Full Title: An evaluation of the implementation of the Australian ATAPS Suicide Prevention Services Initiative

Running head: ATAPS Suicide Prevention Services Initiative

Abstract

The Access to Allied Psychological Services (ATAPS) Suicide Prevention Services initiative is an Australian Government-funded primary mental healthcare initiative providing free intensive psychological intervention for consumers at moderate risk of self-harm or suicide. Findings from a multi-method evaluation aimed at identifying whether the initiative is being implemented as stipulated within the Operational Guidelines, barriers and facilitators to implementation, and preliminary outcomes suggest that the Suicide Prevention Services are largely being implemented as stipulated in the Guidelines, but with some exceptions. In particular, service delivery barriers unique to rural and remote areas place limitations on implementation. Uptake of the ATAPS Suicide Prevention Services is high (10,428 consumers were referred to the Suicide Prevention Services between October 2008 and April 2013, and 86% of those attended at least one session), as is acceptance from organisations involved in its implementation.

Keywords

Suicide; Intervention; Prevention; Evaluation, Primary mental health care; ATAPS; Implementation; Barriers; Mental health services

Background

In 2014, the World health Organisation ranked intentional self-harm as the 15th leading cause of death globally for the years 2000 to 2012, positioning suicide and self-harm as a global health issue.[1] In that same year, 2864 Australians died from intentional self-harm, making it the country's 13th leading cause of death.[2] There are a great number of strategies that have been implemented in various countries across the globe in an attempt to reduce the number and effects of suicide. Broadly, these range from *universal prevention strategies,* which aim to reduce factors that increase suicide risk at a population level, to *indicated prevention strategies*, aimed specifically at those displaying warning signs for suicide or who have already made an attempt.[3] Providing support to people with suicidal thoughts or who have attempted suicide is a key component of Australia's National Suicide Prevention Strategy.[4] The Australian Access to Allied Psychological Services (ATAPS) Suicide Prevention Services initiative attempts to prevent suicides by addressing the need for individual treatment of those at identified risk.

The Australian Access to Allied Psychological Services program

In 2001, the Australian Government Department of Health and Ageing (now Department of Health) introduced the ATAPS program to improve access to services for common mental disorders. ATAPS was implemented through Medicare Locals, and then through Primary Health Networks, to support general practitioners (GPs) and mental health professionals to collaborate to provide optimal primary mental healthcare. GPs refer consumers with high prevalence mental disorders for up to 12 (or 18 in exceptional circumstances) individual sessions of free or low-cost evidence-based mental healthcare, and up to 12 additional group-based sessions. Review by the GP is essential after each six sessions and after the final session. Permissible interventions for ATAPS are largely cognitive-behavioural interventions and narrative therapeutic strategies for Aboriginal and Torres Strait Islander people.[5]

At the time of the evaluation outlined here, there were 61 Medicare Locals spread across all Australian states and territories. Medicare Locals were not-for-profit organisations created with the responsibilities of improving coordination and integration of primary health care in local communities, addressing service gaps, and making it easier for patients to navigate their local health care system.[6] Following a 2014 review of Medical Locals, they were replaced by larger Primary Health Networks, which took over responsibility for the implementation of ATAPS, which is also now administered differently, using a flexible mental health funding pool.[6]

ATAPS Suicide Prevention Services Initiative

Over time, specialist ATAPS initiatives with particular service requirements have been introduced. These initiatives aim to increase access to mental health care for specific at-risk populations, including women with perinatal depression and children with, or at risk of developing, a mental or behavioural disorder. In 2008, a pilot of the ATAPS Suicide Prevention Services Initiative commenced, which aimed to provide specialist services to people discharged to their GP by a hospital or emergency department after an episode of self-harm or a suicide attempt, and to people who present to their GP after an episode of self-harm or who disclose serious thoughts of self-harm.[7] The initiative is not intended for consumers at 'acute and immediate risk of suicide or self-harm'.[7(p.3)] The Suicide Prevention Services Initiative has a number of requirements and flexibilities that aim to address the urgency and risks of intended self-harm. These include requirements for immediate contact from the service provider organisation, an unlimited number of sessions for the initial two months, and provision of both face-to-face sessions with intermediate phone contact. These requirements are further outlined in Table 1.

The adjunct ATAPS After Hours Suicide Support Line is provided by the Melbourne-based service *On the Line,* an organisation providing remote (e.g. telephone, web, video) mental health support services across Australia (see https://www.ontheline.org.au/). The ATAPS After Hours Support Line allows mental health professionals to arrange, or for consumers of the ATAPS Suicide Prevention Services Initiative to directly access, additional phone support. Details of consumer contacts with the Support Line are provided to the Suicide Prevention Services' treating mental health professional to enhance continuity of care.

Evaluation of the Suicide Prevention Pilot

Our team from the Centre for Mental Health at the University of Melbourne has been evaluating the ATAPS program since 2003.[8] As part of this evaluation, we conducted an evaluation of the Suicide Prevention Services pilot, which ran from July 2008 to June 2011 in 19 locations across Australia.[8, 9] During the pilot phase, 2070 consumers received ATAPS Suicide Prevention services.

This evaluation identified two primary models used by Medicare Locals, sometimes in combination, of retaining mental health professionals to deliver the Suicide Prevention Services: directly employing them within the organisation (about 50%) and/or contracting private providers working in the primary sector (about two-thirds, often in combination with direct employment). The evaluation also identified a number of barriers and enablers to implementation of the initiative.[9, 10] Barriers included difficulties with engaging referrers and service providers, preparing appropriate clinical

governance procedures, and servicing rural and remote locations. Good links and communication between parties involved in referral, implementation, and delivering services were key facilitating factors, as was the positive response to the initiative from mental health professionals and referrers, and flexibility to integrate the Suicide Prevention Services into existing ATAPS services. Results of the evaluation suggested that consumers accessing the ATAPS Suicide Prevention services were likely to not have otherwise received services, with half being in receipt of a low income and one-third not previously having accessed mental health care. Referrers to the program and mental health professionals providing the Suicide Prevention Services also believed that the services were meeting a previously unmet need for intensive mental health care for those at moderate risk of suicide who would not be eligible for tertiary mental health care.[9] Pre- and post-intervention measures were available for 245 consumers in the pilots, which showed a clinically and statistically significant reductions in scores on the Modified Scale for Suicidal Ideation.[11] As a result of the success of the pilot, the Suicide Prevention Services Initiative was extended to all 61 Medicare Locals in July 2011 and remained mandatory for all Primary Health Networks after the evaluation period reported in the current paper.

The current evaluation

The aims and requirements for implementation of the Suicide Prevention Services are outlined in the Operational Guidelines for this initiative published by the Australian Government Department of Health[7] and provided to all Medicare Locals to guide their implementation.

The current evaluation takes a multi-method approach, similar to that of the pilot evaluation,[9] to assess two broad evaluation questions:

1. Are the Suicide Prevention Services being implemented as specified by the Operational Guidelines?[7]
2. What are the barriers to, and factors that facilitate, implementation that are being experienced by organisations implementing the Suicide Prevention Services Initiative?

Method

The University of Melbourne's Human Research Ethics Committee provided ethics approval for this evaluation research (No. 1136812.2).

Table 1 outlines the requirements of the Suicide Prevention Services Initiative, as detailed in the Operational Guidelines and for which adherence was assessed for this evaluation. It also outlines the data sources used to evaluate adherence to those aspects of the guidelines.

Table 1. Primary requirements of the Suicide Prevention Services Initiative outlined in the Operational Guidelines, evaluation indictors and data sources

Component	Requirement	Indicator	Data source
Eligibility	Consumers at increased risk of suicide or self-harm, but who are not at acute or immediate risk are eligible.	Pre-treatment means on Modified Scale for Suicidal Ideation; Kessler-10; Depression, Anxiety, Stress Scales.	Minimum dataset
Referrers	Consumers can be referred directly from their GP, an emergency department, a hospital ward, a community mental health service, a psychiatrist or a non-government organisation.	Referrer type	Minimum dataset
Intervention period	Most people should access the Suicide Prevention Services for a maximum of two months before referral to alternative services, once suicide or self-harm risk has reduced. There is, however, no limit on the number of sessions.	- Number of sessions - Number of days between start and finish session dates.	Minimum dataset
Immediate contact	Provider is to contact the consumer within 24 hours, and is to have their first session within 72 hours, of referral. If not possible, contact by the ATAPS After Hours Suicide Support Line must be arranged.	- Number of days between referral and start session dates. - Responses to Interview question: How do you ensure contact within 24 hours and a session within 72 hours?	Minimum dataset Interviews: Medicare Local/provider organisation representatives
Intervention	Intervention types include psychoeducation; cognitive, behavioural and interpersonal therapeutic strategies; relaxation; skills training; and narrative therapeutic strategies for Aboriginal and Torres Strait Islanders. Mix of face-to-face contact and follow-up phone calls.	- Intervention type - Contact type (face to face, phone) - Duration of session - Group or individual session	Minimum dataset
Crisis referral arrangements	Formal arrangements must be in place with the state/territory local acute mental health team (or equivalent) for referral of consumers at acute and immediate risk of suicide, self-harm or harm to others.	Responses to interview question: Does your Medicare Local have arrangements in place to refer people at acute risk to themselves or others to state/territory crisis services?	Interviews: Medicare Local/provider organisation representatives

Liaison/ Development of linkages	The Medicare Local must have a formal liaison role with other services, including local GP practices and emergency services in local hospitals to ensure optimal and timely referral to providers.	Responses to interview question: How has your Medicare Local developed and maintained linkages and referral pathways with emergency departments and mental health services?	Interviews: Medicare Local/provider organisation representatives
ATAPS After-Hours Suicide Support Line	5pm-9am Monday-Friday; 24 hours on holidays and weekends. Can be used by: (1) Providers, referrers or Medicare Local staff to request call to consumer if provider unable to see them immediately or when consumer needs additional support out of hours; (2) consumer can call directly for additional support. Information about contacts accessible to provider on following day. Medicare Locals must promote the Line.	Responses to Interview questions: - Are you aware of the ATAPS after hours suicide support line? - Have you or providers ever accessed this service? - What was the purpose of contact? - Level of satisfaction with service. - How could it be improved?	Interviews: Medicare Local/provider organisation representatives

Data sources

Quantitative data

Quantitative data were taken from the purpose-designed web-based ATAPS minimum dataset, which allows service providers and Medicare Locals to enter standardised, de-identified referral, consumer and session information, and pre- and post-treatment outcome measure scores. Data entry for all referrals and sessions is mandatory, although some fields are elective. Data analysed was from October 2008, the commencement date of the Suicide Prevention Services pilot, to 31 March 2013.

Use of outcome measures with Suicide Prevention Services consumers is not mandatory; however, mental health professionals can choose from specified outcome measures for use at the first and last session. Use of the Modified Scale for Suicidal Ideation,[12] an 18-item measure indicating a level of suicidal ideation, is encouraged, but other possibilities include the Depression Anxiety Stress Scales (DASS21),[13] which uses seven self-report items each on depression, anxiety and stress sub-scales to measure symptoms over the past week; and the Kessler-10 (K10),[14] a 10-item self-report measure of non-specific psychological distress. These measures have sound psychometric properties.[11, 14-16] We used scores on these measures at the first session as a measure of eligibility for the Suicide Prevention Services Initiative.

Qualitative data

Between May and June 2013, two researchers conducted 21 semi-structured telephone interviews with representatives from either Medicare Locals or contracted service provider organisations that deliver the Suicide Prevention Services. For simplicity, we refer to these two groups collectively throughout the results as 'sites'. To choose the Medicare Locals to invite to participate in the interviews, the researchers stratified the Medicare Locals by Australian states and territories; metropolitan, rural and remote locations; varying durations since initial implementation of the Suicide Prevention Services, with some having also participated in the pilot study; and both high and low levels of uptake of the Initiative. We then chose Medicare Locals at random from each stratum to invite to participate. However, Tasmania, the Northern Territory and the Australian Capital Territory each had only one Medicare Local each representing their state or territory, so each of these was invited. Twenty-one interviews represents about one-third of all Medicare Locals (N = 61), which, when combined with the stratified sampling strategy could be considered to represent a robust cross-section of all Medicare Locals implementing the Suicide Prevention Services Initiative to be interviewed.

It is a requirement of the Department of Health, who fund the ATAPS initiatives, that Medicare Locals participate in the evaluation of ATAPS. Therefore, the researchers were able to contact each chosen Medicare Local directly and ask to speak with the person in charge of managing their ATAPS services. Where able, the researchers spoke to a representative over the phone to explain the purpose of the interview and to arrange a time for an interview. Where this was not possible, invitations were sent and interviews organised via email. Each Medicare Local nominated one representative who had been involved in the implementation of the Suicide Prevention Services to represent their organisation in that interview. The researchers also asked Medicare Locals who sub-contracted another organisation to provide their Suicide Prevention Services if they would consent to a representative from those organisations participating in an interview. Medicare Locals then contacted these services to request their participation on behalf of the researchers. Interviews were conducted with representatives from three of these sub-contracted organisations. Each representative to be interviewed received a Plain Language Statement outlining the purpose of the interviews, and a consent form, which also indicated signed consent for recording and transcription of interviews.

Four Medicare Locals who were initially invited to an interview did not participate due to non-responsiveness to interview requests or cancellations of interviews. These Medicare Locals were replaced by others with similar stratified characteristics. No difficulties arose from conducting the interviews by phone, and participants seemed willing to provide comprehensive answers to the questions.

Nominated representatives from the Medicare Locals who participated in the interviews were senior managers and managers in charge of all mental health services (16) or of ATAPS services only (2). Exceptions were one Director of Corporate Services and one Service Manager. Representatives from sub-contracted organisations responsible for the ATAPS Suicide Prevention Services were one Director, and two mental health professionals providing services. Note that two organisations provided two representatives each to participate in their interviews, such that there were 23 representatives from 21 organisations. Seventeen participants were women and six, men.

Interviews assessed participants' experiences of implementing the Suicide Prevention Services Initiative. The specific questions largely reflected implementation of the Suicide Prevention Services in relation to the areas outlined in Table 1. Additional questions regarding barriers and facilitators to implementation replicated those from the pilot evaluation in order to assess changes over time. Once created, the interview guide was approved by the Department of Health, to ensure that the resulting information would be useful to their understanding of the implementation of the Suicide

Prevention Services Initiative. Audio-recordings were professionally transcribed verbatim for use as qualitative data. Transcripts were de-identified during analysis.

Data analysis

Quantitative analysis

SPSS v21 was used to calculate descriptive statistics related to uptake of the Suicide Prevention Services, such as total and mean numbers of referrals and sessions; consumer demographics; mode of session delivery (by telephone or face to face); and duration from referral to first session, and first to last session. Observational comparisons between the Suicide Prevention Services data and that of other ATAPS initiatives were also made.

Qualitative analysis

Each transcript was reviewed by the interviewer to ensure accuracy. Three researchers analysed interview transcripts using a semantic theoretical thematic analysis approach to identify themes[17] in response to individual questions. Themes were labelled using keywords by one team member, then reviewed by a second, and compared with the pilot evaluation to identify changes over time. Linking particular states and territories, area characteristics or job titles to individual responses has the potential to identify individual participants; therefore, the source of specific responses are not specified. However, where specific themes were identified for a particular sub-group of respondents, these were identified this in the results; for example, themes among those from rural and remote Australia or from large geographical catchment areas.

Results

Consumers receiving the ATAPS Suicide Prevention Services

The number of individual consumers referred for Suicide Prevention Services in the data analysis period was 10,428. Table 2 shows sociodemographic characteristics of referred consumers and their attributed diagnosis(es). Their mean age was 33.6 years (SD = 14.7), most were female (60.2%), and almost two-thirds were receiving a low income (as determined by the referrer) (64.2%). Depression and anxiety disorders were the most common diagnoses.

Table 2.

Characteristics of consumers referred for ATAPS Suicide Prevention Services

Demographic	No. consumers	% consumers
Gender[a]		
Female	6,275	60.2
Male	3,830	36.7
Missing	323	3.1
TOTAL	10,428	100.0
Low income[a]		
Yes	7,049	64.2
No	1,191	10.9
Unknown	2,403	21.9
Missing	332	3.0
TOTAL	10,975	100.0
Diagnosis[b]		
Depression	6,581	60.0
Anxiety disorders	3,331	30.4
Other diagnosis	2,515	22.9
Unknown	418	3.8
Psychotic disorders	340	3.1
No formal diagnosis	235	2.1
Unexplained somatic disorders	113	1.0
Missing	1,967	17.9

[a]As this is a stable demographic characteristic, the Numbers (No.) and Percentages (%) are reported on the basis of the total number of unique persons in receipt of services within each initiative rather than the number of referrals, since a single person can receive multiple referrals to the same initiative. For 'low income' the referral total has been used as these demographics can change over time. [b]As individuals can receive more than one diagnosis, percentages for diagnosis will total more than 100%.

Eligibility

Table 3 shows the pre-treatment means for the three most commonly used outcome measures and clinical severity attached to that score. Evidence of both a high level of distress and a mild to moderate level of suicidal ideation suggest that consumers are referred to the Suicide Prevention Services according to the Operational Guidelines, which specify that Suicide Prevention Services are for those at moderate risk of self-harm or suicide.[7] It must be noted, however, that the percentage of cases for which a pre-treatment measure is completed is very low (maximum = 17.1%) and the majority of cases, therefore, are not represented in this data.

Table 3.

Pre-treatment means on outcome measures and category of clinical severity

Measure	n	Mean	SD	Range	Score Category
MSSI	1,090	16.3	11.2	1-49	Mild to moderate suicidal ideation
K10	1,614	35.1	7.4	10-50	Very high level of distress
DASS21					
Depression	1,090	14.6	5.1	1-21	Extremely severe
Anxiety	730	12.1	5.52	1-21	Extremely severe
Stress	495	14.4	4.8	1-21	Severe

Referrers

Table 4 shows the type and number of referrers who referred consumers for Suicide Prevention Services. Note that these are unique referrers, so each referrer is only counted once, regardless of the number of referrals they have made. GPs were by far the most common referral source (87.5%).

This referral data suggest that the majority of consumers are being referred for Suicide Prevention Services according to the Operational Guidelines.

Table 4.

Unique referrers to the Suicide Prevention Services Initiative

Referrer type	No.	%
GP	3,860	87.5
Community mental health service	105	2.4
Emergency Department	307	7.0
Non-government organisation	2	0.0
Psychiatrist	12	0.3
Referrer type not provided	122	2.8
Total referrers	4,409	100.0

Intervention period

The total number of sessions recorded for the 9402 referrals to the Suicide Prevention Services that were taken up was 57,348. The mean number of sessions per referral was 6.1 (SD = 5.8; range, 1-78). Within 60 days of the first session, 64% of consumers had attended their final session within the Suicide Prevention Services, 79% within 90 days and 90% within 150 days (five months). The mean number of days from first to last session was 63.1 (n = 9, 402, SD = 82.7). However, about 10% of consumers were still attending Suicide Prevention sessions five months or more following referral. The majority of consumers are therefore attending the suicide prevention initiative for the recommended period of two months or less before being referred to less intensive services.

Immediate contact

The requirement that consumers are seen within 72 hours of referral is not being met for about two-thirds of consumers. In total, 86.1% of consumers referred to the Suicide Prevention Services attended at least one session. One third had their first session within 72 hours of referral, half (48%)

within one week, 60% within two weeks, and 71% within four weeks. A further 24% were seen more than four weeks after referral.

To ensure consumers were contacted within 24 hours of referral to the Suicide Prevention Services, interviewed sites largely used one of three 'triage' or intake models. Ten reported using a centralised triage system operated from within the Medicare Local whereby triage clinicians conduct an initial telephone assessment with consumers, schedule a session with an employed provider or send the referral to a provider organisation for scheduling. If not suitable, the referrer is contacted to discuss alternative service arrangements.

Five sites noted use of a direct referral system from the referrer to a private provider or the sub-contracted service, and two described a triage system whereby a public mental health service conducts the triage assessment and refers to the Suicide Prevention Services as appropriate.

Seven sites made immediate contact with consumers upon referral to schedule an appointment within 72 hours. Seven had dedicated staff and sessions available each day to see new Suicide Prevention Services consumers, and five stipulated that contractual agreements with private providers were dependent upon providers consistently conducting initial sessions within 72 hours of referral.

However, consumers' own limited availability sometimes delayed the first session, as did receiving referrals on a Friday or before a public holiday. Two rural or remote sites could not guarantee consumers would be seen within 72 hours of referral due to the limitations of part-time, and small numbers of, staff. In these cases, mental health professionals maintained phone contact, linked the consumer with other services or used the ATAPS After Hours Telephone Support Line to maintain support until the consumer was seen within the Suicide Prevention Services.

Interventions

Table 5 shows the modality of delivery, type and duration of Suicide Prevention Services sessions; and the interventions delivered in those sessions. The majority were delivered face to face with individual consumers in sessions of between 46 and 60 minutes, while telephone contact was used in 8% of sessions. This frequency of telephone contact is far higher than is observed for ATAPS overall (0.1%).[10] These findings suggest that, again consistent with the Operational Guidelines, mental health professionals are providing shorter telephone sessions with Suicide Prevention Services consumers between face-to-face sessions in order to maintain therapeutic contact and provide intensive support. Other ATAPS initiatives have no such stipulation, as they are targeted at consumers who are not at such elevated risk of suicide or self-harm. Providers were also using a

range of intervention strategies within these sessions, with cognitive and behavioural interventions the most common. We note, however, there is a significant amount of missing data for intervention type, and it is not clear what these interventions comprise and therefore whether they adhere to the Operational Guidelines.

Table 5.

Session characteristics (N = 57, 348)

Session characteristic	No. sessions	% total sessions
Modality		
Face to face	45,930	80.1
Telephone	4,318	7.5
Videoconference	202	0.4
Web-based	55	0.1
Missing	6,843	11.9
Duration		
0-30 minutes	6, 195	10.8
31-45 minutes	1,007	1.8
46-60 minutes	42,790	74.6
Over 60 minutes	5,257	9.2
Missing	2,099	3.7
Type		
Group	447	0.8
Individual	54,925	95.8
Missing	1,976	3.4
Intervention type		
Diagnostic assessment	10,710	18.7
Psycho-education	11,595	20.2
CBT-Behavioural	17,530	30.6
CBT-Cognitive	23,177	40.4
CBT-Relaxation	7,221	12.6
CBT-Skills training	8,577	15.0
Interpersonal therapy	10,503	18.0
Narrative therapy	840	1.4
Family therapy	33	0.1
Parent training in behaviour management	1	0.0
Other CBT strategies	3,598	6.3
Other strategies	9,001	15.7
Missing	15,899	27.7
No show	3,854	6.7

Crisis referral arrangements

Consistent with the Operational Guidelines,[7] all interviewed sites articulated a referral pathway between their organisation and local mental health crisis services for consumers at acute risk of harm. Use of the relevant state crisis phone line was common, such that the referral process was "no different to any other person that presents [to the crisis service]...". Three sites reported use of a process developed specifically for Suicide Prevention Services' consumers needing acute services.

Nine sites had a formal agreement with local mental health services stipulating these referral pathways. Six had developed the agreement in collaboration with the mental health services and a further two had pre-existing, overarching agreements. Three sites reported no formal agreement with local mental health services, and one commented that attempts to establish an agreement had been refused. Two reported having guidelines for their mental health professionals regarding the assessment of consumer risk and referral processes.

Liaison/Development of linkages and referral pathways

When asked how they had developed and maintained linkages and referral pathways with state/territory mental health services, almost all sites spoke about the importance of this relationship and 13 reported a very productive relationship. It was clear that most sites undertook significant work to establish and maintain these relationships, through initiation of contact, regular meetings and fostering relationships between mental health professionals. The most common means of maintaining their relationships with state/territory mental health services, was regular meetings between the services, as reported by eleven interviewees. These ranged from senior management meetings to clinical case discussions. One interviewee described how they had worked to facilitate these relationships:

> I first approached senior management, got a good relationship with the management… I had to develop a relationship with five of the separate clinical team leaders and team managers and then identify the appropriate providers… introducing each team leader or manager to the provider and having them meet up and establish a relationship together.

Despite a majority having established working relationships with their local mental health services, 10 sites reported substantial difficulties establishing and maintaining these relationships. Six reported that local mental health services had been reluctant to work with, or refer to, them, or to develop a formal working agreement, and another reported difficulties referring their clients to their local state/territory mental health service.

The nature of these relationships with local mental health services ranged from formal relationships maintained by the Medicare Locals on an organisational level, formal or informal relationships between service managers, to individual ad hoc relationships between mental health professionals working in the Suicide Prevention Services and within state/territory mental health services. Good pre-existing relationships between professionals from Medicare Locals and the mental health services were often capitalised upon to facilitate relationships between the organisations more widely.

Using the ATAPS After-hours Suicide Support Line

Interview participants from 13 sites had direct experience of using the ATAPS After Hours Suicide Support Line, while others had received feedback from Suicide Prevention Services providers about the Line. Ten reported using the Support Line to provide contact with consumers after hours or at weekends when the mental health professional was unavailable and the consumer needed additional support. Satisfaction with the service was generally high, with 11 interviewees providing positive comments about the Support Line, using words such as 'supportive', 'reassuring', 'clinically good' and 'well-coordinated'. Three sites expressed dissatisfaction for various reasons including the criteria for consumers to access the service, lack of engagement and poor handover. However, three noted that the service had improved over time. These findings suggest use of the Support Line is as intended and that is it providing a valuable adjunct service to the Suicide Prevention Services.

Facilitators and challenges to implementation

Workforce

One of the most commonly cited facilitators to implementation of the Suicide Prevention Services, cited by interview participants from 12 sites, was positive characteristics of the mental health workforce, such as a strong commitment to delivery of the Suicide Prevention Services.

In the pilot evaluation, recruitment of mental health professionals with the qualifications and experience required to deliver the Services was seen as a major barrier to implementation. However,

this barrier was limited in the current evaluation to rural and remote areas, where both recruitment and retention of such mental health professionals was still noted as being particularly difficult.

Capped funding

Eleven sites stated that capped funding was a barrier to implementation of the Suicide Prevention Services. Six noted difficulties with delivering the Services equitably across their catchment, most often in Medicare Locals with large catchments covering rural and remote locations. As funding is population-based, the cost of time, travel and accommodation for clinicians to provide services to small populations in several discrete and geographically isolated locations was not possible:

> So we've got two hubs… and there's 1000 kilometres between them, so you can imagine it's quite hard to spread out a small amount of FTE [full-time equivalent employment funding] over that area… the costs are huge.

Permanent allocation of a mental health professional to the various geographic locations was not feasible.

Four sites discussed the difficulty of balancing the capped funding available with meeting the deadlines for contacting consumers within 24 hours, and providing a session within 72 hours, of referral, which requires consistently allocated staff time to provide these services even if they are not always required. Two sites had implemented demand management strategies to ensure the Suicide Prevention Services could be funded for the full financial year, only accepting referrals from selected GPs and not accepting referrals directly from emergency departments.

Developing relationships

As stated in the *Liaison/Development of linkages and referral pathways* section above**,** 10 sites reported difficulties with building referral relationships with other local mental health services. This was noted as a significant barrier to delivery of the Suicide Prevention Services. The need for significant time and energy to build and maintain these referral relationships was also noted in the pilot evaluation[9] and is therefore a long-term requirement.

Conversely, productive relationships with local mental health services, established by 13 sites represented in the interviews, were seen as a significant facilitator to delivery of the Suicide Prevention Services, once these relationships were established.

Referrers

Regular, clear education for GPs and emergency departments regarding the parameters of the Suicide Prevention Services was a consistent challenge for interview participants, particularly as staff turnover is high in emergency departments and GP practices. This challenge was also noted in the pilot evaluation.[9] Managing consumers with no regular GP and combatting GPs' preference for referring consumers with any level of suicidality to acute services because they lack confidence to assess the level of risk were also seen as significant challenges. Inappropriate referrals were occasionally received, which prompted a discussion between the ATAPS coordinator and the referrer. Assessing level of consumer suicide risk for determining appropriateness for the Suicide Prevention Services was also noted as being difficult for some sites, as was organisational and provider anxiety about working with suicidal consumers. The latter had been addressed by Medicare Locals and provider organisations providing support, formal documentation and training for those involved in Suicide Prevention Services delivery.

Five sites reported that having good, trusting relationships with GPs, with open communication had resulted in GPs referring confidently into the Suicide Prevention Services Initiative. Three noted that good communication between the Medicare Locals, referrers and mental health professionals was an important facilitator to implementation.

Policies and clinical governance

Six of the sites reported that having good policies and clinical governance in place for mental health professionals was a facilitating factor for implementation. As one interview participant said:

> When the program started we had good procedures in place and everyone was reassured that we were working in a safe program and that it was reasonable and okay.

The establishment of such policies and clinical governance procedures was seen as a barrier to implementation in the Pilot evaluation, but the investment in resources to establish these is clearly now seen as a significant advantage for the longer-term running of the Suicide Prevention Services.

Program flexibility

Participants from four sites stated that the flexibilities provided by the Operational Guidelines are key facilitating factors to successful implementation, including the increased number of sessions available to Suicide Prevention Services.

Discussion

Findings from this evaluation suggest that the ATAPS Suicide Prevention Services Initiative is a highly utilised and accepted primary mental health care initiative, and that Medicare Locals and service delivery organisations are largely delivering the Initiative as stipulated within the Operational Guidelines.[18] The major exceptions to this are that two thirds of consumers attended their first session outside the stipulated timeframe of within 72 hours of referral and about one third of consumers were still attending Suicide Prevention sessions more than two months after referral. Interviewees reported consumers themselves were often not available within this timeframe, and for rural and remote areas, distance and staffing issues prevent adherence to this guideline. However, the Operational Guidelines allow for some departures from the '72 hour rule', also stating that the ATAPS After Hours Suicide Support Line should be utilised if face-to-face contact cannot be made in this time. Interview responses suggested that the ATAPS After Hours Suicide Support Line, telephone contact with a mental health professional, and strong relationships with alternative services were all utilised to ensure that consumers were supported before, and between, face-to-face sessions and where a session could not occur within 72 hours.

It is also important to note that it is not the intention of the Suicide Prevention Services Initiative that consumers be discharged from treatment when their risk or harm reduces, but rather that they are linked into a less intensive, longer-term program, which can include alternative ATAPS initiatives. Therefore, continued sessions after the initial two months may be appropriate for some consumers, if their level of suicidality has not reduced to such an extent to make an appropriate referral to an alternative, less intensive initiative. Accordingly, the wording of this guideline does suggest some flexibility, stating 'In most cases people would access services for a period of up to two months'.[7 (p. 5)]

While implementation of the Suicide Prevention Services was mandatory for Medicare Locals, its acceptance and strong uptake[8] are evidence of effective implementation planning. A systematic review by Greenhalgh et al.[19] outlines a series of characteristics necessary for the successful implementation of innovations within service organisations. Firstly, the innovation must show the intended adopters a clear and unambiguous advantage. Consistent with this idea, the Suicide Prevention Services guidelines allow provision of intensive services to consumers not allowable through any other ATAPS initiative and to consumers not eligible for acute mental health services because they are not at immediate risk of suicide or self-harm.

Greenhalgh et al.[19] also state that implementation of service innovation depends on the innovation's capacity to be adapted and refined to suit a variety of organisational systems and structures while

preserving the key elements or 'hard core' of the innovation. Again aligning with this concept, we observed that while common service delivery, intake and triage models were identified across the participants' organisations, there was wide variation in the use of these models to deliver the essential elements of the initiative. Furthermore, flexibility within the Operational Guidelines[7] was noted as a factor facilitating implementation of the Suicide Prevention Services Initiative in this, and the pilot,[9] evaluation. Such flexibility is especially important in Australia, where geographical and demographic characteristics of local environments are widely varied.

Positive relationships and clear communications between stakeholders were also seen by participants as essential for implementation of the Suicide Prevention Services, as was clear clinical governance. In the pilot evaluation, the need to develop both of these was seen as a barrier to implementation, but their importance has become clearer over time. The importance of both the development of working relationships and strong clinical governance are recognised within the Suicide Prevention Services Operational Guidelines,[7] with Medicare Locals granted an initial period of up to six months for their establishment before commencement of service delivery.

These combined findings suggest a model of treatment for consumers within the Suicide Prevention Services that is largely acceptable and feasible, with the exception of in rural and remote areas of Australia, where the barriers to implementation are significant.

Limitations

While participants were assured of anonymity in the reporting of the evaluation outcomes, and that the researchers are independent of the funding body, participants might have felt compelled to present a positive view of their program implementation; however, expression of some negative views, barriers and difficulties did occur, lending support to the validity of the interview findings, as does repetition of themes identified in the pilot evaluation.

As this evaluation was cross-sectional, rather than longitudinal, and quantitative data analysis was constrained to analysing data available within the minimum dataset, we were limited to assessing pre-treatment levels of suicidal ideation and symptoms of distress based on available outcome measures. Consequently, we were not able to assess actual reduction in suicide attempts or completed suicides, nor other desirable clinical outcomes, such as reductions in level of distress. Future research assessing the outcomes of the Initiative would benefit from longer-term measurement of outcomes to identify whether the Initiative achieved similar or better outcomes to other evidence-based interventions. Significant amounts of missing data within the dataset for some variables also meant that there was some data that was not able to be interpreted.

Implications for behavioural health

The high level of acceptability of the ATAPS Suicide Prevention Services Initiative among Medicare Locals and service provider organisations and its high level of uptake among referrers and consumers suggests the Initiative is filling a service gap for those at moderate risk of self-harm or suicide. The flexibility of the Operational Guidelines allows organisations to adapt implementation to meet the needs of their local area and to the pre-existing organisational structure. For example, referrals for Suicide Prevention Services come from a range of referrers who might act as gatekeepers to mental health services for people identified as being at risk of suicide or who have had a recent suicide attempt. In addition, consumers are allowed an unlimited number of sessions, conducted in person and by phone, in the months following their referral, facilitating intense support at a time when people can be at greatest risk of suicide.[20] Other primary mental health programs implemented at a state/territory or national level in Australia and internationally might benefit from an approach that allows similar flexibilities, while still maintaining a set of strict criteria for the delivery of services according to a program model.

In 2015, the Australian Government released a response to a large-scale review of the Australian mental health system.[21] This response attempts to address this need for greater flexibility in the delivery of primary mental health care to meet the needs of consumers across a spectrum of mental health care needs within highly varied communities across Australia. While community-based Primary Health Networks will be required to implement services specifically aimed at suicide prevention within their communities, there will be flexibility around the design and implementation of those services to ensure the resulting services best meet community need within the parameters of operation of that organisation.[22] While the ATAPS Suicide Prevention Services initiative in its current form will no longer be mandated, PHNs can consider what has been learned in the implementation of this program in the design and implementation of new suicide prevention programs, giving due consideration to what has and what has not been feasible, acceptable and effective for their local community.

Conflicts of interest

This evaluation is funded by the Australian Government Department of Health, which also funds the ATAPS Suicide Prevention Services Initiative.

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