NSW KIDS +FAMILIES

TECH SAVVY + 'APPY

How health services can use technologies safely and effectively to promote young people's health and wellbeing

NSW GOVERNMENT | Health

healthy, safe and well

TABLE OF CONTENTS

EXECUTIVE SUMMARY

As most young people use the internet daily, technology is increasingly recognised as a key way that health services can promote the health of young people. Health practitioners are developing new skills in working with young people and health systems are adapting to support changing practice.

NSW Kids and Families provides leadership to the NSW Health system and partners with stakeholders to champion outstanding health, wellbeing and healthcare for all children young people and families and reduce the health impact of family and community violence, child abuse and neglect.

Healthy Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014-2024 recognises technology as a key enabler for keeping young people healthy and reducing risk taking to minimise harm. The *NSW Youth Health Policy 2011-2016* also has a focus on using creative approaches, including multimedia and technology to engage young people and their parents, carers and families.

This report tables the findings of consultations with young people and health professionals and makes recommendations to progress the take up of technology by health professionals who work with young people.

Project goals

The aim of the *Tech Savvy and 'Appy* project is to identify options to enhance the use of technology by NSW Health services in order to promote access to information and services for young people aged 12 to 24 years, their families and carers.

Methodology

Consultation methods included three phases: 1. an online focus group with young people via the ReachOut website; 2. targeted consultations with the youth health sector and 3. four Tech Savvy and 'Appy workshops with NSW Health services providers (in one urban and three rural areas). The *Tech Savvy and 'Appy* workshops were designed to deliver key research and information on how technology can be used to promote the wellbeing of young people, as well as to provide an opportunity for consultation with health professionals about their priorities for using technology to engage young people, including current barriers and enablers.

The key project questions included:

- How can technology assist young people with their health needs, including accessing services?
- What are the priorities for action?
- What would best assist the NSW Health workforce to enable change?

Findings

The consultation with young people found they use technology to seek health information and services but find navigating the health system to be difficult due to its fragmented nature. Websites and social media play a positive role in promoting health information and services. Young people said that having a website was an important factor in choosing what services they would access. Key suggestions from young people included providing them with trusted health information and better promotion of existing services.

The youth health sector consultations and *Tech Savvy and 'Appy* workshops found most health services use some creative approaches including multimedia and technology to engage young people and their parents, carers and families. However, the use of technology varies greatly, with many services acknowledging their current limitations, including a lack of access to technology, the internet and relevant websites. Supportive policies, management and funding would enable services to better utilise the tools and opportunities that technology can provide in order to meet the changing needs of the client group. Health professionals also identified the need for further training on how they can use technology to engage with young people.

Action Plan

The Youth Health Wellbeing Advisory Group considered the key findings and an Action Plan was developed. The Action Plan focuses on key areas to increase access to technology by health professionals to better engage with young people. The Action Plan includes advocacy for improved access to technological tools and IT support, as well as changes to policy and culture. Professionals also want online engagement to be acknowledged in health professional roles and further training to increase individual efficacy in the use of technology. The exploration of a youth wellbeing web presence and branding was also considered.

1. BACKGROUND

Many of the causes of adult chronic illness have their origins in the lifestyle factors developed during adolescence. This period therefore presents an opportune time to intervene. However, there are a number of barriers to young people accessing healthcare.

With most young people using the internet daily, technologies offer effective solutions to increase young people's access to health information and care. Health practitioners are developing new skills in working with young people and health systems are adapting to support practice change to promoting young people's health now and in the future.

NSW Kids and Families is taking a lead role to drive improved health outcomes for children, young people and families of NSW. NSW Kids and Families has developed *Healthy Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014-24* that includes the use of eHealth as a key enabler to drive integration, services delivery, access, communication, treatment and innovation in the next decade.

The Youth Health and Wellbeing Team of NSW Kids and Families provides leadership for statewide directions, policies and guidelines, providing expert advice on youth health issues, including implementation of the *NSW Youth Health Policy 2011-2016: Healthy Bodies, Healthy Minds, Vibrant Futures.* This Policy has a strong focus on improving the youth friendliness of services by using creative approaches, including multimedia and technology to engage young people and their parents, carers and families.
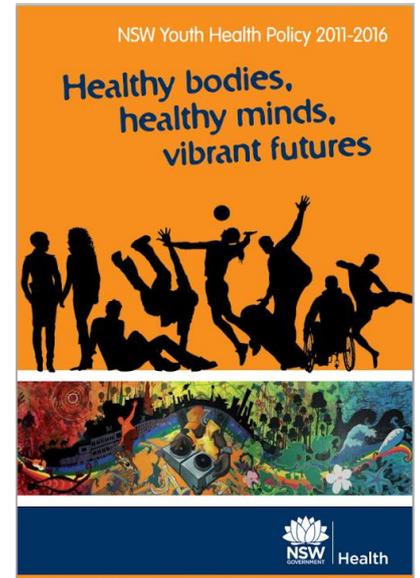
2. PROJECT PURPOSE

The Youth Health and Wellbeing Team is guided by a Youth Health and Wellbeing Advisory Group, made up of nominees from government agencies, the non-government sector, academia and community organisations with expertise in youth health across a range of specialist areas. A Youth Health and Wellbeing eHealth Working Group was established to identify options to progress the use of technology by services working with young people. The Working Group members include representatives from NSW Health and non-government organisations, and are listed in the Appendix.

Project Aim
The aim of this project is to assess and identify options to enhance the use of technology in NSW Health services in order to promote access to information and services by young people aged 12 to 24 years, their families and carers.

Objectives
The key issues include:

- What young people want from NSW Health services in terms of how technology is used
- What the youth health sector see as the priorities for action to work with young people using technology
- What would best assist the NSW Health workforce to enable positive change.

Scope
The focus of this project was to obtain the views of young people aged 12 to 24 years living in NSW, youth health services and NSW Health workers who provide health services for young people.

The topics covered included the promotion of access to information about health and services by young people and eHealth tools to enable quality care. Client health records and data sets were outside the scope of this project.

3. LITERATURE REVIEW ON TECHNOLOGY AND YOUNG PEOPLE'S WELLBEING

The researchers undertook a literature review which is summarised in the table below. This was not an extensive or systematic review, but a review of what would assist to inform the project. These findings present opportunities for health professionals to engage with young people, their families and carers about the online support they are accessing or wanting to access.

Table 1: Examples of how technology is being used to engage young people

Green et al, 2011	Ninety-nine per cent of 15 to 16 year olds and 76 per cent of 9 to 16 year olds use the internet daily or almost daily.
Blanchard et al, 2013	There is a need for professionals working with young people to acknowledge the significance of technology, and the growing body of evidence to support that young people use digital technologies in ways that support and promote their wellbeing
Helton, 2003 Barak and Grohol, 2011	Review the types of online support that have emerged over the past two decades and highlight those with a stronger theoretical base which are thought to be more effective.
Gowan, 2013; Metcalf and Kauer, 2013	More young people are going to online spaces to retrieve health information. Young people actively search for information on medication, diagnosis, treatment options, access to services online. However, young people had concerns about the nature of online information such as feeling overwhelmed by the magnitude of information and not always trusting of the quality of the information given.
Abbott et al, 2008	Have created best-practice guidelines for practitioners providing online therapy.
Australian Association of Social Workers, 2014	Has created standards for Ethics and Practice Guideline – social media, information and communication technologies.
Campbell and Robards, 2013	Developed as part of the Young and Well Cooperative Research Centre, in partnership with the University of Sydney. The better-practice guide for services examines the role of technology in facilitating direct communication, health promotion, health interventions, research and evaluation.
Burns et al, 2010	Young people were consistently more likely to use search engines to seek information online, rather than directly accessing a website.
Biddle et al, 2007	Barriers to seeking face-to-face assistance, such as stigma or access to services, can limit young people's ability to access information and assistance when they need it. However, online services, applications, information websites and forums can be an initial step in gaining the support young people need.
Van Der Krieke et al, 2014	The use of online self-help strategies can also be of benefit for young people already accessing offline health services. In a systematic review of studies which focused on online self-management interventions for people diagnosed with psychosis, online health services are at least as effective as usual care or non-technological approaches, and resulted in other positive impacts on medication management and a greater sense of community and belonging.
Johnson and Ashton-Shaeffer, 2003, cited in Mattison, 2012	Research positively links many types of online health support with increased feelings of connectedness to others. Rather than being viewed as impersonal, technology assisted support is connecting practitioners to young people, young people to other young people and young people to information and knowledge.

4. METHODOLOGY

Three approaches were used: an online consultation with young people, and face-to-face consultations with the youth health sector and broader health workforce.

Youth Consultation

Auspiced by ReachOut, an online mental health and wellbeing, support and information website for young people, the forum discussion was open to all young people accessing ReachOut.com and aimed to explore how young people use technology to support their wellbeing, to gather accounts of their information-seeking behaviours and to gauge what level of knowledge young people have about NSW Health services for young people.

NSW Health chose ReachOut discussion forums as an established online space to gain insight from young people from a variety of physical locations across NSW. The online space encouraged young people to respond without the need to be identified or to physically interact with the forum conductors; and was a medium to access and interact with young people already engaging with technology to support their wellbeing. ReachOut also has established procedures for monitoring and safety.

Participants were recruited through the ReachOut website, via their forum discussion, 'Have Your Say: Technology for your health'.

A focus group design was used and applied to the ReachOut.com online forum for a week from 28 July 2014. Young people were asked to respond to an initial set of eight questions about how health services could be improved for themselves and their peers. There were additional questions about the services and which applications participants could suggest to promote youth health services.

The forum discussion was structured and did not occur at the same time. When the forum conductors logged in, they were able to be identified in their responses to participants. All posts were open to be read by people accessing the ReachOut website. However only registered users to the ReachOut forum community were able to create or respond to posts. Participants identified themselves using names they had selected for themselves and were able to use an image. Information such as gender and postcodes of forum participants gathered for the purposes of this project by the Online Community Manager at registration was not accessible to forum users.

Ten young people participated in the online forum between 28 July and 4 August 2014. Respondents were aged between 19 to 25, with a median age of 21. Eight out of the ten participants of the forum identified themselves as female, with two identifying as male. There was no information on ethnicity, cultural background or languages spoken by respondents. Respondents identified they were living in a number of regions across NSW: six respondents in Sydney, and the remaining four in rural NSW.

Youth Health Sector Consultation

In 2014, the youth health sector were consulted via targeted consultations with the NSW Youth Health Council and the NSW Youth Health Coordination Group as part of scheduled meetings.

The NSW Youth Health Coordination Group includes representation from Local Health Districts across NSW, Specialty Health Networks and NSW Kids and Families to collaboratively support access and delivery of NSW Health funded services to young people in a manner that is consistent, comparable, effective, and efficient across NSW.

The NSW Youth Health Council is a professional forum open to all youth health-related organisations in NSW, committed to improving the health and wellbeing of young people across NSW. Its mission is to advocate on behalf of young people, to support workers, and to provide opportunities for networking, training, partnerships, consultation and planning within the youth health sector.

The findings of the *Youth Health in NSW 2014* report, which describes implementation of the *NSW Youth Health Policy 2011-2016,* were also considered. This statewide summary is based on Youth Health Reports provided by Local Health Districts and Specialty Health Networks.

Tech Savvy and 'Appy Workshops

The *Tech Savvy and 'Appy* workshops were designed to explore online-based engagement with young people to promote health, support early intervention and deliver services. The workshops also consulted Health workers about their priorities for using technology to engage young people, including current barriers and enablers, and how services can be marketed and branded to young people.

Tech Savvy and 'Appy workshops exploring online-based engagement with young people to promote health, support early intervention and deliver services, were held in Dubbo, Wagga Wagga, Lismore, South East Sydney between September and October 2014.

The workshops were led by Youth Health and Wellbeing, NSW Kids and Families in partnership with Black Dog Institute, Inspire Foundation. Local Health Districts nominated a local organiser. Project partners are acknowledged in the Appendix.

The workshops were targeted to health professionals and managers working in youth health, mental health, drug and alcohol, sexual health, community health and hospitals. Although the workshops focused on NSW Health services, representatives from non-government organisations were also invited to attend.

Seventy-five health professionals participated in the four workshops, 13 at Dubbo, 18 at Wagga Wagga, eight at Lismore and 36 at Sydney.

The workshop began with an outline of the purpose, the expected outcomes of the consultations and the current policy context. Recent and relevant research was then presented to participants on technology usage patterns by young people, the evidence base on the use of technology for improved wellbeing, as well as examples of technological tools, such as applications, that have empirical evidence to support their use.

All the workshops delivered key research and information to participants on:

- How young people are using and want to use technology to support their wellbeing (including the findings from the online youth consultation)
- A broad range of technologies that can be used as communication and clinical tools
- How to address ethical and practical issues and concerns about using technology in clinical practice
- How technologies are currently being used in health contexts to promote services, information dissemination and young people's wellbeing
- *Using Technologies Safely and Effectively to Promote Young People's Wellbeing: Better Practice Guide for Services.*

Each workshop also focused on the experiences of young people. A youth representative from the Black Dog Institute presented about their experiences of mental health issues, accessing health services and how they use technology for their own wellbeing.

In addition to the oral and audio-visual information presented, resources, flyers and handouts were provided to participants.

While all four workshops delivered key information
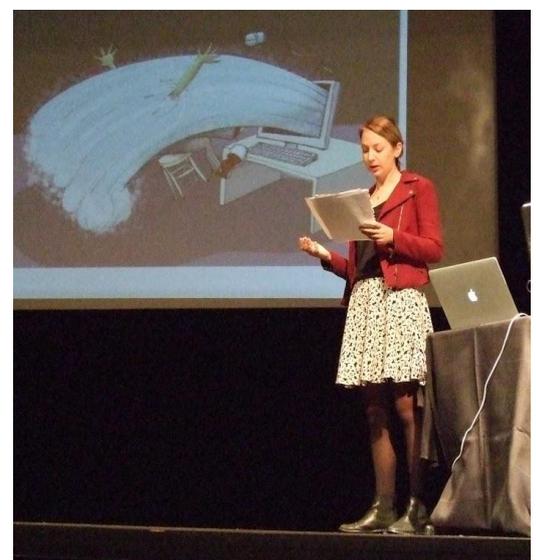
targeted to a similar audience (health professionals), each workshop also needed to account for the diversity of participants and their local needs. For example, each of the workshops featured a different practice example of technology in action presented by a local service provider. Some examples of these are provided in breakout boxes.

The workshop consultation questions focused on the enablers, barriers and priorities for health professionals using technology with young people. The consultations included large and small group discussions following the delivery of presentations. The consultations were based on a qualitative focus group structure, with individual and group tasks allocated to participants.

Participants were given a questionnaire with open questions, which they were asked to respond to on an individual basis, following small group discussions. Participants were also asked to transcribe their points onto cardboard stars as a small group, which they then presented to the whole group of participants. These 'stars' were grouped together in themes and then voted on by all individual participants. The facilitators guided, summarised and paraphrased the key points and voting results on the 'stars' with participants to conclude the activity.

Local examples of technology in action:

Murrumbidgee Local Health District

Maternal Infant Health Facebook page provides young parents with relevant information and links to webpages. It is an important way that young parents find out about health clinics and playgroup activities. The Facebook page has reporting that allows the Local Health District to see how many people like the page or access the page – this information is translated into focus area of the service provided by Local Health District. The Facebook page was initiated by a young Aboriginal worker in consultation with Aboriginal Health and Medical Research Council and Aboriginal Medical Service. It was approved by the Chief Executive.

NSW Sexually Transmissible Infections Program Unit

The Play Safe website has information for young people about safe sex, sexually transmitted infections and getting tested all in the one place. Play Safe aims to connect young people aged 15 to 24 years with sexual health information and testing, treatment and prevention services. Play Safe uses a range of innovative strategies, including easy-to-read facts and infographics; a personalised risk assessment tool; postcode locator to identify services for sexually transmitted infection testing and pharmacy for antibiotics; and a regular blog with updates on relevant issues and activities. Young people can also chat with Nurse Nettie about issues they may have concerning sexual health. This service is supported by trained sexual health nurses from Sexual Health Infoline.

5. CONSULTATION FINDINGS

Young People's Responses

Young people were consulted via an online focus group with young people from NSW who accessed the ReachOut Forum about their experiences and ideas about how technology can be used to promote the health and wellbeing of young people.

There were a total of 43 replies to the original post and 1,743 views of the forum, with seven participants providing responses to all questions and three young people with a partial response. As the consultation was conducted in an online space, all responses were in text format.

Your 'Top 5' apps, websites, games you use for your wellbeing and health

Young people were able to identify a broad range of applications, websites and games they accessed daily or at specific times of need. Young people identified a total of 27 online tools they used to promote their wellbeing with the most often mentioned being, ReachOut, with six young people including it in their top five. Other online tools and spaces that were more frequently mentioned were Fitness Pal, an application to increase physical wellbeing, Pinterest and Smiling Minds, with three young people each identifying those applications in their top five. Participants reported they used applications, websites and games for a range of reasons, including access to support, information and assistance.

Searching for information

The majority of participants identified they searched for specific health information online depending on their current health status, such as searching for information on symptoms or 'new ways of coping' with mental health concerns. Young people also specified they went online to search for a broad range of health services, their location and costs. Some participants stated they had difficulty finding health related information they needed from Australian websites and some information can be very 'vague'. Two stated some search results caused anxiety when symptoms were used as search words.

Searching for help

Young people said they searched for health professionals depending on the type of professional. For example, one young person stated, "If I was after a GP or doctor, I would go to my local medical centre and find a GP I like". The same participant stated that for issues related to their mental health, they would initially use online resources to search for professionals.

A number of young people stated that while they go online to search for information about professionals specifically, they would like to see a biography or description of the professional: "I'm not going to someone completely unknown".

Two participants stated that even if there was information about a specific service, what was provided was basic and sometimes did not include contact numbers or costs, which they would have found helpful. One participant stated they use websites of services or professionals to assess whether they would access the service offered.

Youth-friendly services

Participants were asked to describe a health service they had been to that they liked the look and feel of. The majority of participants identified positive on and offline factors which encouraged their access to a health service. Some of these factors included the professionals' availability, an environment that looks less clinical and inviting aesthetically, that the service had a website, and that the service was free. The majority of participants agreed having a website was an important factor.

With regard to the service having a website, many of the participants said while this was an important factor, "I'm also more likely to go to [a service] that has a website, rather than one that does not", it depended on the service offered and the quality of the website itself. One of the participants specified ReachOut was a good example of a website for young people. Another stated that "I found headspace appealing because they had a website which is how I originally found them and they had a centre near me. Not to mention it was free! I've never used their online service but just knowing that it is there is awesome!"

Young people said that for seeking information and healthcare, websites are important: "I think having a website which listed all of their services I would feel more informed about the service and a bit more comfy when going in. I find asking these things quite daunting sometimes."

Knowledge of youth health services

When asked about their knowledge about youth health services, none of the respondents could identify a NSW Youth Health Service. Two participants mentioned headspace as a youth mental health service they were aware of in their area or had "rallied for", and others mentioned that they knew of a local community health centre. One respondent stated that if it was not for online services "like ReachOut, eheadspace, Kids Helpline, Lifeline etc. We'd have nothing (we do have doctors and a school counsellor, but it's very limited, *sigh*)".

The use of technology by health services

All participants stated the use of technology by youth health services was welcomed. Participants said the kinds of technology they would like included websites and applications, with some adding they would use online spaces to access information and engage in service delivery (eg. online counselling). One participant suggested it is useful for websites to be linked to other services, websites, and health information such as, "baby step style tips to improve mental health" and "helpful videos".

One participant suggested that "any online service (would be) good and would definitely be utilised", and this was of particular importance for young people in regional and rural areas. Another participant added they would use a 24-hour hotline if a service offered it. Better utilisation of existing technology was also suggested, with one of the participants stating "even basic things like having a Facebook page. I follow the Facebook page for the youth service I attend as it's a good way of keeping up-to-date with events and groups they may be offering".

The role of social media
While all participants stated social media could play a positive role in promoting information and services to young people, the ways in which social media could be used were linked by some participants to how it can be measured, that is, how the information could reach the target audience. One participant suggested endorsements: "the most effective method is to establish outlets with large audiences, such as figureheads and internet celebrities, as well as people who have a community presence". In relation to the content that can be shared through social media, one participant stated it can be "general tips and tricks…people don't want deep stuff spread all over their page/s usually".

One of the participants suggested a website might be more effective, "I think sometimes with social media it can be a good idea, but after a while I think the upkeep of it will die down and become a not used page, SO maybe a website which is regularly maintained might be better". Facebook and Instagram were mentioned by some participants, with some functions of Facebook, such as the ability to "like" a page, viewed as being positive, as a young person can control how much information reaches them through that capability. Another stated other forms of social media needed to be better utilised, "I think branching out to more social media outlets (not just Facebook and Twitter) would be great". One of the participants added that "I've heard it quite a lot that younger kids are moving away from Facebook…as the older generations are converging on it", and suggested perhaps tumblr could be utilised.

When an additional question was introduced about traditional media, one of the participants stated offline strategies such as brochures, posters etc, still played a role in how information reached a wide audience of young people.

Priorities for change
Young people were asked, "If you had a pot of money, what would be the most important thing for you to spend it on, to improve young people access to health information and health services using technology?" While some participants suggested new offline services, online counselling services, websites on health information and games that promote wellbeing, several others stated they would use resources to better promote and advertise existing services (eg. ReachOut, mind health connect), so more young people were aware of their existence. "A website so as we can access information or a website that links us in with other awesome websites that can help us".

Two respondents highlighted the need for resources in rural and remote areas, whether online service provision or as one participant stated, the need for digital inclusion, "more computers/tablets/phones for remote and disadvantaged areas that can therefore find what they need more easily than the well-off city folk who have doctors/professionals on every street corner".

One respondent added the need for online counselling is high and that it offered convenience and safety, "with online counselling, some of the anxiety about talking about these issues is minimised because I can sit privately and cry without anyone knowing I'm crying or shaking profusely".

Service directories
Participants were asked if they would ever use a directory when searching for services. One respondent stated they have never used a directory. The participant stated that "often I search for whichever health concern I am after, and go through the websites that pop up". However they did also add they thought the idea of a directory was "worthwhile", and could be bookmarked for future use. Another participant stated the directory did not give any further information than sites already known to them, and added that as they lived in a rural area, they found physical access to the health services listed in the directory limited. One participant stated they would not use a directory as they preferred to search for websites.

Youth health service websites
On whether health services should consider multiple youth health service websites or one, two participants responded by stating they thought NSW could have one website, "It would be great to have just a general website for all of NSW, and then have options to see districts, and then individual services in that area. I think having a general page as well as location specific pages would work really well".

The use of Facebook was also suggested as a communication strategy for services "Getting the word out there - the information online is great, but a lot of young people don't know what's there. You can promote what the service offers and events offered for young people".

Government youth website

When asked to view the current NSW Youth website (http://youth.nsw.gov.au), the three participants who responded had not previously seen this site. One of the participants stated they thought it had information they found particularly relevant, but that the site be more effectively designed. The other two participants stated that they thought the site was "useful", but one of the participants felt the site "looks and feels like a government website - perhaps too formal/too 'adult' and perhaps a bit off putting".

Youth Consultation Outcomes

Young people said they would like better promotion of existing services online. Websites and social media need a youth-friendly look and feel, with accessible content so they are engaging and appropriate for young people. Youth health services need clearer branding and dedicated web pages with basic services information along with information about what to expect (eg. using walk-through videos). Social media can be used to promote youth health information and service activities. Young people also want access to quality health information.

Youth Health Sector Responses

This section outlines the findings of the youth health sector consultations including targeted consultations with the NSW Youth Health Council, the NSW Youth Health Coordination Group and results of Youth Health 2014 Reports.

Most Local Health Districts use creative approaches including multimedia and technology to engage young people and their parents, carers and families (see Table 2). However, the use of technology was inconsistent across the state and, while each Local Health District was able to provide one example of technology use, they also said they want to be able to use a greater range of technology solutions within their area.

Priorities for using technology to engage young people

Services and districts clearly identified the need for a youth health website. This website would provide a single portal for NSW that is centrally managed. This central hub of could provide basic information about youth health services, links to helpful resources and trusted information. The website could be used to promote young people's engagement in keeping themselves healthy; health campaigns; respond to clinical questions from young people; include a health diary and videos (like the Northern Sydney Clinic 16 'what to expect' video) and photos of services.

Table 2: Examples of how technology is being used to engage young people

Health promotion	- Health campaigns and web resources promoted by services and the local media (eg. Aboriginal Health and Medical Research Council and headspace campaigns) - The Local Health District has unblocked YouTube and encouraged services to make videos (eg. Hunter health promotion videos) - Computer and internet access for disadvantaged young people (e.g Western Sydney Youth Health)
Service promotion	- Information available via websites (eg. Murrumbidgee Mental Health Service "Make a Noise" website, YCentral Central Coast Mental Health Service) 'What to expect' videos (eg. Clinic 16 video, Northern Sydney) - Facebook used to promote services and provide health information (eg. Aboriginal Maternal Infant Health Service in Murrumbidgee) - Apps and specialty built regional websites provide service information (eg. Northern Sydney YouthSource App: http://www.youthsource.com.au)
Client communication	- SMS utilised for appointment and group education reminders as well as health promotion - Email used as a form of communication with young people - Rural clinicians use video-conferencing with clients for psychiatry appointment and clinical reviews/case conferences. (eg. CAMHS, Dubbo, Western)

Assessment tools	• Screening questionnaires on iPads inform clinical assessment (eg. Sydney Children's Hospital Network)
Online Services	• Online sexual health testing for sexually transmitted infections with results delivered via SMS (eg. Eastern Sydney) • Referral to online clinical services bolster available services particularly in rural areas (eg. 'Moodgym' and e-Headspace)
Client engagement/thera peutic tools	• Clinicians utilise youth-friendly websites and e-technology to support their engagement with young people (eg. phone apps, interactive sites such as ReachOut.com) • Apps being developed as clinical tools (e.g diabetes management) • Various apps (my calm beat) are recommended as well as specific online education programs (eg. CCI, Brave-online) for young people.
Service evaluation	• Tablet used for patient satisfaction survey (eg. Western Sydney)
Professional networking and development	• Twitter is used to share information and promote events (eg. Northern Sydney) • Video-conferencing for clinical supervision or professional development (eg CAMHS Dubbo receive supervision from Westmead via the CAPTOS)

Government sites can have an authoritative presence but should also have a youth-friendly look and feel along with quality health information (eg. play safe website - https://playsafe.health.nsw.gov.au). Currently there is a lack of websites to promote youth health services. The need to develop a clear brand that is appealing to young people was also suggested.

Having young people involved is also important to help create a dynamic site. Social media could be an adjunct to promote the site - social media channels could be flexible depending what is popular with young people at the time.

Services also mentioned a need for better use of TeleHealth to provide access to specialist services and to consider Patchwork for client case management and communication. SMS appointment reminders via computers (automated, rather than manually via phones) was also requested.

To support greater use of technology by services, services also requested workforce development, better understanding and access to the technology.

Barriers to implementing priorities for change
Staff said there was a lack of Local Health District and NSW Health policies to support the effective use of technology, or to provide the knowledge and skills to implement use and technical support.

Restricted access to internet for clinical staff has meant clinicians have resisted doing a holistic assessment because they don't know where to refer a client when issues are identified without access to online service directories. Limited access to the internet and websites at work means staff use work-around solutions: "We need to access from home or on our phone".

Services said they felt restrained by their outdated technology compared to what young people are currently accessing. Key issues affecting implementation in this area include budget and other resource constraints affecting their ability to access training and equipment such as tablets and smart phones. Budgetary constraints were accompanied by delays in decision-making on funding proposals to purchase resources.

Enabling the use of technology in day-to-day practice
The NSW Health workforce would like to see fewer restrictive policies. In particular they want barriers and inconsistencies in how policy is interpreted to be addressed, for example by providing consistent internet access for all staff and patients.

They suggested training in using technology to "help staff to be comfortable with technology" would also assist the NSW Health workforce to make positive changes to use technology in day-to-day practice.

Services wanted funding such as innovation grants to motivate and engage services and provide access to technology. They also suggested centralising resources if this means building a quality resource for the sector as a whole. They also suggested NSW Kids and Families has a key role in advocating for change.

Marketing and branded services for young people

NSW Health services said clear branding would assist service promotion and access by young people. Services suggested creating a youth health brand. This brand could be combined with youth-friendly accreditation, for example by linking to use of the youth-friendly checklist. Although service models vary, branding can provide a clear message and aim. Suggested messaging included a positive focus on young people taking increasing responsibility for their health to promote wellbeing.

Outcomes from youth health services consultation

Based on the two youth sector consultations and youth health reports, it was found services and districts clearly identified the need for a youth health website with social media as an adjunct to the site. Smart phones and other portable devices, along with Wi-Fi, are important to enable the use of apps as clinical tools, access to online clinical assessments and for client satisfaction surveys. The NSW Health workforce would like to see fewer restrictive policies, for example by providing internet access for all and unblocking website access. Workforce development was requested to support greater use of technology by services.

Tech Savvy and 'Appy Workshop Responses

Tech Savvy and 'Appy workshops explored online-based engagement with young people to promote health, support early intervention and deliver services.

Current technology use

NSW Health professionals were asked about how they currently utilised technology to challenge the notion that technology was not currently used, to gather examples and for health professionals to share their practice wisdom.

Responses varied greatly across all the Local Health District participant groups. Participants shared positive experiences of using technology in their day-to-day practice, with examples including: "Video conferencing to facilitate social groups"; "Facebook pages to promote programs"; "SMS messaging"; "I use apps during sessions"; "Email communication with clients"; "Directing clients to websites".

Priorities for using technology to engage young people

All four workshop groups identified the need to create, improve or increase access to technology for clients and staff in health centres as a key priority area for the health sector. While the use or application of technology and access across the four health workshops varied, health professionals across the four Local Health Districts stated they needed access to infrastructure, such as smart phones and other portable devices, SMS messaging capabilities, as well as free Wi-Fi at all NSW Health facilities for staff and clients to access.

Participants noted the lack of access (eg. to websites) and consistency in the provision of technology. There were examples across all four workshops where health professionals used their own devices in order to embed technological tools in their practice. There was agreement among professionals that this is not ideal and presented risk. However these risks were mitigated through strategies developed by the health professional.

The majority of participants across all four workshops stated health professionals required unblocked access to the Internet, including social media websites, for opportunities to engage with young people, as well as access to information to support young people.

Workshop participants spoke about needing better access to SMS for appointment reminders and the ability to communicate via SMS with clients. Email, as a point of contact with a service, was also highlighted as a preferred communication option by some clients.

Workshop participants proposed that health facility telephone numbers should be displayed, as some clients will not

accept calls form numbers they cannot identify (when the ID has been blocked).

A significant number of workshop participants nominated having increased training and awareness about opportunities to engage young people for staff. Suggestions included having training devoted to how technology can be used safely and effectively in practice by health professionals, as well as how to identify which technological applications could be of benefit to young people.

Some participants suggested websites and applications could be tested and endorsed by dedicated staff and a list of endorsed sites be made accessible to all health staff. NSW Health staff should be able to rate or provide feedback on how they have used it in their practice with young people: "we need a trusted database of apps and websites that we can refer to and that is constantly updated".

Participants suggested and supported the development of NSW Health websites that can be localised and 'youth friendly', are appealing and accessible to young people at risk, with one participant adding health professionals need to "engage the disengaged through the right language and message".

Several participants suggested the use of short videos on websites to showcase a service as a way to make NSW Health websites more appealing to young people. For example, health professionals suggested they create videos in partnership with young people to explain what a young person can expect either in accessing a service or when engaged in a service. Health professionals who were based in inpatient units suggested videos that describe procedures to children and young people could be created, for example, a visual recording of what occurs when someone has an MRI or goes to the dentist to potentially reduce 'fear of the unknown'.

Participants from all of the workshop locations identified a key priority is the need to "embrace change". "We need to be able to use technology at work and have the resources to be able to access technology young people are using". Participants identified a need for policies supporting technology use and evidence-based practice: "to reflect the changing needs of young people and services".

Overcoming barriers to change

Participants identified a number of key barriers including a lack of designated resources, ill-defined policies, restrictive management practices, funding issues and delays in decision-making.

Resource constraints that participants cited were:

● "Inconsistent access to the internet"
● "Access to internet sites eg. Facebook, YouTube, the ability to search for sexual health resources"
● "A lack of equipment such as tablets and smart phones"
● "Lack of dedicated staff or resources and training"
● "Having technology on computers for SMS appointment reminders"

Participants also highlighted the "lack of consistency across Local Health Districts" and "we need policies across NSW Health, not Local Health District specific", in relation to access, use and resources allocated for staff to be able to use technology in their practice.

At times, NSW Health professionals reported a sense of being overwhelmed by the barriers: "Clinicians attempting to make changes/bring in innovations face numerous barriers regarding policy, bureaucracy, different departments etc. This is almost impossible in addition to a clinical load". Workshop participants also identified they experienced delays in decision-making related to whether a proposal to use social media was accepted, and the criteria for such decisions seemed to focus on organisational risk rather than potential clinical outcomes for young people.

NSW Health professionals feel they have the expertise (clinical knowledge and skills) to contribute to the development of useful and marketable applications, which meet client outcomes, but need the technological support in order to do so.

Workshop evaluations

The Dubbo Workshop was evaluated as part of the NSW Rural Health and Research Congress. Workshop participants indicated the workshop was 'relevant' to 'extremely relevant' on a sliding scale and they were 'satisfied' to 'extremely satisfied' with the quality and format of the workshop.
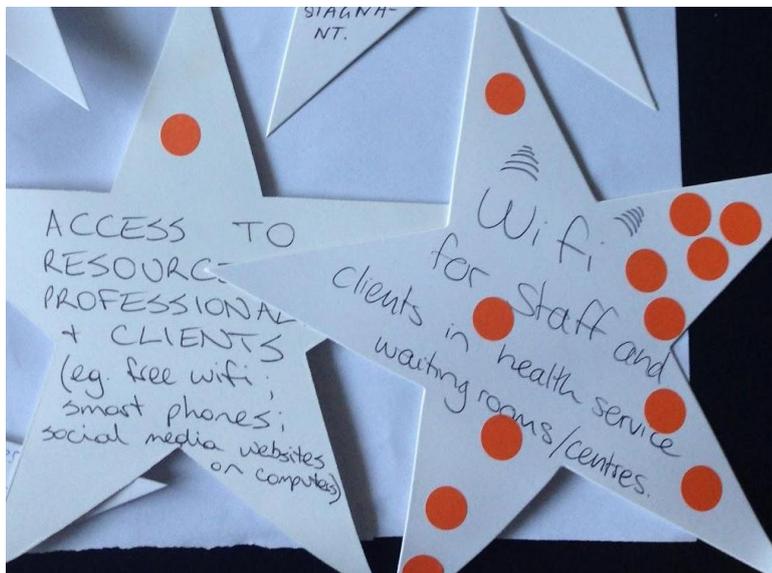
An open-ended questionnaire was distributed to participants at the Wagga Wagga, Lismore and Sydney workshops. Many commented on the relevance of the workshop content to their practice.

Participants appreciated the information and practical examples of current projects and new research. For many, a highlight of the workshop was the opportunity to listen to a young person speaking directly about their experience of how technology helped them attain and maintain wellbeing.

Suggestions on how to improve the workshop included the request for Wi-Fi access to better enable an interactive online component to the workshops, a resource list of suggested applications and websites to test during the workshop and an increased focus on addressing barriers to implement priorities to embed technology in daily practice.

Tech Savvy and 'Appy Workshop Outcomes

Technology is viewed as a positive tool to engage clients by health professionals. NSW Health professionals want to communicate with young people and support their wellbeing using technology as a tool. They also want to engage with young people in spaces that young people themselves are familiar and comfortable with, such as social media spaces. However, NSW Health professionals have limited and inconsistent access to technology which is deemed inequitable. They feel that their organisation presents the challenges and barriers for them to implement change. Health professionals recognise that the use of technology can bring efficiencies, especially as they are aware this technology is an important mode of communication for young clients. They are willing to develop their knowledge, skills and practices to meet the current needs of young people. The sector needs further training on how to effectively and safely embed technology into day-to-day practice with young people.

6. FUTURE USE OF TECHNOLOGY

The working group considered implications of project outcomes and identified key areas for future action. Based on the targeted consultations with young people, youth health services and other NSW Health service providers, the following five action areas are proposed by the eHealth Working Group.

1. Technology tools

Health professionals have requested consistent access to the technological tools and technical support to enable them to work more effectively and efficiently with the target group including:

- Access to up-to-date computers with unblocked internet access (including social media)
- Access to smart phones, tablets and applications

- Wi-Fi access for staff and clients
- SMS for appointment reminders and two-way SMS communication with clients
- Use of email as a point of contact for young people wanting to enquire about services
- NSW Health service phone numbers are ID unblocked so that the numbers can be identified by clients.

2. Policy

NSW Health communication policies can provide support across the organisation, and promote equitable access to the technology that health professionals need in order to work effectively with young people. Procedures can further clarify safe and effective use of technology to ensure positive outcomes for young people. For example, procedures could cover using email and SMS to communicate with clients, setting up and managing a social media page and keeping records of client interactions.

3. Training and development

NSW Health professionals require training and development on how to use technology. They also want to be pointed to information about technology tools (eg. *Using Technologies Safely and Effectively to Promote Young People's Wellbeing: Better Practice Guide for Services* and the ReachOut.com Pro website which reviews relevant clinical tools).

4. Professional roles

The use of technology in routine practice can be acknowledged in health professional roles and job descriptions.

5. Online information

Youth health services would benefit from dedicated web pages, with clear branding and a 'look and feel' that is appealing to the target group. Young people can find basic services information along with information about what to expect for young people accessing the service (eg. using 'walk through' or 'what to expect' videos).

Social media can provide an additional tool to promote the website, provide health and service information that has the functionality to be updated by health professionals. Other options for providing ways for young people to locate trusted health information can be further explored.

Next steps

NSW Kids and Families has developed an Action Plan based on the above recommendations. Key actions, which can be led by NSW Kids and Families, include the provision of training for health professionals. To further this, *Being Tech Savvy and 'Appy* webinars are being run in May 2015, in partnership with ReachOut professionals. NSW Kids and Families will also work with NSW Health partners to action change.

References

Barak, A and Grohol, J. M. (2011). Current and future trends in internet-supported mental health interventions. *Journal of Technology in Human Services.* 29 (3), pp. 155-196.

Biddle, L., Donovan, J., Sharp, D. and Gunnell, D. (2007). Explaining non-help-seeking amongst young adults with mental distress: a dynamic interpretive model of illness behaviour. *Sociology of Health and Illness,* 29 (7), pp. 983-1002.

Blanchard, M., Hosie, A., and Burns, J. (2013) Embracing technologies to improve wellbeing for young people: An Australian view of evidence and policy implications. *Commonwealth Health Partnerships*, pp.127-132.

Burns, J., Davenport, T., Durkin, L., Luscombe, G., and Hickie, I. (2010). The Internet as a setting for mental health service utilisation by young people. *Medical Journal of Australia.* 192 (110), pp. 22-26.

Campbell A, and Robards, F (2013) *Using Technologies Safely and Effectively to Promote Young People's Wellbeing: A Better Practice Guide for Services,* NSW Centre for the Advancement of Adolescent Health, Westmead and the Young and Well CRC, Abbotsford.

Green, L, Brady, D, Ólafsson, K, Hartley, J, and Lumby, C (2011). *Risks and Safety for Australian Children on the Internet: Full Findings from the AU Kids Online Survey of 9-16 Year Olds and Their Parents.* ARC Centre of Excellence for Creative Industries and Innovation.

Gowen, L. K. (2013). Online mental health information seeking in young adults with mental health challenges. *Journal of Technology in Human Service,* 31 (2), pp. 97-111.

Helton, D. (2003). Online therapeutic social service provision (Therap-pc): A state of the art review. *Journal of Technology in Human Services.* 21(4), pp. 17-36.

Mattison, M. (2012) Social work practice in the digital age: therapeutic email as a direct practice methodology. *Social Work.* 57(3), pp. 249.

Metcalf, A. and Kauer, S. (2013). *ReachOut.com National Survey 2012.* Inspire Foundation, Sydney.

NSW Department of Health (2010). *NSW Youth Health Policy 2011-2016: Healthy Bodies, Healthy Minds, Vibrant Futures.* NSW Department of Health, North Sydney.

NSW Kids and Families (2014). *Healthy, Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014-24,* NSW Kids and Families, North Sydney.

Steyaert, J. and Gould, N. (2009). Social work and the changing face of the digital divide. *British Journal of Social Work.* 39 (4), pp. 740-753.

Van Der Krieke, L., Wunderink, L., Emerencia, A. C., De Jonge, P. and Sytema, S. (2014). E-mental health self-management for psychotic disorders: State of the art and future perspectives. *Psychiatric Services.* 65 (1), pp. 33-49.

APPENDIX – ACKNOWLEDGEMENTS

NSW Kids and Families would like to thank the following partner organisations for their contribution:

- Black Dog Institute
- Murrumbidgee Local Health District
- Northern NSW Local Health District
- ReachOut.com
- Rural Health and Research Conference
- South Eastern Sydney Local Health District
- University Centre for Rural Health North Coast
- University of Sydney School of Rural Health

The reference group are thanked for their input and guidance:

- Rachel Bienenstock, Northern Sydney Local Health District
- Lisa Bogie, The Warehouse
- Kerrie Buhagiar, Inspire Foundation
- Victoria Durand, Youth consultant, Northern Sydney Local Health District
- Sally Gibson, Senior Manager, NSW Kids and Families
- Sera Harris, consultant, NSW Kids and Families
- Claire Honey, NSW/ACT Manager, Headspace
- Terrence Humphreys, Twenty 10
- Nicole Myers and Sabrina Brown, Murrumbidgee Local Health District
- Shika Raju, Team Administration Officer, NSW Kids and Families (Minutes)
- Kristian Reyes, Youthblock Youth Health Service
- Fiona Robards, Senior Analyst, NSW Kids and Families (Chair)
- Kate Tolley, Clinical Nurse Consultant, Northern Sydney Local Health District
- Amanda Webster, South Eastern Sydney Local Health District
- Thomas Yeo and David White, Healthshare
- Andre Zeballos and Michael Cummings, High Street Youth Health Service

The authors of this report are:

- Sera Harris, Consultant, NSW Kids and Families
- Fiona Robards, Senior Analyst, NSW Kids and Families