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EXECUTIVE SUMMARY

Background

Psychosocial assessment

Psychosocial assessment in young people allows early identification of social, behavioural and emotional issues and risks that enables health workers to provide support and offer preventative interventions that will impact adolescent morbidity and mortality (1,2). The HEEADSSS psychosocial assessment focuses on the assessment of Home, Education and employment, Eating and exercise, Activities, hobbies and peer relationships etc., Drug use, cigarettes and alcohol etc., Sexual activity and sexuality etc., Suicide, depression, self-harm etc. and Safety (3,4). Often conducted as a face-to-face interview or a self-administered questionnaire, the effectiveness of psychosocial assessment tools like HEEADSSS relies on the young person feeling comfortable to disclose personal information (1,5). More recently, in order to improve disclosure and acceptability with young people, psychosocial assessment tools have been converted for use on personal tablet devices.

Maari Ma Youth Health Clinic

Maari Ma, an Aboriginal community controlled health organisation in Broken Hill, New South Wales (NSW) set up a Youth Health Clinic at the end of 2015 to improve the health outcomes of the Aboriginal young people in the far west region of NSW. Since its inception, the Maari Ma Youth Health Clinic has seen an average of eleven 12-18 year olds per month for Youth Health Checks. Youth Health workers (comprising a Nurse, an Aboriginal Health Worker (AHW) and a General Practitioner) have been using a paper based version of the HEEADSSS assessment modified for the Aboriginal young people in the far west region during these health checks.

To further improve the clinics engagement with young people, working with TickiT Health in Canada, Maari Ma Health has modified the TickiT personal tablet technology, an interactive mobile eHealth psychosocial assessment tool, developed by TickiT Health for local Aboriginal young people.

Aims

This evaluation aimed to determine the acceptability of the TickiT tablet based psychosocial assessment tool in the Maari Ma Youth Health Clinic among the Aboriginal young people of Broken Hill, their parents, and staff of the clinic.

The objectives of this evaluation were to:

1. Identify and describe the ways in which TickiT is being implemented
2. Explore client and staff experiences and perspectives of TickiT and the Youth Health Clinic
3. Investigate the extent to which TickiT is reaching the target population
Method
A process evaluation was conducted, drawing on qualitative and quantitative methods as described by the following three components:

1. Continuous Quality Improvement (CQI) or service improvement questions were collected as additional questions at the end of the TickiT psychosocial assessment since April 2017.
2. In person or telephone interviews were conducted with Aboriginal young people aged 12-18 years who had used TickiT before their Youth Health Check. In person interviews were also conducted with Youth Health Clinic staff at Maari Ma.
3. Key demographic and quality related data from TickiT and the Youth Health Clinic were extracted and used in this evaluation to supplement the qualitative data collected.

Results
Component 1

Forty six young people answered the CQI questions that were collected as additional questions at the end of the TickiT psychosocial assessment between 28 April 2017 and 10 October 2017. Ninety eight per cent of young people who filled out TickiT before their Youth Health Check found that using the tablet was easy or very easy, with only 2% stating that they found it difficult. All young people felt either comfortable or very comfortable answering the psychosocial assessment questions on TickiT. Ninety five per cent of young people felt that their responses on TickiT would be helpful or very helpful for the youth health team. Seventy five per cent of young people agreed or strongly agreed that answering the questions on TickiT helped them feel ready for their visit with the Youth Health Team.

Component 2

Interviews with Aboriginal Young People

In total, 11 young people who had completed their Annual Youth Health Check and used TickiT were interviewed. All young people interviewed reported that it was easy to fill in the questions on TickiT and that the length of time to complete all the questions was acceptable. While the majority of participants found the questions easy to understand, a few stated that there was one or two that they found confusing. All of the participants believed that questions asked on TickiT were relevant to them as Aboriginal young people living in Broken Hill.

Most young people interviewed felt comfortable answering the questions on TickiT. Seven out of eleven participants reported that they preferred to use TickiT rather than go through all the questions with a health worker or General Practitioner (GP), three reported that they would have preferred to answer in person, and one respondent was neutral.

Two young people commented about the technology used to deliver TickiT. These participants found the tablet slow and unresponsive to their selection.
**Interviews with Youth Health Clinic Staff**

All Youth Health Clinic staff believed the tool was appropriate for the Aboriginal young people in Broken Hill. Most young people had been able to answer the questions on the tablet without much assistance.

Overall, staff felt that TickiT is very useful in the Youth Health Clinic as it provides all the information required to conduct a holistic psychosocial assessment of young people and saves time in the consultation with the GP. Staff believe that TickiT is a non-judgemental way for young people to provide answers to difficult questions. For the most part staff believe that TickiT is more effective than a face-to-face HEADSSS conversation alone.

While the Aboriginal Health Worker (AHW) and Youth Health Registered Nurse (RN) did not report any issues with the time taken to complete TickiT, the GPs stated that they felt that sometimes the young people were fatigued by the time they spoke to them in the second half of the appointment.

The AHW and Youth Health RN noted that from their perspective, a limitation of the process in its current form is that they do not have enough time to de-brief with the young person after they complete TickiT before the hand over to the GP.

Additionally, staff in the Youth Health Clinic noticed the same technology issues as the young people who were interviewed, reporting that the tablet is sometimes slow and the touch screen is sometimes unresponsive.

**Component 3**

Since November 2015 when the Youth Health Clinic was established, Maari Ma has completed 283 Annual Youth Health Checks for young people aged 12-18 years old. This is an average of 11.3 Youth Health Checks per month.

**Recommendations**

1. Include time for the Youth Health Team to de-brief with the young person after they complete TickiT
2. Review the questions on TickiT to ensure the questions are easy to understand and the psychosocial assessment is effective
3. Consider removing some questions on TickiT to shorten the time of completion
4. Evaluate referral pathways that are available to support young people
5. Utilise the population reporting function on TickiT to provide evidence for support services
6. Update technology as required
7. Re-examine the extent to which Annual Youth Health Checks are reaching the target population
8. Conduct an evaluation to measure the short and medium term impact that TickiT is having on the population
BACKGROUND

Psychosocial assessment

Psychosocial assessment in young people allows early identification of social, behavioural and emotional issues and risks that enables health workers to provide support and offer preventative interventions that will impact adolescent morbidity and mortality (1,2). The HEEADSSS psychosocial assessment tool provides a comprehensive assessment of the key areas of the young person’s life. HEEADSSS focuses on the assessment of Home, Education and employment, Eating and exercise, Activities, hobbies and peer relationships etc., Drug use, cigarettes and alcohol etc., Sexual activity and sexuality etc., Suicide, depression, self-harm etc. and Safety (3,4). HEEADSSS is a way of engaging and building rapport with the young person, in order to get to know the young person’s life while gathering a more in-depth history. The order of the questions aims to guide the young person from the less personal subjects of home life and school, through to the very personal subjects of sexuality, suicide and safety (5).

Often conducted as a face-to-face interview or a self-administered questionnaire, the effectiveness of psychosocial assessment tools like HEEADSSS relies on the young person feeling comfortable to disclose personal information (1,5). These methods depend on the relationship that the health worker is able to build with the young person in a short amount of time (1).

More recently, in order to improve disclosure and acceptability with young people, psychosocial assessment tools have been converted for use on personal tablet devices. Many studies have found that young people have a strong preference for using electronic assessment tools when compared to interview and paper based questionnaires (5–7). Bradford found that young people felt more comfortable and were more likely to disclose risk factors that they were embarrassed about when using the electronic tool (5). Young people also expressed that they felt more engaged with their healthcare as the tool allowed them to identify and decide issues of importance to them (5).

Maari Ma Youth Health Clinic

Maari Ma, an Aboriginal community controlled health organisation in Broken Hill, New South Wales (NSW) set up a Youth Health Clinic at the end of 2015 to improve the health outcomes of the Aboriginal young people in the far west region of NSW. All Aboriginal and Torres Strait Islander people are eligible for a free annual health check under the Medicare Benefits Schedule. Among the Aboriginal population in NSW in 2015, the usage rate of these annual health checks was 20.8% in 5-14 year olds and 17.8 % in 15-24 year olds (8). Since its inception, the Maari Ma Youth Health Clinic has seen an average of eleven 12-18 year olds per month for Youth Health Checks. In the year prior to the establishment of the clinic Maari Ma saw an average of five 12-18 year olds per month for their annual Aboriginal and Torres Strait Islander health check. These checks did not include any formalised psychosocial assessment. Youth Health workers (comprising a Nurse, an Aboriginal Health Worker (AHW) and a General Practitioner) have been using a paper based version of the HEEADSSS assessment modified for the Aboriginal young people in the far west region during these health checks.

To further improve the clinics engagement with young people, working with TickiT Health in Canada, Maari Ma Health has modified the TickiT personal tablet technology, an interactive mobile eHealth psychosocial assessment tool, developed by TickiT Health for local Aboriginal young people. The
TickiT questionnaire contains simple text and friendly graphics to engage young people and has been modified by Maari Ma so the images, graphics, language and questions reflect the Aboriginal population of Broken Hill. For example, instead of asking the young person if they would like to talk more about an issue, the modified version asks “I’d like to yarn more about this”. Also, another category of questions has been added at the end of TickiT – Strong. The Youth Health Team at Maari Ma believed that it was important for the assessment tool to end on a positive note so included questions that asks what makes the young person feel strong in their life.

TickiT allows the young person to fill out the psychosocial assessment in private before their appointment using interactive software in a setting where a health worker is available for support if required. It also allows the young person to state which issues they want to discuss further or not. A flagged report that highlights critical information, categorising risks, strengths and issues about the young person, is then sent immediately and electronically through to the clinician. This provides a foundation for the clinician to address health-related risks with the young person during the Youth Health Check. A youth health service such as the clinic Maari Ma has established is somewhat unique among Aboriginal health services.

**TickiT Evaluation**

A feasibility study conducted by Whitehouse et al of TickiT in 80 adolescents in Canada found positive engagement and acceptability with the tool with 99% uptake and survey completion, 92% found it easy to understand and easy to use, 91% felt comfortable or very comfortable with the content of the questions asked, and 9% felt neutral and none felt uncomfortable (9).

Maari Ma has commissioned a process evaluation of TickiT in partnership with the NSW Ministry of Health to determine if the tool will have similar positive results with the Aboriginal young people of Broken Hill. The evaluation will focus on service improvement of the Youth Health Clinic and acceptability of the tool among Aboriginal youth.

**EVALUATION AIMS**

This evaluation aimed to determine the acceptability of the TickiT tablet based psychosocial assessment tool in the Maari Ma Youth Health Clinic among the Aboriginal young people of Broken Hill, their parents, and staff of the clinic.

The objectives of this evaluation were to:

1. Identify and describe the ways in which TickiT is being implemented
2. Explore client and staff experiences and perspectives of TickiT and the Youth Health Clinic
3. Investigate the extent to which TickiT is reaching the target population

**METHOD**

A process evaluation was conducted, drawing on qualitative and quantitative methods as described by the three components below.
This evaluation was approved by the Aboriginal Health and Medical Research Council Ethics Committee ref: 1282/17.

1. **TickiT Service Improvement Questions**
   Continuous Quality Improvement (CQI) or service improvement questions were collected as additional questions at the end of the TickiT psychosocial assessment since April 2017.

2. **Qualitative Interviews**
   **Semi-structured interviews with Aboriginal young people**
   - In person or telephone interviews were conducted with Aboriginal young people aged 12-18 years who had used TickiT before their Youth Health Check.
   - In person interviews were conducted after the Youth Health Check had been completed. Telephone interviews were conducted with a selection of participants who had completed their Youth Health Check within the last month.
   - Participants were provided with a participant information sheet outlining the purpose of the evaluation and signed consent was obtained from both the young person and their parent/carer.
   - A semi-structured interview guide was used to conduct each interview. Each interview was audio-recorded with permission sought prior to the commencement of the interview.

   **Semi-structured interviews with Maari Ma Youth Health Clinic staff**
   - In person interviews were conducted with Youth Health Clinic staff at Maari Ma. Interviews were conducted by a non-Aboriginal member of the evaluation team.
   - Staff were provided with a participant information sheet outlining the purpose of the evaluation and signed consent was obtained before the interview commenced.
   - A semi-structured interview guide was used to conduct each interview. Each interview was audio-recorded with permission sought prior to the commencement of the interview.

Audio recordings were transcribed and interview notes were analysed by thematic textual analysis. Responses were grouped under the questions that were asked during the qualitative interviews. Then responses were explored to identify general themes identified and coded from the data within each stakeholder group, and then discussed in relation to the evaluation objectives.

Throughout the interview process, data from participants were continuously compared to identify similarities and differences and the observations and ideas were recorded for analysis.

3. **Analysis of TickiT and Youth Health Clinic data**
   Only key demographic and quality related data from TickiT and the Youth Health Clinic were extracted and used in this evaluation to supplement the qualitative data collected.

TickiT data were extracted by the Data Analyst at Maari Ma and provided to the evaluation team.

A de-identified aggregated Youth Health Clinic quarterly monitoring report was also provided to investigate the extent to which TickiT is reaching the target population.
RESULTS

Component 1
Sixty young people answered the Continuous Quality Improvement (CQI) or service improvement questions that were collected as additional questions at the end of the TickiT psychosocial assessment between 28 April 2017 and 30 November 2017.

*Figure 1: CQI Question One – Using this tablet was*

Ninety seven per cent of young people who filled out TickiT before their Youth Health Check found that using the tablet was easy or very easy, with only 3% stating that they found it difficult (Figure 1).

*Figure 2: CQI Question Two – I felt comfortable answering those questions*

Most young people felt either comfortable or very comfortable (96%) answering the psychosocial assessment questions on TickiT, with only 2% feeling uncomfortable and 2% unsure (Figure 2).
Figure 3: CQI Question Three – I think my responses will be helpful for the youth health team

Ninety three per cent of young people felt that their responses on TickiT would be helpful or very helpful for the youth health team (Figure 3).

Figure 4: CQI Question Four – Answering these questions helped me feel ready for my visit

Ninety one per cent of young people agreed or strongly agreed that answering the questions on TickiT helped them feel ready for their visit with the Youth Health Team. A small number of young people (2) disagreed with this statement (Figure 4).
Component 2

Interviews Conducted
Interviews were conducted with Aboriginal Young People between 13 September 2017 and 25 September 2017. These interviews included:

- In person interviews with 6 males and 1 female
- Telephone interviews with 4 females

Table 1: Age of Participants (Young People)

<table>
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<td>2</td>
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</tbody>
</table>

In total, 11 young people who had completed their Annual Youth Health Check and used TickiT were interviewed. Participants were aged between 12 and 18 years old (Table 1). All participants agreed to their interviews being audio-recorded. Duration of interviews ranged from 2 to 6 minutes.

Four Maari Ma Youth Health Clinic Staff were interviewed in person between 13 September 2017 and 15 September 2017. These interviews were conducted with the Youth Health Registered Nurse, Aboriginal Health Worker and two General Practitioners (GPs). All participants agreed to their interviews being audio-recorded. Duration of interviews ranged from 6 to 24 minutes.

Implementation of TickiT
The interviews with the Youth Health Clinic Staff described the process by which TickiT was implemented within the Youth Health Clinic.

Annual Youth Health Checks are the core service that the Maari Ma Youth Health Clinic provides. The major component of the health check is a psychosocial assessment. The assessment is facilitated in private by the Aboriginal Health Worker or Registered Nurse before the young person’s appointment with the GP.

Figure 5 outlines how the Youth Health Check is conducted at Maari Ma and how TickiT is being implemented in this process. Appointments are booked for an hour’s duration at the Youth Health Clinic. The first half hour of the appointment is with the Aboriginal Health Worker and Registered Nurse (Youth Health Team) and the second with a GP. Young people and their parent/carer are advised at the time of booking that the duration of the appointment is for an hour.
Part 1: Aboriginal Health Worker or Registered Nurse

The first half of the appointment occurs in a dedicated Youth Health Room within Maari Ma with either the Aboriginal Health Worker or the Registered Nurse (Youth Health Team). The young person and their parent/carer is invited into the room and the health worker conducts some measurements including, height, weight and temperature, and asks the young person questions about their health (e.g. teeth, ears and skin).

Before the psychosocial assessment commences, confidentiality is explained to the young person and their parent/carer and TickiT is introduced. The young person completes TickiT and the health worker uploads the completed report to their file. If there is time, the health worker will de-brief with the young person about the answers. The young person and their parent/carer are then taken to see the GP.

Part 2: General Practitioner

A flagged report that highlights critical information, categorising risks, strengths and issues about the young person, is then sent immediately and electronically through to the GP. This provides a foundation for the GP to address health-related risks and emotional issues with the young person during the Youth Health Check.

The GP will have a conversation about the health related risks, strengths and issues that the young person has indicated on TickiT and talk about key issues that may need re-enforcement such as mental health, sexual health and drug alcohol, depending on the circumstance. The GP is then able to refer the young person to the correct service or pathway or make another appointment with them to follow up if necessary.

The GP conducts a physical examination of the young person, as well as the psychosocial assessment.

Interviews with Aboriginal Young People

Acceptability

All young people interviewed reported that it was easy to fill in the questions on TickiT and that the length of time to complete all the questions was acceptable.
While the majority of participants (8/11) found the questions easy to understand, a few (3/11) stated that there were one or two that they found confusing. Of the participants that had found questions confusing, most stated that after clarifying with the health worker they were able to understand and answer the question.

In particular, the violence question in the Safety category – “I have seen or experienced violence” was identified as causing confusion.

“I didn’t know about the violence one. I didn’t know if it meant me seeing it or me having it... I just put yes because I’ve seen it around school”. (Male, 16)

All young people stated that the staff in the Youth Health Clinic explained to them how to use TickiT and fill in the questions on the tablet and some went further on to say this was helpful.

All but one participant (10/11) reported that they would be happy to use TickiT when they next came into the clinic describing it as easy and quick.

“I guess you could explain it easier. Like what you want. Like answer easier than it would be in real life” (Male 15)

“It was just easier to do.” (Male 14)

“It was easier and faster I guess” (Female 14)

All of the participants thought that questions asked on TickiT where relevant to them as Aboriginal young people living in Broken Hill.

Disclosure

Most young people (9/11) interviewed felt comfortable answering the questions on TickiT. Although there were two participants who stated that they did not feel comfortable answering some of the more sensitive questions, but did not wish to identify a specific question.

While the majority of young people (7/10) did not think that there were any questions they answered on TickiT that they wouldn’t have spoken to the doctor or nurse about, a few participants (2/10) felt that there was some they would not have answered in person.

“Ummm yes. The questions about alcohol and stuff” (Female 18)

Young people were then probed further and asked if they would have preferred to go through all the questions with the doctor or nurse instead of using TickiT; seven participants reported that they preferred TickiT, three reported that they would have preferred to answer in person, and one respondent was neutral.

“No, it was good on the iPad. Cause it was better to do it for myself, to answer by myself” (Male, 12).

“I preferred the iPad... I don’t know, if I do it to a doctor, I’d probably nervous or something where if I just do it on an iPad I know what I can answer (Female, 12).
“Probably preferred to go through it with someone... I don’t know. I more like talking instead of sitting there and doing it.” (Male 16)

Usefulness

All young people interviewed felt that answering the questions on TickiT helped with talking to the GP when they went in for the second half of their appointment.

The majority of young people (9/11) reported that the GP spoke to them about the issues that they wanted to talk about in their appointment, however two participants disagreed with this.

Barriers

Most young people (9/11) stated that there was not anything about TickiT they didn’t like. Those who did respond with issues, had comments about the technology used to deliver TickiT. A few (2/11) participants found the tablet slow and unresponsive to their selection.

“Not sure if it was the tablet or the app but pressing the things and next [button] sometimes would take a few clicks... like it didn’t respond to some clicks” (Male 15)

None of the young people interviewed thought that there were any questions or issues missing that might be important for the youth health team to know about.

Interviews with Youth Health Clinic Staff

Note: Youth Health Team in this section refers to the Aboriginal Health Worker and Youth Health Registered Nurse

Accessibility

Youth Health Clinic staff believed that nearly all young people who were between the ages of 12 – 18 years old who attended the clinic for their Annual Youth Health Check had used TickiT. A very small percentage of young people may have been missed due to staff availability or scheduling on the day.

Acceptability

All Youth Health Clinic staff believed the tool was appropriate for the Aboriginal young people in Broken Hill. Most young people had been able to answer the questions on the tablet without much assistance after receiving an explanation on how to use to it. Staff noted those who did need assistance understanding or reading the questions were younger or struggled with literacy.

However, staff stated that they have had some of the young people ask what ‘yarn’ meant which surprised them as they believed use of this term for ‘talk’ was common among Aboriginal people in Broken Hill. However, when staff explained that this meant ‘talk’ the young person was able to carry on answering the questions.

While the Youth Health Team did not report any issues with the time taken to complete TickiT, the GPs stated that they felt that sometimes the young people were fatigued by the time they spoke to them in the second half of the appointment.
“We need to re-evaluate in the future just to make it a little bit more effective. Should include all of these questions in TickiT? Because I can see that they feel a little bit tired after that assessment.” (YHC staff member)

No staff member reported any young person refusing to use TickiT during their appointment.

**Usefulness**

Overall, staff feel that TickiT is very useful in the Youth Health Clinic as it provides all the information required to conduct a holistic psychosocial assessment of young people. TickiT is efficient as it collects all the information required and saves time in the consultation with the GP. Reviewing the risk factor report allows the GP to direct conversation to the issues or risks that the young person has identified.

“With TickiT you can just have a quick look before they come in to my consult room so I know which area I should concentrate on, or talk more, or get more information from them. That makes my consultation a bit easier, quicker, and a bit more thorough as well.” (YHC staff member)

The questions on TickiT allow clinicians in the Youth Health Clinic to conduct a holistic assessment of the young person to gain a picture of the issues in their life and how they interact with each other. The risk factor report allows clinicians to explore the issues raised by the young person and make a plan with them to refer or arrange a follow up appointment.

“We explore the issues and we made a plan to follow up and also provide them a referral and think that is the key point. We do see a lot of issues. For example, I think, nearly 50% of the health checks today, that’s only today, and we have to make a plan on how to follow up these issues properly.” (YHC staff member)

Staff believe that TickiT is a non-judgemental way for young people to provide answers to questions they may find difficult answering and that young people are more comfortable answering sensitive questions on TickiT. Staff also reported that young people completed question groups in a way that made them feel the most comfortable, observing that some young people chose to complete the sex and drug categories last.

“I think it is really good. It’s a good way to ask those difficult questions. It’s a non-judgemental way to ask … when you are talking to young people about drugs and sex and all of that.” (YHC staff member)

For the most part staff agree that TickiT is more effective than a face-to-face HEEADSSS conversation. Although they do acknowledge that this does depend on the young person as some young people like to talk more than others. For young people who do want to have a conversation, the Youth Health Team still try to have a conversation with them if there is time before their appointment with the doctor.

“So if you’ve got those kids who are shy and you can’t get anything out of them, then flat out it’s the best tool in the world. But if you’ve got those chatty chatty kids who just want to talk and talk, it’s not as effective. I do like to have extra notes for those kids. Because they say bits and pieces that is important information that the doctor should be aware of.” (YHC staff member)
**Limitations**

The Youth Health Team noted that from their perspective, a limitation of the process in its current form is that they do not have enough time to de-brief with the young person after they complete TickiT before the hand over to the GP. This means they do not have time to build a relationship or rapport with the young person which is important in a youth health environment.

“Sometimes we don’t really have enough time to talk to them about TickiT because they have got to go through and see the doctor. By the time they have finished it, it is hard for [the Youth Health Team] to go through and have a good chat with them... It has made it a little bit harder for me to get that rapport with the kids as well.” (YHC staff member)

In regards to the specific questions asked on TickiT, the question regarding violence was also reported as causing confusion by staff of the clinic:

“The question about have you ever experienced or seen violence. The word ‘seen’ is a little bit broad and vague, so I think a lot of people answer yes because of the violence in the neighbourhood, or because they have seen someone being punched at school, but they haven’t actually experienced any violence.” (YHC staff member)

“The domestic violence question about have you ‘seen’ or ‘experienced’ violence [a young person] has answered yes and once [the GP] had spoken to them about it, it was like oh they witnessed a neighbour fighting or something like that.” (YHC staff member)

A staff member also noted that in their opinion the question ‘have you ever thought about running away from home’ was not very useful. Although a ‘yes’ answer to this question can raise issues, mostly the answer raises some vague and non-specific reason and the young person is not usually thinking of running away.

Additionally, while TickiT currently asks young people if they attend school, it does not ask them which year at school they are in. Staff thought that this would be helpful to include in the tool as they currently mark it down in their notes.

**Barriers**

Staff in the Youth Health Clinic noticed the same technology issues as the young people who were interviewed, reporting that the tablet is sometimes slow and the touch screen is sometimes unresponsive.

“The sensitivity of the touch screen. Sometimes, like yesterday we had a couple kids who were doing it too quick and it wasn’t registering. And then they accidently click out of it all together and you’ve got to go find where you’re up to. I guess that’s the only frustrating thing for the kids that has been brought up.” (YHC staff member)

Staff also raised the issue of wifi connectivity as a barrier to using TickiT while performing Annual Youth Health Checks. While this was not perceived as a large challenge, staff did note that it meant that if TickiT was used in a mobile clinic setting, they would need to have access to wifi or tether the tablet to a device with internet connection.
**Additional benefits**

Staff acknowledged that one of the advantages of TickiT is that it provides data about each young person that can be recorded on their file and referenced in the future if required.

Additionally, the data on TickiT could be used at a population level to provide a picture of the health and wellbeing of the Aboriginal young people of Broken Hill. In particular the data could be used to put together a community action plan, apply for funding, health promotion activities or be provided as statistics to other community organisations.
Component 3
Number of Annual Youth Health Checks

Between November 2015 when the Youth Health Clinic was established and 30 November 2017, Maari Ma has completed 283 Annual Youth Health Checks for young people aged 12-18 years old. This is an average of 11.3 Youth Health Checks per month (Figure 6).

Since March 2017 when TickiT was introduced in the Youth Health Clinic 78 Aboriginal young people have used TickiT during their Annual Youth Health Check.

Figure 6: Number of Annual Youth Health Checks completed for 12-18 year olds by month (November 2015 – 30 November 2017)

Population Reach

Figure 7 and 8 describe the proportion of the population of Aboriginal young people with a Broken Hill postcode of 2880 who have completed an Annual Youth Health Check at Maari Ma over the periods November 2015 – October 2016 and November 2016 – October 2017 respectively. In both years the proportion of young people accessing the service is higher in the 12 – 14 year old age group.
Figure 7: Proportion of Annual Youth Health Checks completed for Aboriginal young people aged 12-18 years with a Broken Hill postcode (November 2015 – October 2016)

Figure 8: Proportion of Annual Youth Health Checks completed for Aboriginal young people aged 12-18 years with a Broken Hill postcode (November 2016 – October 2017)
When compared to the previous year, the proportion of Aboriginal young people in Broken Hill accessing Youth Health Checks at Maari Ma decreased in November 2016 – October 2017 (Figure 8). The age distribution over the two year time period shows that there is a trend towards Annual Health Checks being completed in higher age group in November 2016 – October 2017 when compared to November 2015 – October 2016 (Figure 9).

*Figure 9: Annual Youth Health Checks completed
Age distribution over two time periods*
TickiT

From March 2017 – November 2017, the average time taken to complete TickiT was 13 minutes, although there is a range in the length of time that young people have taken to complete the assessment (Figure 10 and 11).

Forty two out of 78 (54%) young people answered all questions that they were asked on TickiT (excludes ‘unasked’ and CQI questions).

Figure 10: Distribution of time taken to complete TickiT (March 2017- November 2017)

Figure 11: Average time taken to complete TickiT (March 2017- November 2017)
RECOMMENDATIONS
The qualitative feedback from Aboriginal young people and Maari Ma Youth Health Clinic Staff along with the Continuous Quality Improvement data collected supports the continuation of the use of TickiT in the Youth Health Clinic.

This evaluation found positive engagement, strong acceptability and satisfaction with the tool from Staff and Aboriginal young people. Overall, Aboriginal young people felt comfortable using TickiT and believed that it was helpful for their Annual Youth Health Check. Young people interviewed preferred using TickiT rather than a face-to-face HEADSSS conversation.

Drawing on the findings of the three components of the evaluation, the following recommendations have been identified to inform the implementation of TickiT in the Youth Health Clinic and to improve the experiences and engagement of young people.

1. Include time for the Youth Health Team to de-brief with the young person after they complete TickiT

Currently, the Youth Health Team’s role includes introducing TickiT to young people to ensure they understand the process, feel comfortable using it and to provide support while answering questions. However, once TickiT has been completed the Youth Health Team do not feel that they have enough time to de-brief with the young person before handing over to the GP, and therefore miss out on building rapport with them. Staff feel that building a relationship with the young people who attend the clinic will help them to feel comfortable coming back to the clinic and encourage them to talk about any issues in their life.

This suggests there is a need to re-examine the process by which TickiT is implemented in the clinic to allow time for the staff member who introduces TickiT to speak with the young person about their answers before they go in for their appointment with the GP.

2. Review the questions on TickiT to ensure the questions are easy to understand and the psychosocial assessment is effective

Some young people reported being confused by a few of the questions in TickiT. In particular the violence question in the Safety category – “I have seen or experienced violence” was identified as causing confusion. Additionally, a staff member noted that in their opinion the question ‘have you ever thought about running away from home’ was not very useful as the answer usually raises some vague and non-specific reason and the young person is not usually thinking of running away. Clarifying the answers to these questions takes up valuable time in the second part of the appointment. There is therefore a need to review and refine the questions on TickiT to ensure that questions are clear and the information is collected is useful.

3. Consider removing questions on TickiT to shorten the time of completion

GPs in the Youth Health Clinic reported that they felt that sometimes young people were fatigued by the time that they spoke to them in the second half of the appointment. Given this, a review of the questions on TickiT could take place to determine if there were any questions that were not useful in the assessment and could be removed to save time. As a starting point, to save some time, it is
recommended that the CQI questions be removed from the end of the tool as the evaluation is complete.

4. **Ensure referral pathways are available to support young people**

Youth Health Clinic staff reported that the psychosocial assessment questions on TickiT have identified many young people who require a referral to specialist services (e.g. mental health or nutrition services). Ensuring that young people have timely access to these services is essential to support those young people who have issues within their life and help to maintain a positive relationship with the clinic.

5. **Utilise the population reporting function on TickiT to provide evidence for support services**

If required, the population data on TickiT can be used to support the above recommendation. TickiT produces reports that allow staff to view the aggregated data of young people who have completed TickiT by response and date range. Examining the responses certain questions or groups of questions can provide a picture of the health related risks and issues affecting the Aboriginal young people attending the clinic.

While the interviews suggested that more services are required to support young people that attend the Youth Health Clinic, data collected at a population level could be used as further evidence.

6. **Update technology as required**

The only barrier to completion that was raised by young people in the interviews was technological. Ensuring that the tablet software is kept up to date and tablets are repaired or replaced when they become unresponsive is likely to be important to effectiveness of the tool.

7. **Re-examine the extent to which Annual Youth Health Checks are reaching the target population.**

There has been an increase in the number of Annual Youth Checks completed at Maari Ma since the inception of the Youth Health Clinic in late 2015. However, the results in component 3 of this evaluation suggest that there has been a decrease in the proportion of the Aboriginal young people in Broken Hill accessing the service between November 2015 - October 2016 and November 2016 - October 2017 (Figures 7 and 8). There also appears to be a trend towards Annual Health Checks being completed in higher age group between these two years (Figure 9). A possible explanation for this is that the same young people are coming in for their Annual Health Check each year.

Re-examining this data will provide further information on the reach of the Youth Health Clinic and determine if there are young people who are not accessing the service. Such a review should be conducted with in collaboration with staff of the Youth Health Clinic to ensure that important contextual information is included.
8. **Conduct an evaluation to measure the short and medium term impact that TickiT is having on the population.**

To investigate the effectiveness of TickiT in the Youth Health Clinic, an evaluation measuring the short and medium term outcomes of TickiT on the Aboriginal youth population of Broken Hill could be conducted as the next step.

Additionally, a simple comparison study could be undertaken, where TickiT is randomly offered before the consultation or after the consultation and the issues identified by the General Practitioner are the outcome measure. This would demonstrate whether the tool is actually assisting the General Practitioner to identify more issues when TickiT is used before the consultation.
REFERENCES


