

Project Status Update

Reporting cycle:	1 October 2016 to 30 June 2017 (Year 1)	Date:	13 June 2017
Designated charity:	<i>The University of Sydney's Brain and Mind Centre</i>		
Funded initiative:	<i>Youth Mental Health and Technology Program (known as Brain and Mind-Youth Platform)</i>		

The provision of highly-personalised clinical assessment and online monitoring of treatment over 12 months can dramatically improve the health outcomes of young people with depression.

The BMC has been working to develop novel clinical assessment and longitudinal tracking tools to support that. Those tools use new and emerging technologies to detail psychological, cognitive, social and medical characteristics and plan individualised and more effective long-term interventions. The package of tools is referred to as the Brain and Mind-Youth Platform.

This project will support the installation of the above package of tools initially at five sites in NSW (Camperdown, Darlinghurst, Campbelltown, Ashfield and the Central Coast), followed by progressive extension to other sites in NSW (Eastern and South-Eastern Sydney, Far West NSW) and then interstate (collaborating centres in Melbourne, regional Victoria, Brisbane, regional Queensland, Darwin and Alice Springs).¹

Each of the sites will subscribe to the Brain and Mind-Youth Platform, allowing young people who attend these centres to access the same level of detailed clinical assessment and tracking techniques as that currently available only at the BMC in Sydney. This access to specialist care gives young people the greatest opportunity of achieving full symptomatic and functional recovery from their episode of clinical depression.

The funding provided by FGG will contribute towards the research/ evaluation, clinical and technology personnel required to roll-out the Brain and Mind-Youth Platform at the first five sites, conduct training for health professionals and, lead the ongoing research, development and evaluation of the Youth Platform. Additional funds will be used to support the technical aids (notably license fees to computerised cognitive testing) to implementation at each site, the engagement of young people and their families in ongoing co-design, user (acceptance) testing and evaluation of upgrades to the Youth Platform. In later years, funding will be used to extend the system rapidly to other collaborating sites in NSW and then Australia-wide.

Once the Brain and Mind-Youth Platform has been rolled-out at each site, it will be evaluated using both quantitative and qualitative assessments which include health outcomes as well as every-day user experience by young people and health professionals. Health outcomes will be reported annually (i.e. rates of participation in effective care, education and employment; reductions in disability, suicidal ideation and risk behaviours). The cost-effectiveness of the program will also be measured (i.e. cost per young person treated; cost savings due to reduced disability or use of other mental or physical health services) and the capacity to transfer the Youth Platform to new participating sites with lower start-up costs, rapid implementation and lower sustainability costs will also be measured.

Ultimately, the Brain and Mind-Youth Platform will link a network of stand-alone primary care clinics and, thereby, enable 20,000 young people over five years to use the system. The explicit goals are to increase effective treatment rates from 50% to 80%, increase participation in employment or education from 70% to 85% and reduce suicidal ideation by 50%. Additionally, it aims to reduce daily smoking rates from 30% to 15%; hazardous alcohol use from 35% to 20%; and, regular cannabis use from 15% to 5%.

Snapshot overview: To date, FGG funding has supported the installation of the Brain and Mind-Youth Platform at five *headspace* sites in NSW (Ashfield, Bondi Junction, Camperdown, Hurstville and Miranda). Its etools assess, report and guide real-time results and recommendations regarding mental health and wellbeing and include the development of a 'share plan' with a health professional. To date, more than 500 'share plans' have been created.

¹ Current negotiations are also exploring international uptake in North and South America.

This installation has also been accompanied by implementation of a pilot training program for participating *headspace* health professionals including and includes clinical (i.e. staging), service (i.e. stepped care) and digital (i.e. Brain and Mind-Youth Platform) modules. The training program also includes the 'zero suicide in care' philosophy.

Over this time, continued iterative and rapid prototyping of the technology has occurred in response to every-day young person and health professional use of the Brain and Mind-Youth Platform as well as changing in response to the maturing service and technology environments. Importantly, it now includes more personalised assessment and further intervention, and will soon include real-time and aggregate *headspace* site metrics.

Future funding will contribute to the expansion of the project to include other *headspace* sites in NSW and interstate; and, over the course of the project will link together clustered networks of youth primary mental health care services to achieve system reform. It will enable an estimated 20,000 young people over five years to access the Brain and Mind-Youth Platform.

No significant adjustments have been made to the project scope or approach.

Key achievements:

To date, key achievements have included:

1. Roll-out of the Brain and Mind-Youth Platform to five primary health care services in NSW.
2. Implementation of the training program for participating *headspace* health professionals.
3. Continuous iterative and rapid prototyping of the technology.
4. Implementation and management of the ongoing research and development agenda including overall project evaluation.

Building the evidence base: To date, five primary health care services have enrolled in the project and now includes more than 500 young people users and approximately 25 health professional users of the Brain and Mind-Youth Platform. Preliminary analyses of the first 500 young people participants suggest improved rates in functionality and health outcomes via more effective triage, individual needs assessment and matching service to needs. Through the training program, participating health professionals have committed to working towards the zero suicide philosophy. Overall, the research, development and evaluation of this project continues to iteratively inform the (re)development of the Brain and Mind-Youth Platform.

Building sector capability: Approximately 25 health professionals are now using the Brain and Mind-Youth Platform and have participated in the training program. Preliminary analyses of health professional responses trend towards increased ability and confidence of working with young people presenting with suicidal behaviours; and qualitative data suggests health professionals have a positive user experience with the Brain and Mind-Youth Platform resulting in improved health service outcomes.

Increasing individual agency: To date, five primary health care services have enrolled in the project and now includes more than 500 young people users and approximately 25 trained health professional users of the Brain and Mind-Youth Platform. Preliminary analyses of both young people and health professional participants have indicated better awareness of, and confidence, seeking help online.

Improving access to support: More than 500 young people are now using the Brain and Mind-Youth Platform and preliminary analyses of user experience suggests young people participants are satisfied with the care provided and have a more positive attitude towards help seeking (both online and offline).

Strengthening early intervention: Preliminary analyses of the first 500 young people participants suggest improved rates in functionality and health outcomes via more effective triage, individual needs assessment and matching service to needs. Through the training program, participating health professionals have committed to working towards the zero suicide philosophy.

Fostering socio-economic **participation**: Preliminary analyses of the first 500 young people participants suggest improved rates in functionality including more participation in education, employment and training.

No. people supported:

People supported through the project: ²	Support provided to date:		
	Directly Supported	Indirectly Supported	Total
	No.	+ Estimated	= Total
Children & young people	>500	500	~1,000
Those who are close to & care for them	0	0	0
Professional service providers	~25	0	25

Specified targets are indicative as they are based on ‘average’ assumptions. That is, each centre assists on average 1,000 young people per year; and each of these centres employ an average of 10 health professionals. Consequently, we predict the yearly figures for engagement of young people to be Years 1-2 = ~5,000 over the two years, and then Years 3-5 = ~5,000 per year as more centres come online, Total = ~20,000 young people over the life of the project. Similarly, we would predict the yearly figures for engagement of health professionals to be Years 1-2 = 50 over the two years, and then Years 3-5 = ~50 per year as more centres come online, Total = ~200 health professionals.

Initial recruitment rates of young people participants reflect the start-up phase of project implementation and uptake, that often occurs at the commencement of research trials. Now that implementation is well established, uptake of currently enrolled *headspace* sites is strong and we expect recruitment of young people to now be more closely aligned to estimated numbers.

Key observations & learnings to date:

Preliminary analyses of the first 500 young people participants suggest improved rates in functionality (i.e. education, employment and training) as well as health outcomes via more effective triage, individual needs assessment and matching service to needs. Through the training program, participating health professionals (n=25) have committed to working towards the zero suicide philosophy; and, results have trended towards increased ability and confidence of working with young people presenting with suicidal behaviours. Qualitative data also suggests health professionals have a positive user experience with the Brain and Mind-Youth Platform which has resulted in improved health service outcomes and in turn greater uptake of the digital solution by young people participants.

Given rapid advances in new and emerging technologies and its high level of use amongst young people, primary health services (i.e. *headspace*) are encouraged to see the implementation of digital solutions, such as the Brain and Mind-Youth Platform, as part of an effective mechanism to achieve technology-enabled mental health service reform for better outcomes.

In order for implementation of this digital solution to be effective however, such services require strong and consistent leadership, effective engagement with all staff, and, ongoing training and developmental support for staff. The development of a ‘technology and service implementation protocol’ for future expansion of the project will assist services with the process, and support a more standardised approach to utilising the Brain and Mind-Youth Platform. This will also enable ongoing development and evaluation to support achievement of technology-enabled mental health service reform more broadly.

² Directly Supported = people who are able to be specifically identified as having participated in project activity or having accessed services or supports provided through it. Indirectly Supported = based on demographic or other project estimates rather than being able to be specifically identified as having participated in project activity or having accessed services or supports provided through it.

Benefits derived from FGG funding:

For the BMC's Youth Platform, FGG funding is a very significant investment, both in terms of its size and continuity. This investment allows us to plan in advance and consequently achieve capability as well as sustainability, that would not otherwise be available.

Next steps:

Next steps include expansion of the project to include other *headspace* sites in NSW and interstate; and, over the course of the project will link together clustered networks of youth primary mental health care services to achieve system reform. It will enable an estimated 20,000 young people over five years to access the Brain and Mind-Youth Platform.

Project Outcomes Framework: [take framework from Project Overview, report on delivery against Year 1 Targets and specify Year 2 Targets]

Change Lever	Objective	Metrics	Target – Full Project	Target – Year 1	Actual Delivery – Year 1	Target – Year 2
Evidence	<ul style="list-style-type: none"> Improved numbers of young people in effective care Improved everyday function of young people (eg. increased rates in education, employment, training) Lower young person self-reported levels of symptomatology/ disability ‘Zero suicide in care’ and reduced rates of associated risky behaviours 	<ul style="list-style-type: none"> Number of primary health care services enrolled in the project Number of young people and health professionals using the Brain and Mind-Youth Platform Rates of effective treatment (including number of sessions, length of session, further assessments and interventions recommended) Young person functional outcomes (including rates in education, employment, training; rates smoking daily or engaging in hazardous alcohol or other substance use) Young person health outcomes (including symptomatology and disability) Numbers of escalated cases displaying suicidal behaviours including self-harm 	<ul style="list-style-type: none"> ~20 primary health care services enrolled in the project ~20,000 young people and ~200 health professionals using the Brain and Mind-Youth Platform Improved rates of effective treatment from 50% to 80% Improved young person functionality and health outcomes including the reduction of daily smoking rates from 30% to 15%, hazardous alcohol use from 35% to 20% and, regular cannabis use from 15% to 5%. Working towards a ‘Zero suicides in care’ philosophy by reducing suicidal ideation by 50% Research, development and evaluation of project to continuously and iteratively inform the (re)development of the Brain and Mind-Youth Platform Project learnings reflected in current health service reform Up to five research papers published 	<ul style="list-style-type: none"> ~Five primary health care services enrolled in the project ~2,500 young people and ~25 health professionals using the Brain and Mind-Youth Platform Improved rates of effective treatment Improved young person functionality and health outcomes Working towards a ‘Zero suicides in care’ philosophy Research, development and evaluation of project to continuously and iteratively inform the (re)development of the Brain and Mind-Youth Platform 	<p>To date, five primary health care services have enrolled in the project and now includes more than 500 young people users and approximately 25 health professional users of the Brain and Mind-Youth Platform. Preliminary analyses of the first 500 young people participants suggest improved rates in functionality and health outcomes via more effective triage, individual needs assessment and matching service to needs. Through the training program, participating health professionals have committed to working towards the zero suicide philosophy. Overall, the research, development and evaluation of this project continues to iteratively inform the (re)development of the Brain and Mind-Youth Platform.</p>	<ul style="list-style-type: none"> ~Five more primary health care services enrolled in the project ~5,000 young people and ~50 health professionals using the Brain and Mind-Youth Platform Improved rates of effective treatment Improved young person functionality and health outcomes Working towards a ‘Zero suicides in care’ philosophy Research, development and evaluation of project to continuously and iteratively inform the (re)development of the Brain and Mind-Youth Platform
Capability	<ul style="list-style-type: none"> Improved health professional access to relevant training including clinical (i.e. staging), service (i.e. stepped care) and digital (i.e. the Brain and 	<ul style="list-style-type: none"> Number of health professionals participating in training and evaluations of that training Rates of effective treatment (including number of sessions, 	<ul style="list-style-type: none"> ~200 health professionals participating in training and evaluations of that training Improved rates of effective treatment from 50% to 80% 	<ul style="list-style-type: none"> ~25 health professionals participating in training and evaluations of that training Improved rates of effective treatment 	<p>Approximately 25 health professionals are now using the Brain and Mind-Youth Platform and have participated in the training program.</p>	<ul style="list-style-type: none"> ~50 health professionals participating in training and evaluations of that training

Change Lever	Objective	Metrics	Target – Full Project	Target – Year 1	Actual Delivery – Year 1	Target – Year 2
	<p>Mind-Youth Platform and associated tools) modules, as well as the ‘zero suicides in care’ philosophy</p> <ul style="list-style-type: none"> Improved health professional delivery of effective care via better triage, assessment and management of young people presenting for care Increased health professional ability to identify and respond to the needs of young people presenting with suicidal behaviours Increased health professional confidence in working with young people presenting with suicidal behaviours Strengthen health professional support/ service network 	<p>length of session, further assessments and interventions recommended)</p> <ul style="list-style-type: none"> Health professional self-reported ability and confidence of working with young people presenting with suicidal behaviours Quantitative assessments of health professional user experience regarding improvement in health service support and network via the Brain and Mind-Youth Platform Qualitative assessments of health professional user experience regarding improvement in health service support and network via the Brain and Mind-Youth Platform 	<ul style="list-style-type: none"> Working towards a ‘Zero suicides in care’ philosophy by reducing suicidal ideation by 50% Increased rate of participating health professional self-reported ability and confidence of working with young people presenting with suicidal behaviours Positive health professional user experience regarding improvement in health service support and network via the Brain and Mind-Youth Platform 	<ul style="list-style-type: none"> Working towards a ‘Zero suicides in care’ philosophy Increased rate of participating health professional self-reported ability and confidence of working with young people presenting with suicidal behaviours Positive health professional user experience regarding improvement in health service support and network via the Brain and Mind-Youth Platform 	<p>Preliminary analyses of health professional responses trend towards increased ability and confidence of working with young people presenting with suicidal behaviours; and qualitative data suggests health professionals have a positive user experience with the Brain and Mind-Youth Platform resulting in improved health service outcomes.</p>	<ul style="list-style-type: none"> Improved rates of effective treatment Working towards a ‘Zero suicides in care’ philosophy Increased rate of participating health professional self-reported ability and confidence of working with young people presenting with suicidal behaviours Positive health professional user experience regarding improvement in health service support and network via the Brain and Mind-Youth Platform
Agency	<ul style="list-style-type: none"> Increased use of the Brain and Mind-Youth Platform by young people and health professionals Increased awareness of available sources of help online (and offline) for both the young person and health professional Increased confidence in accessing sources of help online (and offline) for both the young person and health professional Right care at the right time! 	<ul style="list-style-type: none"> Number of primary health care services enrolled in the project Number of young people and health professionals using the Brain and Mind-Youth Platform Google analytics to understand online user behaviour including time online and exit points etc Quantitative assessments of young person and health professional user experience regarding awareness and 	<ul style="list-style-type: none"> ~20 primary health care services enrolled in the project ~20,000 young people and ~200 health professionals using the Brain and Mind-Youth Platform ~200 health professionals participating in training and evaluations of that training Increased numbers of young people and health professionals reporting better awareness and confidence of seeking help online Improved rates of effective treatment from 50% to 80% Working towards a ‘Zero suicides in care’ philosophy by 	<ul style="list-style-type: none"> ~Five primary health care services enrolled in the project ~2,500 young people and ~25 health professionals using the Brain and Mind-Youth Platform ~25 health professionals participating in training and evaluations of that training Increased numbers of young people and health professionals reporting better awareness and confidence of seeking help online 	<p>To date, five primary health care services have enrolled in the project and now includes more than 500 young people users and approximately 25 trained health professional users of the Brain and Mind-Youth Platform. Preliminary analyses of both young people and health professional participants have indicated better awareness of, and</p>	<ul style="list-style-type: none"> ~Five more primary health care services enrolled in the project ~5,000 young people and ~50 health professionals using the Brain and Mind-Youth Platform ~50 health professionals participating in training and evaluations of that training

Change Lever	Objective	Metrics	Target – Full Project	Target – Year 1	Actual Delivery – Year 1	Target – Year 2
		<ul style="list-style-type: none"> confidence of seeking help online • Qualitative assessments of young person and health professional user experience regarding awareness and confidence if seeking help online 	<p>reducing suicidal ideation by 50%</p>	<ul style="list-style-type: none"> • Improved rates of effective treatment • Working towards a ‘Zero suicides in care’ philosophy 	<p>confidence, seeking help online.</p>	<ul style="list-style-type: none"> • Increased numbers of young people and health professionals reporting better awareness and confidence of seeking help online • Improved rates of effective treatment • Working towards a ‘Zero suicides in care’ philosophy
<p>Access</p>	<ul style="list-style-type: none"> • Improved access to, and uptake of care through, online technologies such as the Brain and Mind-Youth Platform and its associated tools • Improved young person user experience when engaging with a health professional who has accessed the training program • Increased rates of young people seeking help and accessing services online (or offline) 	<ul style="list-style-type: none"> • Number of primary health care services enrolled in the project • Number of young people and health professionals using the Brain and Mind-Youth Platform • Number of health professionals participating in training and evaluations of that training • Google analytics to understand online user behaviour including unique users accessing online resources • Quantitative assessments of young person user experience regarding relevance and usefulness of the Brain and Mind-Youth Platform • Qualitative assessments of young person user experience regarding relevance and usefulness of the Brain and Mind-Youth Platform 	<ul style="list-style-type: none"> • ~20 primary health care services enrolled in the project • ~20,000 young people and ~200 health professionals using the Brain and Mind-Youth Platform • Increased numbers of young people reporting satisfaction with care and positive attitude towards help seeking • Improved rates of effective treatment from 50% to 80% 	<ul style="list-style-type: none"> • ~Five primary health care services enrolled in the project • ~2,500 young people and ~25 health professionals using the Brain and Mind-Youth Platform • Increased numbers of young people reporting satisfaction with care and positive attitude towards help seeking • Improved rates of effective treatment 	<p>More than 500 young people are now using the Brain and Mind-Youth Platform and preliminary analyses of user experience suggests young people participants are satisfied with the care provided and have a more positive attitude towards help seeking (both online and offline).</p>	<ul style="list-style-type: none"> • ~Five more primary health care services enrolled in the project • ~5,000 young people and ~50 health professionals using the Brain and Mind-Youth Platform • Increased numbers of young people reporting satisfaction with care and positive attitude towards help seeking • Improved rates of effective treatment

Change Lever	Objective	Metrics	Target – Full Project	Target – Year 1	Actual Delivery – Year 1	Target – Year 2
Early Intervention	<ul style="list-style-type: none"> Increased rates of young people seeking help and accessing services online (or offline) Improved treatment outcomes for young people 	<ul style="list-style-type: none"> Number of primary health care services enrolled in the project Number of young people using the Brain and Mind-Youth Platform 	<ul style="list-style-type: none"> ~20 primary health care services enrolled in the project ~20,000 young people using the Brain and Mind-Youth Platform Improved rates of effective treatment from 50% to 80% Working towards a 'Zero suicides in care' philosophy by reducing suicidal ideation by 50% 	<ul style="list-style-type: none"> ~Five primary health care services enrolled in the project ~2,500 young people using the Brain and Mind-Youth Platform Improved rates of effective treatment Working towards a 'Zero suicides in care' philosophy 	<p>Preliminary analyses of the first 500 young people participants suggest improved rates in functionality and health outcomes via more effective triage, individual needs assessment and matching service to needs. Through the training program, participating health professionals have committed to working towards the zero suicide philosophy.</p>	<ul style="list-style-type: none"> ~Five more primary health care services enrolled in the project ~5,000 young people using the Brain and Mind-Youth Platform Improved rates of effective treatment Working towards a 'Zero suicides in care' philosophy
Participation	<ul style="list-style-type: none"> Improved rates of social and economic participation for young people (eg. increased rates in education, employment, training) 	<ul style="list-style-type: none"> Number of young people currently in education, employment and training 	<ul style="list-style-type: none"> Increased rates of young person participation in education, employment and training from 70% to 85% 	<ul style="list-style-type: none"> Increased rates of young person participation in education, employment and training 	<p>Preliminary analyses of the first 500 young people participants suggest improved rates in functionality including more participation in education, employment and training.</p>	<ul style="list-style-type: none"> Increased rates of young person participation in education, employment and training

Notes: The change levers within this Project Outcomes Framework currently read with some repetition. This has occurred due to the early stage of the project which is still in implementation phase rather than analyses phase. Only current recruited numbers and data trends have been recorded above; however, change levers will include more detail with increased recruitment, data collection and analyses planned for the next 12 months of the project.

Overall Performance assessment:

Change Lever	Assessment	Comments
Evidence	Below At Exceeding target	<ul style="list-style-type: none"> Project in early stages, on track for delivery
Capability	Below At Exceeding target	<ul style="list-style-type: none"> Project in early stages, on track for delivery
Agency	Below At Exceeding target	<ul style="list-style-type: none"> Project in early stages, on track for delivery

Change Lever	Assessment	Comments
Access	Below At Exceeding target	• Project in early stages, on track for delivery
Early Intervention	Below At Exceeding target	• Project in early stages, on track for delivery
Participation	Below At Exceeding target	• Project in early stages, on track for delivery

Status against plan for implementation:

On track | At risk | Off track

Status against targeted project outcomes:

Below | **At** | Exceeding target