out
- Non-judgmental
- Informal
- Flexible
- Helping identify need

- Supporting self-reliance
- Establishing relationships
- Effective
- Including both mental health and alcohol and substance use
- Not changing at age 18
- Employing workers who like and understand young people
- Providing help right away

The first 30 headspace centers

headspace centers have been progressively set up across Australia to deliver highly accessible, youth-friendly and integrated services. The first ten centers started in 2006-2007, followed by another twenty in 2008-2009. Evidence-based interventions are provided at centers under four core service streams: mental health, general health, alcohol and other drug services, and vocational and educational support. **headspace** centers aim to address the health and wellbeing of young people by providing a holistic platform of care. This is intended to give young people comfort that their support will be coordinated and integrated across primary and specialist care; and not just focused on the 'illness' but also social inclusion and recovery.

The headspace center network expands

In the years that followed, the Australian Government significantly increased its support for **headspace**. The current national expansion of **headspace** will take the total number of centers to 100 by June of 2016.

Adding telephone and online services: eheadspace

eheadspace commenced as a pilot project in July 2010 to provide emotional and mental health support to young people aged 12 to 25 who lived in drought-affected areas of Western Australia. In June 2011, the Federal Government provided funding for the service to be expanded and rolled out nationally. **eheadspace** provides an integrated, clinically supervised, youth-friendly telephone and online therapeutic counseling and information service that aims to improve the mental health outcomes and help-seeking behavior of young people across Australia. **eheadspace** achieves this through increasing the availability and geographic accessibility of mental health and other services and supports as well as assisting young people in finding appropriate referral pathways to **headspace** sites and other mental health, physical health, alcohol and drug, and social and vocational services and supports.

Suicide 'postvention' in schools

The School Support service was developed in 2011 to support secondary schools that have been affected by suicide. It is described as a suicide 'postvention' service, which refers to activities and strategies undertaken after a suicide death to reduce associate trauma, which can be long lasting and problematic for family and friends. All services are delivered via email, phone and/or face-to-face. Small teams of School Support staff are located in each Australian state or territory while management and evaluation staff are centrally located at the **headspace** National Office in Melbourne.

Expanding to incorporate early psychosis and other services

In 2013, the Australian Government announced the introduction of the **headspace** Youth Early Psychosis Program (hYEPP) that will deliver services for young people experiencing, or at risk of developing, their first episode of psychosis.

hYEPP services are based on the Early Psychosis Prevention and Intervention Centre (EPPIC) model, which is recognized as international best practice and was developed over 20 years in Australia by Orygen Youth Health. hYEPP is a world-first innovation in the delivery of specialist mental health services through a primary mental health platform. hYEPP services are being established in nine locations across Australia with at least one service in each state and territory. Services are scheduled to be fully operational by July 2016. hYEPP will boost the ability of **headspace** to support all young people, not just those experiencing mild to moderate mental

health issues. Further discussions are underway to consider expanding these services to also support young people with eating disorders and other more serious mental health conditions.

Driving system reform and developing best practice

A core component of the work of the **headspace** National Office is ensuring **headspace** delivers services that are informed by the best current evidence in youth mental health. In 2013, the **headspace** Service Innovation Project set out to determine what was currently considered to be best practice for **headspace** centers. The methodology involved:

- A brief literature review of best practice models in youth health and mental health
- Interviews and focus groups with 129 participants including: members of headspace board and executive staff, headspace staff, young people and parents, and members of a youth participation group
- Case studies of 10 **headspace** centers using information from the interviews and focus groups along with quantitative data from the **headspace** minimum data set

Best Practice Principles

A framework with four best practice principles was developed from the research conducted by the Service Innovation Project (Rickwood et al., 2014). The four principles are:

Accessible

headspace services must be accessible to young people aged 12-25. For services to be accessible, they need to:

- be *affordable* to young people
- be *convenient* to access by young people
- be delivered in a *timely* way, to minimize waiting times for young people
- able to be accessed confidentially to *minimize stigma*
- be delivered in a *flexible* way to meet the needs of young people
- be inclusive of all young people, their family and friends in a local community
- promote awareness and access of headspace services in the local community.

Acceptable

headspace services must also be accepted by all young people aged 12-25. Services are acceptable if they are:

- *Youth-friendly* in terms of the physical environment and in that the attitudes of staff and young people are involved in the development and review of service activities.
- Confidential to ensure the privacy of the young person
- *Respectful* by being tailored to a young person's individual needs and goals
- *Engaging* by being relevant to the young person's reason for presentation and providing adequate support for the young person to continue to access services.
- *Responsive* by incorporating the input of young people, family, friends and the community in service activities.
- **headspace** service staff are *competent*, appropriately trained and can provide culturally safe, professional services.
- Collaborative with other local services to ensure continuity of care so that young people do not need to retell their story.

Appropriate

Appropriate headspace services are characterized by:

- A focus on early intervention
- Providing *comprehensive* services across the four core streams, conducting holistic assessments of young people's needs, and ensuring access to services to meet these needs
- · Being developmentally-appropriate to the age of the young person
- Being tailored and suitable to the stage of illness of the young person
- The service response is *suitable to the complexity of presentation* including appropriate pathways of care through referral and service plans for young people with complex or unique needs.
- Being evidence-based
- Strong clinical governance structures to assure quality

Sustainable

headspace services are managed to ensure the ongoing provision of a valued and viable community service and resource for young people. Findings of the Service Innovation Project indicate that sustainability can be achieved when centers are:

- *Embedded within their community* through well-development partnerships and service arrangements with key local agencies
- Integrated within the national headspace network including other headspace services such as eheadspace and headspace School Support
- *Effectively managed* in terms of clinical governance and risk, finance, human resources and information technology.
- An advocate for young people's wellbeing through a commitment to continuous learning and quality improvement to enhance outcomes for young people.

Outcomes

Newly released data shows that **headspace** is delivering on its goal to reach young people with mild-moderate mental health care needs and improving health for these youth. Sixty percent of **headspace** clients experience improved psychosocial functioning and/or improvement in psychological distress. The most common reasons for seeking **headspace** services are for symptoms of depression and anxiety – accounting for two-thirds of all presentations for services (Rickwood, Mazzer, Telford, Tanti & McGorry, 2015). Furthermore, the majority of **headspace** clients receive an appointment within two weeks, a notable victory in removing a barrier to accessing care, since young people are often reluctant to do so and long wait times lead to missed opportunities for support (Rickwood et al., 2015). These outcomes demonstrate that **headspace** is succeeding in its hallmark efforts to reduce barriers to help-seeking, while also facilitating early access to quality mental health services with positive outcomes for young people.

Current US Providers

Several existing models of adolescent/young adult health care in use across the US were visited and considered during the **headspace** feasibility study:

Adolescent Health Centers: These programs provide adolescent health and mental health support, often based either in stand-alone community settings or linked to an academic medical center. These sites provide confidential health services for young people usually 12-25 years of age, with a focus on primary care and reproductive health services. Funding often comes through federal and state funds for reproductive health services or linked to primary care Medicaid models. Occasionally these sites are linked to Federally Qualified Health Centers (FQHCs) and are able to then accept an enhanced fee for service rate. Unfortunately, in most of these sites, the mental health services were not a primary treatment component and accounted for a small amount of both service provision and reimbursement.

Two models visited or consulted were the Mt. Sinai Adolescent Health Program and the Adolescent Health Center at the Cincinnati Children's Hospital. The Adolescent Health Clinic at Mt. Sinai provides stand-alone adolescent health services targeting the 10-22 year old population. While the primary services are reproductive health and primary care, mental health services are also provided as a component of the service package. At the Adolescent Health Clinic at the University of Cincinnati, psychiatric consultation services are available on a limited basis for those coming in for primary care or reproductive health services. In addition, the adolescent health clinic serves as a triage site to identify those with eating disorders, and effectively links those young people to their eating disorders program. At this time, however, this clinical program does not provide ongoing mental health or substance abuse services of any type within the Adolescent Clinic program.

School-Based or Linked Health Centers: Several school-based health centers (SBHCs) were visited and conversations were held with national leaders within the school-based mental health movement. SBHCs are wonderful sites for connecting with young people who are in school or spending time near school sites. One advantage of SBHC sites, like **headspace** centers, is the fact that most provide integrated health services, resulting in a shared waiting room for primary care, reproductive health and mental health services, thereby decreasing the stigma associated with waiting to be seen for a mental health service in a school setting.

SBHCs provide important services for young people, mostly 12-18 years of age, and are less available to those 19-25 years old. In addition, for students who have left school or have been suspended or expelled, SBHCs may not be easily accessible sites for the provision of services. In addition, in SBHCs, students often face barriers to giving their own informed consent for a service or for receiving confidential services. Sometimes complex legal issues that impact educational records and health records (FERPA vs. HIPAA) dictate the possibility of whether or not a health service provided to a young person in a school setting may remain confidential. Nationally, about 80% of SBHCs provide some type of mental health service, usually counseling by a master's level therapist. Unfortunately, these services are usually unable to meet the need and demand since there are generally not enough mental health providers on site in schools. Furthermore, the finances of SBHCs are quite complex, even for those agencies linked to

FQHCs. Most SBHCs recover approximately 60% of their costs through reimbursement and require additional grants and philanthropic funds to cover their remaining costs.

The feasibility study team visited three school-based or linked health centers in the Bay Area to obtain a better understanding of these models:

- The Children's Teen Clinic Youth Uprising Castlemont Health Center sits between the Youth Uprising Community Transformation Hub and the nearby Castlemont High School. Services are integrated between primary care, reproductive health, and mental health. Students come from several schools to access these services and mental health support are provide by the six on site therapists to approximately 200-250 students per year. While the average number of mental health visits per student is around seven, most students are seen for 1-2 visits or 20-25 visits over the course of a school year.
- The Fuente Wellness Center is a school-linked clinic within the Ashland REACH Youth Center, next to Edendale Middle School, and is run by La Clinica de la Raza on weekday afternoons. Services are primarily health care and one therapist is currently on staff for mental health support.
- The Daly City Youth Health Center is run as a partnership between the Jefferson Union High School District and the San Mateo Medical Center. The Youth Center is a stand-alone clinic that serves students from 3 different high schools and provides both primary care and mental health services in one building with two separate entrances. As a stand-alone site serving young people with mild to moderate mental health conditions, the Daly City clinic seemed closest to the **headspace** model. However, while 2000 young people are seen per year for approximately 5000 visits, 70% of the visits are for reproductive health and approximately 10% of those students are seen for mental health support.

Crisis Text Line: One relatively new model of youth mental health outreach is the use of technology to link to young people at risk. Crisis Text Line is a relatively new program designed to reach young people facing an immediate crisis through the use of text messaging. Crisis text line initially began serving several urban markets in the US and has been increasing its services to keep up with demand as a rapid way to reach young people in immediate crisis. Crisis Text Line uses trained counselors supervised by mental health professionals to respond to text messages sent by young people needing support in the moment. This model has been found to provide a high degree of user satisfaction in handling the immediate crisis situation, yet questions remain as to the mental health issues, access to mental health treatment, or treatment outcomes of those accessing the service.

After completing in-depth reviews of multiple adolescent mental health service models, including visits to several sites and conversations with many US and Australian adolescent health experts, it is clear that the replication of **headspace** presents a unique opportunity to bring a program to the US that could ultimately create a new national culture of adolescent health. Such an innovative approach could really shake up and transform the ineffective system of care currently in place in the US. In considering this replication, several aspects of **headspace** must be considered in implementing a US version of the model:

- Stand-apart sites: headspace US sites must be physically stand alone sites with their own entrance/exits in order to be successful. Part of the core success of headspace is that young people see the program as their independent place for mental health/health care. Also, by standing alone but still linked to the headspace brand, each site is able to reflect the adolescent/young adult culture of each geographic community and population being served. This adolescent culture is reflected in each site placement, in ease of access to service, decisions regarding furniture and artwork, reception staff demeanor, and nature of local onsite staffing.
- Integrated care services: Each site must ensure the provision of integrated care services, with a primary plan to target those with mild to moderate mental health conditions. The provision of integrated care services allows for "one-stop shopping" for young people while also taking on the stigma issues related to being seen for a mental health related service. Furthermore, given the high frequency of comorbid health and mental health related conditions for young people, linking these services makes sense. The focus on mildmoderate mental health issues, with additional linkages for substance abuse and other related services, including access to supported education/employment and housing, is core to the headspace model and fills a significant gap in adolescent/young adult public mental health service provision. In addition, if people then need a higher end behavioral health service, linkages can be made to the community behavioral health system for more intensive intervention. A recent analysis showed that for young people who initially visited headspace for situational issues, alcohol and drug problems, or physical or sexual health concerns, the vast majority also attended mental health sessions, supporting the contention that an integrated "one stop shop" can provide pathways to needed mental health services (Rickwood et al., 2015).
- Marketing directly to adolescents/young adults: Through strategic marketing and advertising models, headspace has dramatically decreased the perceived stigma for young people in accessing mental health supports when needed. Through thoughtful advertising campaigns, linkages to musical events, the involvement of youth culture leaders, and activities most of interest to adolescent and young adults across Australia, headspace has changed the national norm for young people in going independently or with a friend to a headspace site for mental health support. In addition, marketing investments are made to ensure that messaging specifically targets the appropriate cultural group, as recently seen in the headspace rollout of the yarn safe campaign for the indigenous people of Australia. It will be important for US sites to have the capacity to reach local young people from targeted cultural groups with specific and appropriate messaging in order to be successful.

Economics

An exact economic forecast for a **headspace** adaptation would require a great many assumptions: organization structure/governance, locale, patient and payer mix, volume of visits, etc. The economic analysis in the feasibility assessment provided an overall estimate for the operating costs and revenues.

Expense: The basic structure of the **headspace** model determines a large part of the operating costs in the US. Its focus on mild-to moderate disorders establishes the type and amount of providers (see Appendix C – slide 41). The primary providers proposed in the US adaptation are Master's level staff. This is similar to **headspace** centers in Australia, as well as many of the adolescent mental health clinics in the US.

The mild-to moderate focus also drives patient volumes. A typical patient at a **headspace** center is initially offered 6 visits for early mental health support and the average number used is 4. This is generally consistent with teen clinics in the US, and is projected to occur for a **headspace US** adaptation (see Appendix C – slides 38-39).

Apart from variations in wages, the largest difference in costs between a US adaptation and an Australian **headspace** center lies in the non-clinical staffing. A US clinic is not likely to be part of a national network of sister facilities, and it not able to rely on shared services provided by a national office (see Appendix C – slide 34). Unlike many US adolescent health clinics, a **headspace** adaptation would have added staff positions for the youth outreach elements. This also leads to added non-clinical staff headcount.

Revenue: The US adaptation modeled by the team assumed a focus on a low-income patient population. As such, Medicaid reimbursement rates were used in determining fee-income (see Appendix C – slide 39). Despite this higher reimbursement rate, fee-income was insufficient in covering the full operating costs of the US adaption. This is in line with the economics of the US clinics studied, in which fees covered one-half to two-thirds of operating costs. An examination of US clinic financials showed varying levels of reimbursement, driven by mix of payers and regional reimbursement rates. In each case, clinics supplemented fee-income with additional contract revenue from state and local agencies and philanthropy.

Critical Financial Performance Measures: The economic analysis provides rough approximation for the operating performance for a clinic modeled on **headspace**. Only a set of pilot sites, however, can give a more credible test of the economic viability of such an approach. Chief among the questions any pilot should answer are:

- Patient Volumes Can the US adaptation of headspace attract adolescents seeking mental health supports at adequate volumes?
- Operating Costs What are the appropriate clinical and non-clinical staffing levels required to operate a headspace adaptation?
- Reimbursement Levels what reimbursement can the pilot of a US adaptation of **headspace** achieve? What additional revenue can be sustainably generated?

Conclusions and Recommendations

The **headspace** program serves a unique and vital role in the provision of early and integrated mental health supports for adolescents and young adults that does not currently exist in the US. This Australian model has been so successful in providing critical services to an underserved population that the federal government there continues to expand both funding and services to sites on an annual basis, regardless of the legislative party in power. Legislators across the country compete to have **headspace** sites in their communities since the sites are so popular with young people and families. In fact, the majority of young people coming to **headspace** sites come on their own or with a friend. Replications expanding in Denmark, Israel, and Canada point to the successful potential for international replication.

Adolescence is a longer and more stressful period than ever before (Steinberg, 2014). Because of the lack of early identification and intervention services for young people in the United States, youth often do not reach the health, social service, or justice systems until their mental health problems have become more severe, often more difficult to treat, and more costly. This crisis will continue with disastrous effects unless we upend the current approach and make a deliberate effort to support youth in an entirely different way. **The US needs a headspace model to help build a national culture of adolescent health and to improve access to care for young people with mild to moderate mental health conditions, which would decrease the accompanying morbidities of substance abuse, teen pregnancy, violence, and school dropout faced by this population. In addition, US headspace sites would provide an opportunity for signing up this generally health population of young people for health care coverage on site. The critical Australian headspace components of stand alone services, integrated care, and direct marketing to young people would need to be vital aspects of a US replication.**

The potential benefit of shifting the health care culture by creating **headspace US** in support of adolescent/young adult mental health far outweighs the challenges of negotiating our complex financial models to make this program a reality. Starting small seems to be the most logical step, but enough sites must be piloted to allow for sufficient information to be obtained for determining larger scale viability. Thus the feasibility team makes the following recommendations:

- Three geographically distributed pilot headspace US sites should simultaneously be developed, implemented, and evaluated for a 3-year period. Numerous communities across the US have expressed interest in serving as headspace pilot sites. A multi-state pilot would yield many important insights regarding financing and infrastructure, especially because of the different state Medicaid structures and other unique state mental health financial models, such as the Mental Health Services Act in California.
- Each site might target different cultural groups of young people to allow for the opportunity to develop and pilot different marketing models in each site.
- In order to utilize the public mental health care financial and services systems, **headspace** pilot services might specifically target lower income communities and populations.
- Each site will need to participate in a coordinated evaluation of service implementation, financial modeling and marketing success to provide information on long term model viability.

The first critical step in developing these pilot sites should be the implementation of a planning grant. This grant would provide necessary support for the development of each site across the country in a coordinated way, including:

- 1. Development of an oversight and organizational infrastructure for the **headspace US** pilot sites
- 2. Determination of the site selection criteria and process
- 3. Development of relationships with local service providers and community partners to plan for future pilot implementation
- 4. Identification of funding for implementation for each 3-year pilot site
- 5. Initiation of coordinated and targeted marketing efforts
- 6. Establishment of a coordinated evaluation plan for the headspace US pilot

Bringing the **headspace** model to the US provides an opportunity to disrupt the inadequate system of adolescent healthcare in our country and create a revolutionary culture of adolescent health that could dramatically reduce the burden of mental illness in our population through early detection and treatment. Doing so responds to the call from national leaders to shift educational and health care services to address the national crisis in adolescent mental health and health supports that are the primary morbidities of our young people. It also has the potential to offer a supportive, culturally friendly environment for young people during a challenging and neuro-developmentally critical time in their lives. The success of **headspace** in Australia shows the overwhelming interest and need young people have to access early mental health in a setting that is uniquely tailored to their needs. And new data point to the ability of the **headspace** model to successfully engage and support youth at an early and critical juncture. It is time for the US to build this infrastructure to directly address the primary morbidity of our young people and provide them with the early supports to thrive throughout adolescence and move on to successful and productive adulthood.

Appendices

Appendix A – T	eam Member	Descriptions
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- Appendix B Adolescent Health Centers Visited & Expert Institutions Consulted
- Appendix C Feasibility Study PowerPoint Presentation
- Appendix D Links to headspace Research, Information and Messaging
- Appendix E References
- Appendix F Infographic: Headspace Center Journey

Appendix A: Team Member Descriptions

Steven Adelsheim, MD

Steven Adelsheim, MD, FAACAP, is a child/adolescent psychiatrist and Director of Community Partnerships in the Stanford Department of Psychiatry and Behavioral Sciences. For many years Dr. Adelsheim has been developing and implementing early detection/intervention programs for young people in school-based and primary care settings, including programs for depression, anxiety, prodromal symptoms of psychosis, and first episodes of psychosis. Dr. Adelsheim is also involved in the implementation of integrated behavioral health care models in primary care settings as well as the use of media to decrease stigma surrounding mental health issues. Previously Dr. Adelsheim directed the University of New Mexico (UNM) Psychiatry Department's Center for Rural and Community Behavioral Health, Dr. Adelsheim also served as the behavioral health consultant to the New Mexico state behavioral health system and previously served as the New Mexico Director of School Mental Health. He was the school mental health consultant to the President's New Freedom Commission on Mental Health. Dr. Adelsheim also recently served as the principal investigator of both the EARLY and RAISE prodrome and first episode programs at UNM, and he is working to develop similar models in the Psychiatry Department at Stanford. NAMI, the American Psychiatric Association, and the American Academy of Child and Adolescent Psychiatry have all recognized Dr. Adelsheim for his mental health early detection and intervention efforts for young people.

Vicki Harrison, MSW

Vicki Harrison, MSW is Program Manager for Community Partnerships in the Department of Psychiatry and Behavioral Sciences at Stanford University. She received her Masters degree in Social Work from Washington University in St. Louis, MO and her BA in Sociology with a Psychology minor from the University of California, San Diego. Her past work includes the development and implementation of early intervention programs for children and adolescents in schools, with an emphasis on reproductive health. This experience included implementation of a parent-child communication curriculum pilot in the Unites States. She also led the expansion of a small, web-based health and wellness pilot to a fully established program and built the prevention and wellness portfolio for a large California health plan. Prior to her work at Stanford, Ms. Harrison presided over the Board of Directors for a community-based, non-profit, parent-child center. She supports community partnership and engagement throughout the department by providing assistance with administration and coordination of community engagement activities, identifying and pursuing opportunities for expansion of behavioral health services, and through training and program development. She has more than fifteen years of experience planning, implementing and managing health programs.

Roger King, Consultant

In support of the overall project, Roger King has attended meetings and sites visits, and participated in related discussions to provide essential expertise related to building a sustainable business model for the replication of **headspace** in the US. Mr. King holds an AB and an MBA from Harvard University. Mr. King has provided strategic consultation for more than three decades and has focused specifically on helping non-profits and University partners strategize for financial sustainability and going-to-scale since the early 1990s.

Chris Tanti, Consultant

Chris Tanti, Chief Executive Officer, **headspace** National Youth Mental Health Foundation. Chris Tanti has led **headspace** since its inception in 2006, turning it into an extraordinarily successful operation funded by the Commonwealth Government in Australia to deliver early intervention mental health services for 12 to 25 year olds across the country. Tanti's mission was to turn the youth mental health service paradigm on its head and create something better that actually met the health and wellbeing needs of young people in a way that suited them. Throughout his career, he knew if people were ever going to get the right support, the system of care they needed to access required reform. As a leader with more than 15 years management experience, his career has been characterized by developing new programs, modernizing services and hospitals and influencing policy so end users could get the most out of public and private health resources. For the last seven years as CEO of the world's leading youth mental health organization, **headspace**, Tanti has focused his attention on making a real difference to the lives of tens of thousands of young Australians and their families by working with others to create a model of care that is comprehensive, accessible and importantly valued. He is now committed to supporting the replication of this important program to other countries.

Appendix B: Adolescent Health Centers Visited & Experts Consulted

Organizations:

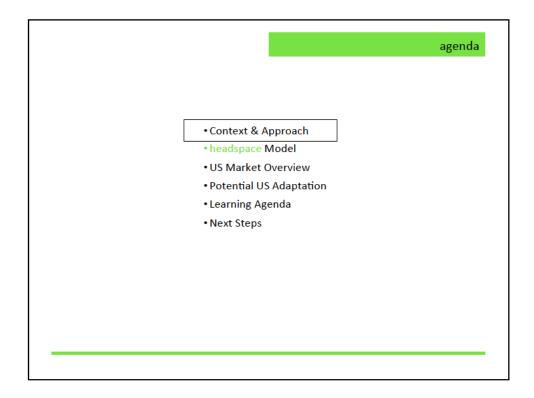
- Children's Teen Clinic Youth Uprising Castlemont Health Center, Oakland, CA
- Cincinnati Children's Adolescent & Transition Medicine
- Crisis Text Line, New York, NY
- Daly City Youth Health Center, Daly City, CA
- Fuente Wellness Center at Ashland REACH Youth Center, San Leandro, CA
- · Mount Sinai Adolescent Health Center, New York, NY

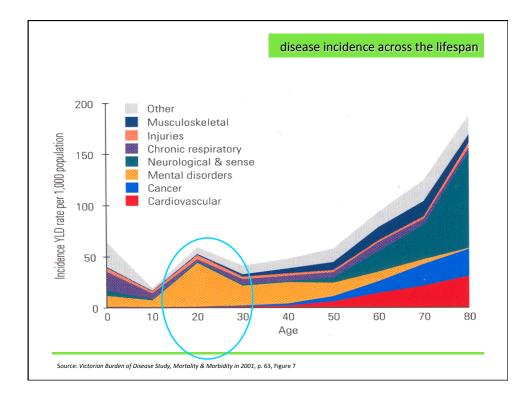
Subject Matter Experts:

- Alameda County Department of Health
- · American Academy of Child and Adolescent Psychiatry
- American Psychiatric Association
- Centers for Medicare and Medicaid Services
- · George Washington University, Center for Health and Healthcare in Schools
- International Initiative for Mental Health Leadership
- Kaiser Permanente Northern CA
- Lucile Packard Children's Hospital
- · Lucile Packard Foundation for Children's Health
- National Academy for State Health Policy
- National Alliance on Mental Illness (NAMI)
- National Institute of Mental Health
- Nationwide Children's Hospital
- Oregon Mental Health Authority
- Robert Wood Johnson Foundation
- Stanford University Department of Psychiatry and Behavioral Sciences
- Substance Abuse and Mental Health Services Administration (SAMHSA)
- Child, Adolescent, and Family Branch
- University of Melbourne Centre for Youth Mental Health

Appendix C: Feasibility Study PowerPoint Presentation





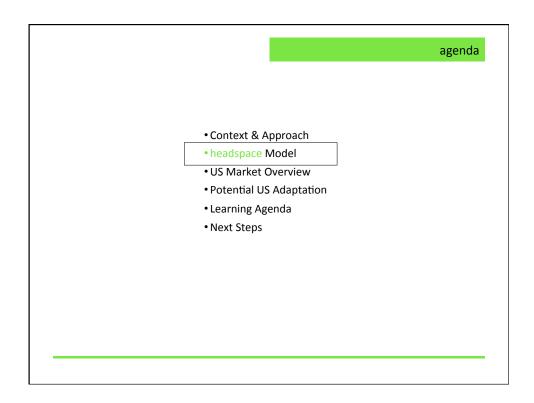


	project context
Situation	 Nearly 50% of adolescents and young adults experience a mental health disorder Half of all lifetime cases of mental illness start by age 14, and three quarters by age 24 Yet, well under half of these young people receive any treatment
Opportunity	 headspace, an Australian mental health program, has shown great promise in addressing adolescent needs on a national scale
Question	 How can the headspace concept and experience best be employed in the US?

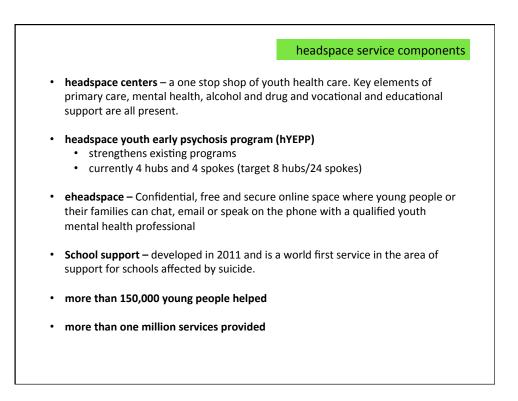
	project approach
Activities	 Extensive analysis of headspace model: Centers, eheadspace, National Office: weeklong visit
	 Study US models: on-site, phone interview; market analysis Expert interviews Financial modeling
Team	 Dr. Steven Adelsheim, Clinical Professor of Psychiatry, Stanford Chris Tanti, President & CEO, headspace Roger King, Business Consultant Zach Grafe, Financial Analyst Vicki Harrison, Program Manager, Stanford Jane Lowe, Program Officer, RWJF
Timeline	• August 2014 through March 2015

	sources and subject matter experts
• Cincinnati Cł • Youth UpRis • REACH Ashla • Crisis Text Li	olescent Health Center, New York, NY nildren' s Adolescent & Transition Medicine ing, Oakland, CA and Youth Center, San Leandro, CA ne, New York, NY uth Center, Daly City, CA
Interviews	
Alameda County Department of Health American Academy of Child and Adolescent Psychiatry American Psychiatric Association Centers for Medicare and Medicaid Services George Washington University, Center for Health and Healthcare in School International Initiative for Mental Health Leadership Kaiser Permanente Northern CA Lucile Packard Children's Hospital	National Alliance on Mental Illness (NAMI) National Institute of Mental Health

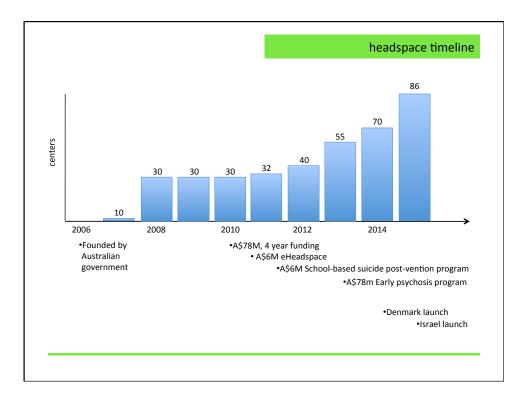
	executive summary
Findings	 Improving adolescent mental health in the US is an enormous opportunity Timely intervention Underserved population
	 headspace is an innovative and potentially powerful model for reaching and treating adolescents with mental health needs
	 Only a handful of models in the US, with none combining the stand-alone service delivery and communications campaign designed to speak to adolescents
Recommendations	 Test the viability of the headspace model in the US in a limited number of pilots
	 Can the pilots attract adolescents in sufficient numbers? Can the pilots garner sufficient fee-income? Can the pilots raise remaining funding needs from other sustainable sources?

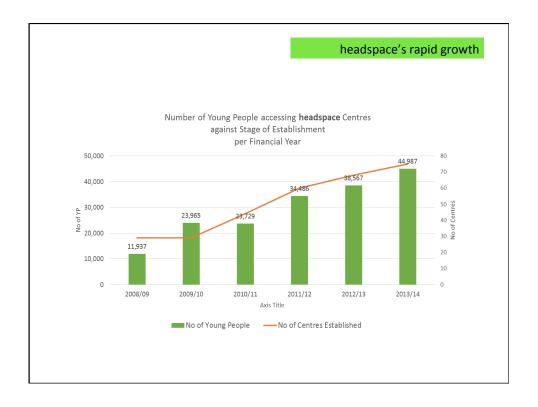


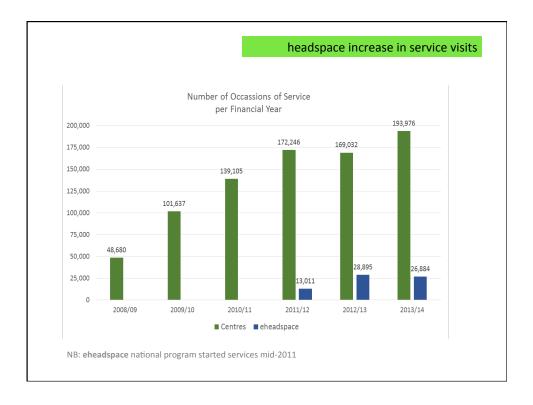
	headspace approach
Adolescent Focus	 Create an environment that lowers reluctance of teens to seek help Comfortable space Welcoming staff Appropriate language, look, & feel
De-stigmatize	 Create a national media campaign that speaks to teens
Easy Access	 Any door – allow teens to get mental health support with various initial presentations: physical health, sexual health, etc. Robust national network of physical sites

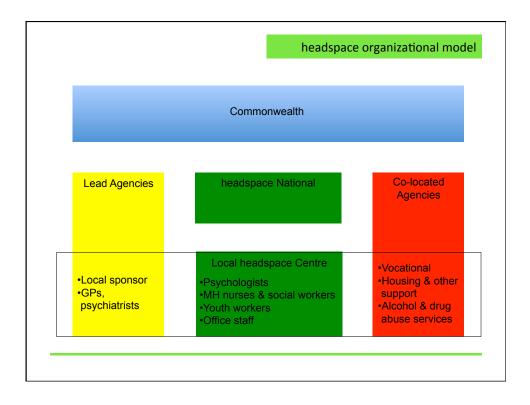


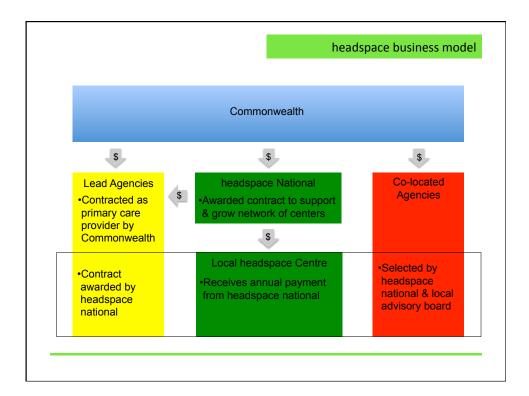
	headspace centers
Network Reach	 86 centers in operation (target 100) 54,000 adolescents served annually
Typical Center Profile	 1000 new clients served per annum when fully established 12 salaried staff 5 clinical staff (Clinical lead, youth MH clinicians, etc.) 1 community engagement staffer 2 management & admin Consulting private practitioners (GPs, psychiatrists, psychologists, MH nurse, etc.) Co-located agency staff (Tertiary MH, AOD services, vocational support, etc.)
Typical Center Budget	• Australian \$700k = approximately US \$615k per center

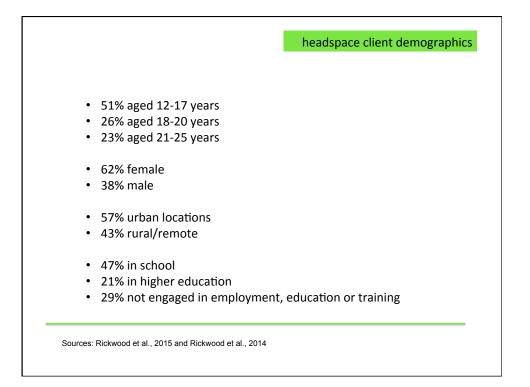


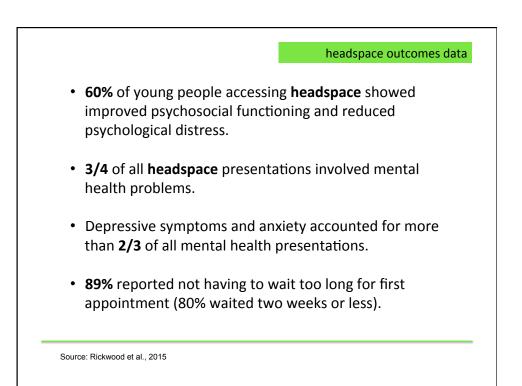


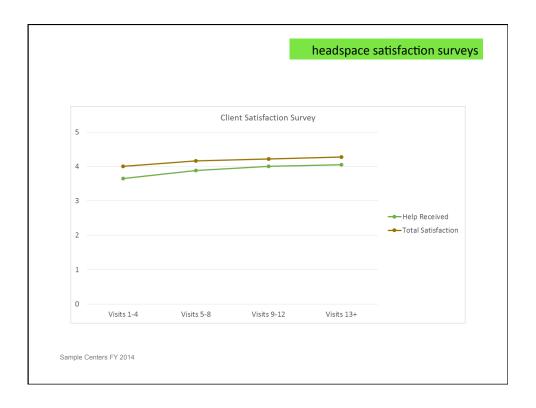


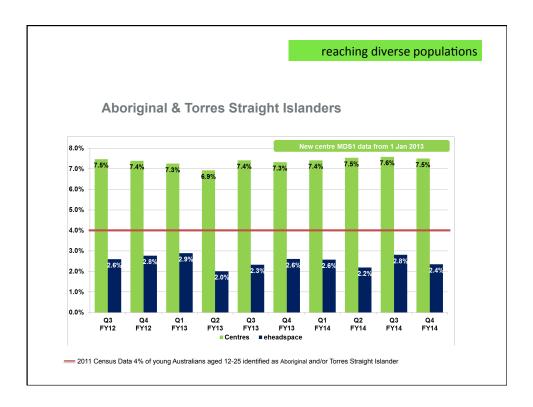






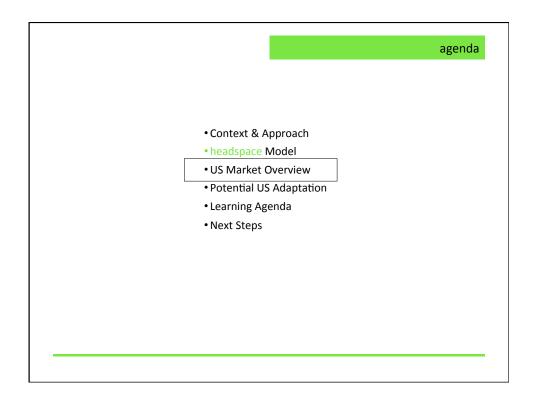


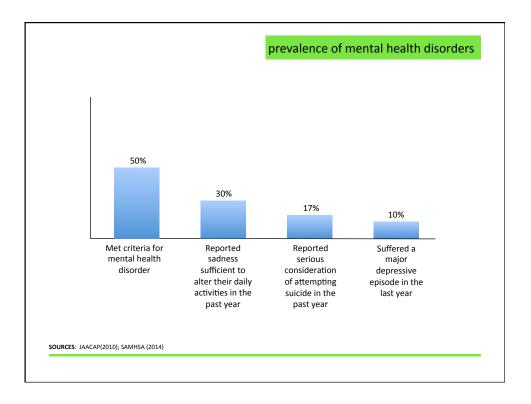


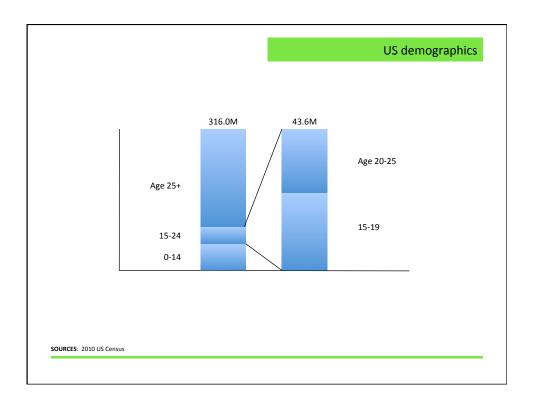


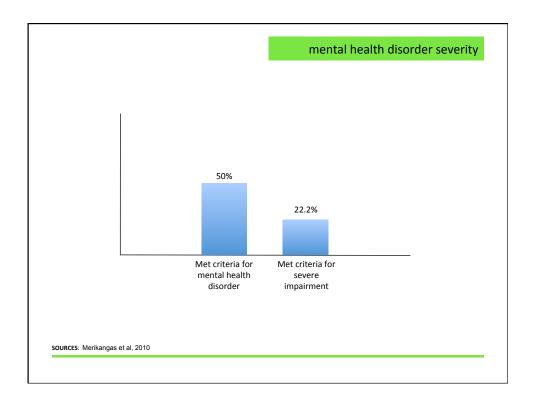
	headspace key success factors
Physical Platform	 Proximate: wide network of well-located Centers One-stop site for wide array of health services
Free	 Centre costs funded by Commonwealth through headspace National Provider costs (counselors, psychiatrists, etc.) paid by national health system (Medicare Locals)
Discreet	 Discreet setting: not school-based or family doctor Confidential De-stigmatizing of mental health challenges
Adolescent Focus	 Dedicated to serving teens Designed (space and communications) to appeal to teens Deliberate use of youth voice

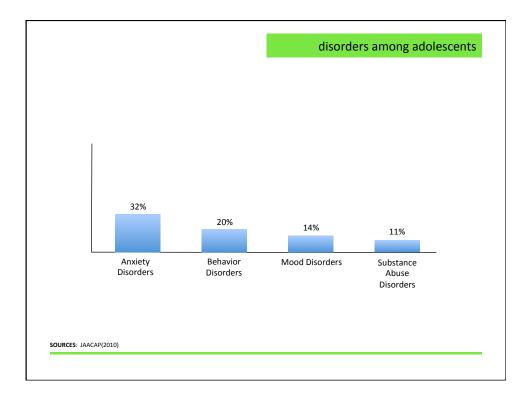
	headspace lessons learned
Attracting Youth	 Adolescents will seek out mental health services in significant numbers under the right circumstances
De-stigmatizing MH	 Communicating about mental health challenges can lower reluctance of adolescents to seek assistance

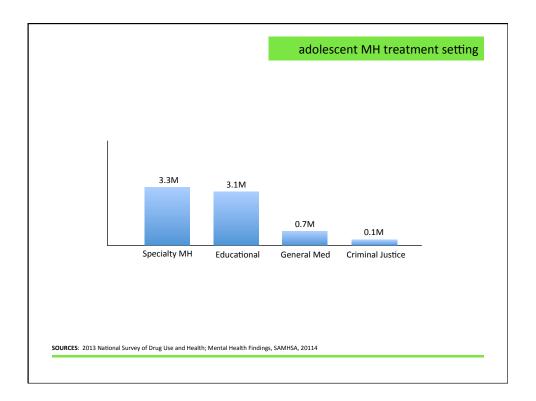


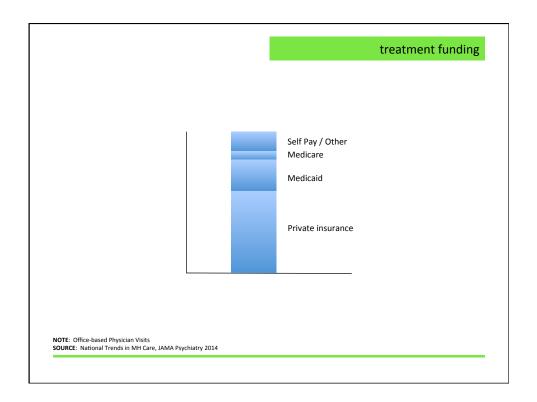


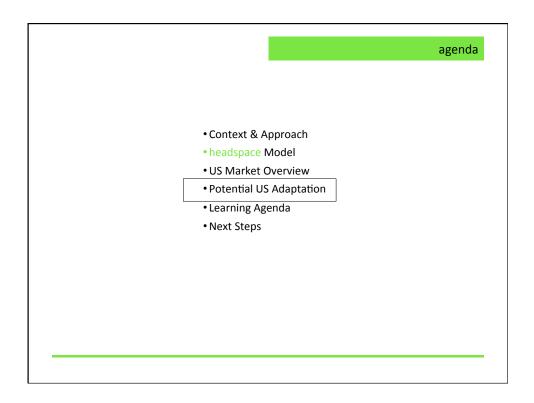












			potential strategies
	[]		
	Physical Platform	Virtual Network	Campaign Only
Elements	 Standalone facilities Media campaign 	 New national network integrating existing providers in existing facilities Media campaign 	• Media campaign
Rationale	 Required to attract adolescents 	• No/low new investment required	 No/low new investment required
Questions	 Sustainable business model Start-up investment 	 Adequacy of existing providers in attracting adolescents 	 Adequacy of existing providers in attracting adolescents

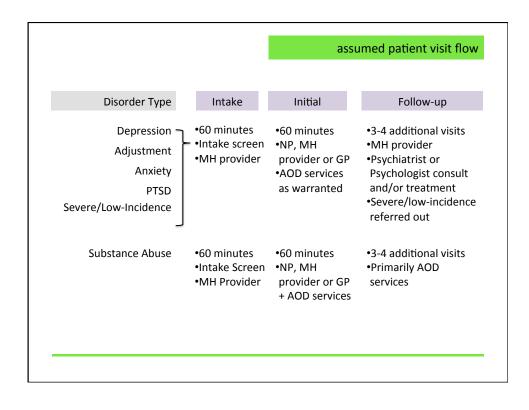
	existing US models considered
School-Based Health Centers (SBHCs)	 Access population in schools and through high school age only Prioritize primary care and reproductive health with less access to mental health services HIPAA-FERPA issues
Adolescent Health Centers	 Prioritize reproductive health due to reimbursement possibilities; minimal mental health supports Many connected to academic medical centers Lower access to transition age and young adult populations
Federally Qualified Health Centers (FQHCs)	 Generally target clinical programs to other ages and not stand alone or adolescent-young adult friendly Integration of primary care and mental health in early development Do have enhanced reimbursement rate through Medicaid

			typical US site financia	
	Year 1	Year 2	Year 3	Year 4
Revenue				
Client Visit Revenue	\$435,345	\$653,223	\$653,223	\$653,223
Other Site Revenue	\$0	\$0	\$0	\$C
Total Revenue	\$435,345	\$653,223	\$653,223	\$653,223
Expenses				
Direct				
Personnel: Direct	\$624,441	\$637,283	\$656,401	\$676,093
IT / Communications	\$23,669	\$12,910	\$12,910	\$12,910
Marketing	\$64,500	\$6,000	\$6,000	\$6,000
Training and Other Direct Expenses Total Clinic Expenses	\$24,910 \$737,520	\$12,910 \$669,103	\$12,910 \$688,222	\$12,910 \$707,914
Total Clinic Expenses	\$737,520	\$669,103	\$688,222	\$707,914
Gross Profit	(\$302,175)	(\$15,880)	(\$34,998)	(\$54,690)
Overhead and Administrative				
Personnel: Indirect	\$338,129	\$345,082	\$355,435	\$366,098
Facilities and Maintenance	\$43,000	\$24,000	\$24,000	\$24,000
Supplies	\$7,250	\$3,000	\$3,000	\$3,000
Travel	\$4,500	\$6,000	\$6,000	\$6,000
Research Costs	\$0	\$0	\$0	\$0
Communications (Indirect)	\$10,900	\$1,200	\$1,200	\$1,200
Other Expenses Total Overhead and Administrative Expenses	\$9,000 \$412,779	\$12,000 \$391,282	\$12,000 \$401,635	\$12,000
Total Overheau and Administrative Expenses	3412,775	\$351,262	3401,033	3412,250
Net Operating Income	(\$714,954)	(\$407,162)	(\$436,633)	(\$466,988)
Total Operating Expenses	\$1,150,299	\$1,060,386	\$1,089,857	\$1,120,212
Grant Revenue Needed for Break-Even	\$714,954	\$407,162	\$436,633	\$466,988

	headspace		US Site Model	
	Title	FTEs	Title	FTEs
Non-Clinical	Service Integration Mgr.	1.00	Clinic Site Manager	1.00
	Engagement Workers	1.67	Clinic Admin Assistants	2.00
	Community Awareness	ommunity Awareness 1.00 Clinic Admin – Billing		1.00
Clinical	General Practitioner*	0.20	Awareness / Peer Support	2.00
	Psychiatrist*	0.20	General Practitioner	0.13
	Psychologist*	0.20	Psychiatrist	0.13
	MH Nurse*	1.50	Psychologist	0.50
	Social Worker*	1.00	Nurse Practitioner	1.00
	Tertiary MH*	1.00	MH Provider	2.00
	AOD Services*	0.75	AOD Services	1.00
	Clinical Lead	1.00	Total Headcount (FTEs)	10.76
	Youth MH Clinicians*	1.50		
	Vocational Support*	0.33		
	Housing, Income, Other*	0.33		
	General Support Services*	0.33		
	Total Headcount (FTEs)	12.02		

			US site staf	fing expenses
	Year 1	Year 2	Year 3	Year 4
Non-Clinical	\$338,129	\$345,082	\$355,435	\$366,098
Clinical	\$624,441	\$637,283	\$656,401	\$676,093

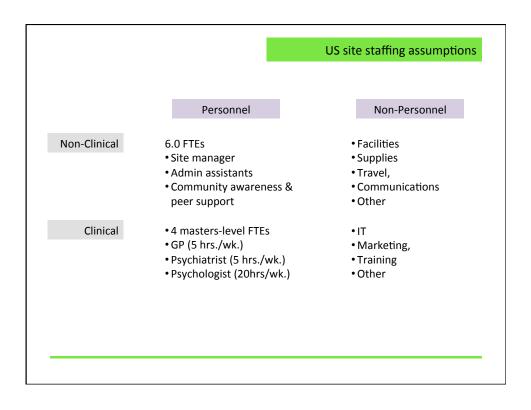
		assumed patient disorders
Disorder Type	headspace	US Model
Depression	42%**	26%
Adjustment	20%*	25%
Anxiety	22%**	22%
PTSD	10%*	10%
Substance Abuse	3%	15%
Severe/Low-Incidence	3%*	1%
NOTES: Overall headspace 2014 * Estimated ** Based on eHeadspace percentage		



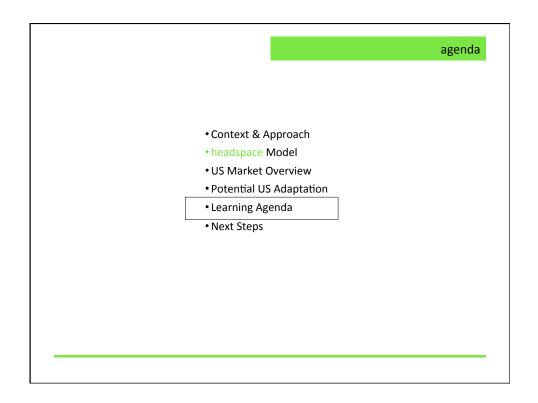
		ass	umed patient visit yield
Disorder Type	Intake	Initial	Follow-up
Depression	100%	80%	75%
Adjustment	100%	80%	75%
Anxiety	100%	80%	75%
PTSD	100%	80%	75%
Substance Abuse	100%	80%	75%
Severe/Low-Incidence	100%	80%	(referred out)

Visit Type	Treatment	CPT Codes	Avg revenue
Initial Visit	 Psychiatric diagnostic interview Health & behavioral assessment 	90791 96150	\$158
Follow Up Visits	 Individual psychotherapy 60 minutes Interactive complexity add-on (50% of visits) 	90837 90785	\$139
Substance Abuse Visits	•Health & behavior intervention – individual	96152	\$80

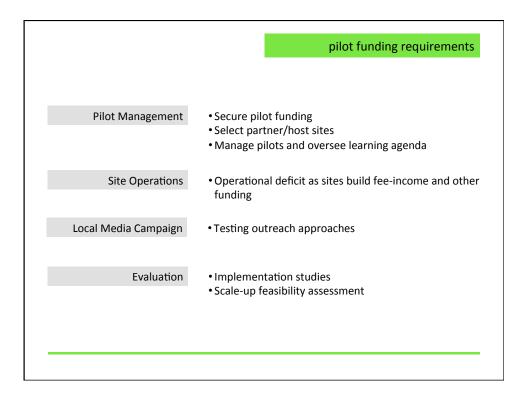


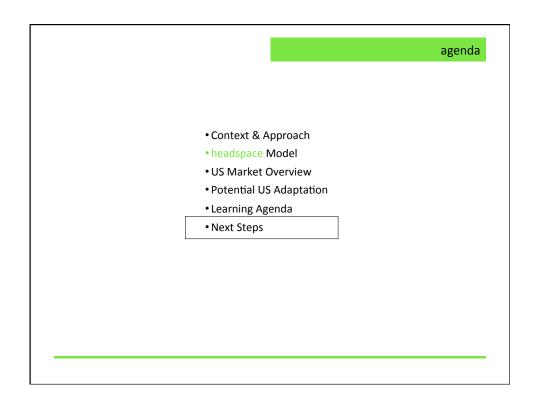


Year 1 Year 2 Year 3 Year 4 Client Visit Revenue \$435k \$653k \$653k \$653l
Client Visit Revenue \$435k \$653k \$653k \$653l
Additional required \$715k \$407k \$437k \$467k funding



	primary pilot proof points
Operational	 Staffing and other expenses sufficient to delivery quality mental health services Adequate start-up costs: site build-out, staff recruitment & training
Business Model	 Sites able to secure reimbursement: amounts and mechanics Sites able to attract additional, sustainable sources of funding for the remaining site operating expenses Media campaign to attract adolescents: elements and cost
Strategic	 Sites able to attract adolescents in sufficient volume





Appendix D: Links to **headspace** information, research, and messaging

headspace Website: http://www.headspace.org.au/

2013-2014 headspace Annual Report: https://www.youtube.com/user/headspaceAustralia

Journal Article: Rickwood, D.J., Mazzer, K.R., Telford, N.R., Parker, A.G., Tanti, C.J., McGorry, P.D. (2015) <u>Changes in psychological distress and psychosocial functioning in young people</u> <u>accessing headspace centres for mental health problems.</u> *The Medical Journal of Australia*, 202 (10): 537-543.

https://www.mja.com.au/journal/2015/202/10/changes-psychological-distress-and-psychosocialfunctioning-young-people

Journal Article: Rickwood, D.J., Telford, N.R., Mazzer, K.R., Parker, A.G., Tanti, C.J., McGorry, P.D, (2015) <u>The services provided to young people by headspace centres in Australia</u>. *The Medical Journal of Australia*, 202 (10): 533-537.

https://www.mja.com.au/journal/2015/202/10/services-provided-young-people-through-headspacecentres-across-australia

Journal Article: Rickwood, D.J., Telford, N.R., Parker, A.G., Tanti, C.J., McGorry, P.D. (2014) *headspace* - Australia's innovation in youth mental health: who are the clients and why are they presenting? *The Medical Journal of Australia*, 200 (2): 108-111.

https://www.mja.com.au/journal/2014/200/2/headspace-australia-s-innovation-youth-mental-health-who-are-clients-and-why-are?0=ip_login_no_cache=d6583ae0d1d7f30fea70ea224d76af19

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https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCMQFjAA&url=htt p%3A%2F%2Fwww.headspace.org.au%2Fcore%2FHandlers%2FMediaHandler.ashx%3Fmediald =3018&ei=ebpbVfCYGISvogTjx4D4Bw&usg=AFQjCNEDUgRzaM5JHTdP5EjeW6mHQ4Lj0Q&bvm =bv.93756505,d.ah

Advertisements:

James vs the Broken Heart: https://www.youtube.com/watch?v=Gjmu-IsnrhY

Sarah vs the Dreaded Butterflies: https://www.youtube.com/watch?v=RM6jym0Eg0U

Daniel vs the Black Cloud: https://www.youtube.com/watch?v=OWG1OeaGUrY

Videos:

"Got a lot going on?" Aboriginal hip hop video, developed with aboriginal youth from across the country. https://www.youtube.com/watch?v=jjermadefAM

The Low Down on Alcohol: https://www.youtube.com/watch?v=wWbx1F3TRpw

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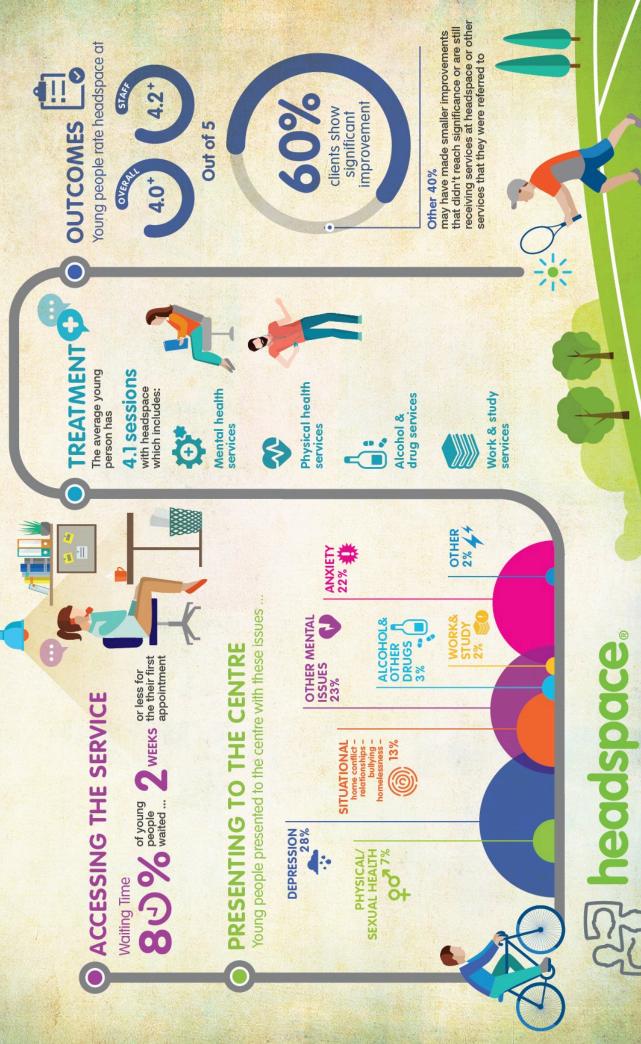
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