Online Supplement Table A4: Nature of the intervention

Reference	Therapy type	Intensity of Therapy	Contact time (hours)	Home visits	Additional contact?	Emphasis /agenda on motivating/ensuring patient attendance?	Emphasis on continuity?	Open access to care provider/service?	Inpatient admission?
Problem focused									
Bannan 2010[69]	Problem Solving Therapy delivered in groups: problem orientation, problem listing & definition, brainstorming, devising an action plan and reviewing the plan	8 sessions (150 minutes). Sessions 1-4 were held twice weekly, sessions 5 & 6 were held weekly, and sessions 7 & 8 were held at 2-week intervals	20	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Gibbons 1978[75]	Social work-led task oriented case work that was task-centered and crisis orientated for a time limited period	3 months; no other detail	12	Yes; intervention was offered in the home	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Hatcher 2011[76]	Problem Solving Therapy: problem orientation, problem listing & definition, brainstorming, devising an action plan and reviewing the plan. A therapist manual and client workbook were developed and used. Regular risk assessments were conducted	Up to 9 sessions (60 minutes) over 3 months.	9	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Hawton 1987[48]	Problem oriented counselling; main focus being on helping the patient to solve current and future problems. Discussed meaning of attempt, disadvantages of self-poisoning	No detail provided	*Unclear; assume same as Hawton 1981: 10*	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	Participants could contact a therapist in the general hospital service by phone	N

	as a coping mechanism and specific measures to help target self-poisoning included. Where appropriate family members and/or friends were included in the sessions with some focus on improving communication.								
Husain 2014[49]	A brief, problem focused and manual-assisted intervention based on CBT principles. Includes an evaluation of the self harm attempt; crisis skills; problem-solving and CBT skills to manage emotions, negative thinking, interpersonal relationships and relapse prevention strategies. Culturally appropriate case scenarios were also included.	6 sessions (50 minutes) over 3 months. The first 2 sessions were offered weekly, then fortnightly.	5	Treatment was provided at home or in the clinic depending on the patients preference	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
McAuliffe 2014[77]	Interpersonal problem-solving skills training as delivered by McLeavey delivered in groups	6 sessions (120 minutes) held weekly over 6 weeks	12	N	Routine between session phone calls were made to remind them of their next appointment date and time	Routine between session phone calls were made to remind them of their next appointment date and time	N: Standard for therapy is that same therapist delivered the intervention	N	N
McLeavey 1984[67]	Interpersonal problem-solving skills training: followed the 5 stages of problem solving as recommended by D'Zurilla & Goldfried (1971) with a focus on interpersonal difficulties. Instruction, active discussion & reflective listening were the principal techniques used	5 sessions (60 minute) held weekly. An additional session was provided if necessary	5	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N

Patsiokas 1985[84]	Two intervention arms: 1. Cognitive restructuring; 2. Problem solving approach including 1) general orientation 2) problem definition & formulation 3) generation of laternatives 4) decision-making 5) verification	10 sessions (60 minutes) conducted over a 3-week period	10	N	NA	N	Treatment was delivered by the same therapist throughout	N	Participants were inpatients throughout treatment
Stewart 2009[85]	**Intervention group 1-Problem solving therapy: develop problem list, choose problem to work on, examine past coping strategies, brainstorming problem solving options, choosing a solution and implementing** **Intervention group 2-CBT: behavioural strategies including daily activity planning, relaxation and stress management and goal setting; CBT formulation; cognitive restructuring**	**Problem solving was four sessions (60 minutes) and CBT was seven sessions (60 minutes). No information regarding length of treatment.**	**Problem solving 4 hours** **CBT 7 hours**	**N**	**N**	**N**	N: Standard for therapy is that same therapist delivered the intervention	**N**	**N**
Salkovskis 1990[68]	Intervention was based on a problem solving approach; problem definition, generation of solutions, selection of potential solution and formulating achievable goals, planning steps to achieve these goals, monitoring success	5 session (60 minutes) over a 4-week.	5	Treatment was provided entirely at home in 4 cases. In the remainder, treatment commenced on the inpatient unit and was finished at home	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	Several participants were inpatients at the point of commencing but it wasn't a standardised or controlled aspect of the treatment program
CBT									

Brown 2005[50]	Cognitive therapy specifically designed to prevent suicide attempts; key to the therapy was the identification of proximal thoughts, images and core beliefs activated prior to the SA. Cognitive and behavioural strategies were applied to help the participant develop adaptive ways of coping with daily stressors.	10 sessions (length unclear) provided on a weekly or biweekly basis as needed	10	N	Contacted by case managers on a weekly to monthly basis by mail and telephone throughout the follow-up period	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Evans 1999[71]	Manual Assisted Cognitive-Behavioural Therapy (MACT): a brief cognitively oriented and problem-focused therapy that utilises a manual in face-to-face sessions; therapeutic approach focuses on problem-solving, basic cognitive techniques, and relapse prevention techniques	2 to 6 sessions (length unclear)	4	N	If the patient did not attend, the chapter of the manual relevant to that sessions was sent out; No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Liberman 1981[70]	Two intervention arms: 1. Insight oriented therapy comprised 17 hours of individual therapy, 10 hours of psychodrama and group therapy and 5 hours of family therapy. Behavioural therapy comprised 17 hours of social skills training, 10 hours of anxiety management and 5 hours of family negotiation and contingency contracting	1. 4 hours of therapy per day was delivered to both groups, over an 8-day period. A total of 32 hours of treatment was delivered	32	N	NA	N	N: Standard for therapy is that same therapist delivered the intervention	N	Participants were inpatients throughout treatment
Morely 2014[89]	Opportunistic Cognitive Behavioural Therapy including cognitive and behavioural strategies to assist in reducing or abstaining from substance use and address co-occurring	8 sessions (60 to 75 minutes) plus a group workshop of 75 to 90 minutes three months after completion of	12	N	N	N	N: Standard for therapy is that same therapist delivered the intervention	N	N

	depression and suicidal ideation	individual sessions							
Rudd 2015[66]	**CBT for suicidality, which included assessment and formulation with regard to vulnerability and triggers and crisis response plan, , emotion regulation skills, cognitive restructuring, and relapse prevention.**	**12 sessions (first session 90 minutes; subsequent 60 minutes) weekly or biweekly**	**12.5 hours**	**N**	**N**	**N**	N: Standard for therapy is that same therapist delivered the intervention	**N**	**N**
Slee 2008[90]	CBT specifically designed to prevent deliberate self harm; key to the therapy was the identification & modification of the mechanisms that maintained the self harm. Initial session involved an assessment of the most recent DSH episode they then investigated the role of emotional, behavioural & cognitive factors. Specific maintenance factors addressed included: dysfunctional cognitions, emotion regulation difficulties and poor problem solving. Relapse prevention was also addressed	12 outpatient sessions (length unclear). 10 were provided weekly and the last 2 were follow-up sessions	12	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Tyrer 2003[78]	Manual Assisted Cognitive-Behavioural Therapy (MACT): a brief cognitively oriented and problem-focused therapy that utilises a manual in face-to-face sessions; therapeutic approach focuses on problem-solving, basic cognitive techniques, and relapse prevention techniques	Up to 5 sessions over 3 months plus 2 optional booster sessions within 6 months	7	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	Occasional day patient care was provided
Psychodynamic									
Guthrie 2001[51]	Brief psychodynamic interpersonal therapy delivered at home. Therapy entails identifying and helping to	4 sessions (50 minutes) weekly for 4 weeks.	4	All sessions were delivered at home	No other contact described	N	N: Standard for therapy is that same therapist delivered the	N	N

	resolve interpersonal difficulties that exacerbate psychological distress						intervention		
Complex interventions with outreach									
Allard 1992[52]	Any combination of support or psychoanalytically oriented psychotherapy, psychosocial, drug or behavioural therapy, according to needs of patient and training of therapist	18 therapy sessions (length unclear) over one year; at least weekly for the first month; - every 2 weeks for the next 3 months; - monthly for the next 8 months	18	At least one home visit in the context of missed appointments	Written and phone reminders in the case of missed appointments	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Clarke 2002[80]	Nurse led case management; did not provide treatment plan per se but ensured that the patient was engaged in the appropriate treatments and services	Intervention length was undefined and uncontrolled; follow-up undertaken at 12 months	*Unclear; assume 2 contacts per month at 30=12*	If necessary, meetings were organised in mutually convenient locations	No other contact described	N	Same case manager	Open access to the case manager via a dedicated phone number	N
Comtois 2011[73]	The Collaborative Assessment and Management of Suicidality (CAMS) creates the opportunity for a suicidal patient to identify the ‘‘drivers’’ or causes that lead to suicidal ideation and the subsequent reduction in suicidal ideation and behavior as coping strategy. The Suicide Status Form (SSF) guides assessment, treatment planning, on-going tracking of risk, and outcome/disposition of care. The treatment plan that always includes a crisis response plan	Average of 8 sessions of 50 to 60 minutes over 13 weeks	8	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Hatcher 2015[82]	Package of care including patient support for 2 weeks to ensure patient was engaged in ongoing care, postcard contact	Patient support was one to two sessions or undefined length, PST was four to six	Assume patient support of 60 mins and PST sessions of 60	N	Eight postcards were sent in sealed	Research clinicians provided supportive contact for two weeks to assist the	N: Standard for therapy is that same therapist delivered the	N	N

	for 1 year, problem solving therapy, encouragement to attend general practice care for physical health checks, and a risk management strategy	sessions of undefined length and postcards were sent for up to one year	mins; approx. 8		envelopes in months 1, 2, 3, 4, 6, 8,10 and 12 after the index episode	patient to implement the discharge plan	intervention		
Hatcher 2016[65]	Package of care including patient support for 2 weeks to ensure patient was engaged in ongoing care, postcard contact for 1 year, problem solving therapy, encouragement to attend general practice care for physical health checks, a risk management strategy and a cultural assessment. The process of therapy explicity incorporated Māori cultural beliefs and values.	Patient support was one to two sessions or undefined length, PST was four to six sessions of undefined length and postcards were sent for up to one year	Assume patient support of 60 mins and PST sessions of 60 mins; approx. 8	N	Eight postcards were sent in sealed envelopes in months 1, 2, 3, 4, 6, 8, 10, and 12 after the index episode	Research clinicians provided supportive contact for two weeks to assist the patient to implement the discharge plan	N: Standard for therapy is that same therapist delivered the intervention	N	N
Hawton 1981[47]	Problem oriented counselling; main focus being on helping the patient to solve current and future problems. Discussed meaning of attempt, disadvantages of self-poisoning as a coping mechanism and specific measures to help target self-poisoning included. Where appropriate family members and/or friends were included in the sessions with some focus on improving communication.	One hour sessions as frequent as required (except in the third month when only 2 sessions were allowed) that were terminated once the crisis and/or problem had resolved but had to be within 3 months of index overdose	10	All sessions at home	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	Participants in the treatment group could contact a therapist in the general hospital service by phone (p170)	N
Hvid 2011[55]	OPAC program (outreach, problem solving, adherence, continuity) delivered by a hospital based intervention	6 months; no other detail	18	OPAC included some home visiting	Contact via telephone calls, text, email and	The treatment team motivated and supported participants to adhere	Outreach team were the same nurses and consultant	Not described	Not described

	team; solution focused counselling, and had a focus on rapid response and active outreach as well as increasing motivation for therapy				letters	to treatment	psychiatrist who worked on the inpatient unit; as much as possible contact was with the same nurse		
Kawanishi 2014[81]	Assertive and continuous case management: encouragement to participate in psychiatric treatment was a core feature with collation of information about participant's treatment status and social problems that may affect adherence; coordination of appointments and active follow-up of missed appointments; referrals to social services and psychoeducation for family members	Contact at week 1 and months 1, 2, 3, 6, 12, and 18; no other detail	7	No	If face-to-face appointment could not be achieved, phone calls were made	Y	Unclear	N	N
Litman 1976[86]	Continuing Relationship Management (CRM) via volunteer contact using a befriending approach.	Approximately 1 hour per week over 18 months	72	Some contacts were in the home but on a case by case basis	Contact was primarily by phone but there were also contacts in the suicide prevention centre and the clients homes	N	Same volunteer was in contact with participant	N	N
Marasinghe 2012[57]	The intervention included a problem solving approach, meditation, an intervention to increase social support, advice on reducing drug and alcohol use	Phase 1: face-to-face – 5 sessions (30 to 60 minutes): one assessment and 1 session each of the 4 techniques plus training to use mobile phone . Phase 2: Mobile follow-up - 10 phone calls of 10-15 minutes over 24	7	Unclear where face to face therapy undertaken	The intervention itself emphasised ongoing contact with 10 mobile phone calls post discharge to assess suicidality	N	N: Standard for therapy is that same therapist delivered the intervention	N	N

		weeks; continuous access to 5 min audio phone messages and weekly SMS messages			and provide further therapy; continuous access to phone messages and SMS reminders to engage in skills being taught in therapy				
Morthorst 2012[92]	Case management with crisis intervention and flexible, problem solving assertive outreach through motivational support and practical and active assistance to get to and from appointments	8 to 20 flexible outreach consultations; plus treatment as usual	14	Sessions were offered at home or wherever suited the patient	Phone calls and text messages	Participants were assisted getting to and from appointment	The same case manager saw the patient throughout	Unclear - if the patient had strong suicidal impulses they were asked to take a prepaid taxi to the ED	N
Van der Sande 1997[53]	Admission in inpatient unit (supportive mileu environment) and problem oriented counselling for outpatient therapy	1-4 days admission; outpatient therapy was once a week but no details with regard to length of sessions or treatment except that it was on a flexible basis and usually weekly (first follow-up assessment was 3 months post discharge)	12	N	No other contact described	N	Same therapist as during admission delivered therapy on outpatient basis	Able to contact the inpatient unit if in crisis	Yes; 1 to 4 day admission
Van Heeringen 1995[79]	Non compliance was assessed including ascertaining reasons for non compliance; needs for treatment evaluated, and identified needs matched with availability of outpatient treatment	Home visit was repeated twice if patient was not at home or they missed their next appointment	2	Up to two home visits in the context of missed appointments	None except for home visit	The intervention was aimed at increasing compliance	Not described	N	N

Wei 2013[56]	Two intervention arms: 1: Supportive counselling all done on the phone; 2. Cognitive behavioural therapy (CBT)	1. Supportive counselling delivered in 12 phone calls (20-40 minutes) over three months; 2. CBT delivered over 10 sessions (40 to 65 minutes each) over three months	Supportive: 4 to 8 (median 6) CBT: 6.6 to 10.8 (we don't use this arm as no one participated)	N	No other contact described	N	Unclear if the same person called each time	N	N
Welu 1977[54]	The intervention was formulation driven such that a range of interventions including psychotherapy, crisis intervention, family therapy or other technique were delivered with the emphasis on quantity and continuity of care	4 months	16	The initial visit was always in the home with the best place for providing treatment assessed at this appointment such that the remainder of treatments were conducted either at home, in the office, over the phone or alternative locations as appropriate	Weekly or bi weekly contact by phone to either provide treatment or monitor treatment being provided by another service	N	One team member was responsible for a certain geographical area such that participants only saw that one therapist	N	N
Other Psychological									
Dubois 1999[58]	Brief psychotherapy; no other details	5 sessions during the first month	5	N	No other contact described	N	Y	N	N
Gysin-Maillart 2016[64]	**ASSIP: manualised face to face therapy with personalised letters for 24 months. Therapy consisted of reconstructing vulnerability**	**Three sessions (60 to 90 minutes) over 3 weeks with a fourth session if necessary**	**4.5 hours**	**N**	**Y**	**N**	**N**	**N**	**N**

	and triggering factors that led to suicide attempt (using a CBT framework) and developing goals, warning signs and safety strategies.								
Tapolaa 2010[87]	Therapy combines elements of Acceptance Commitment Therapy and Solution Focused Brief Therapy. It was manualised and included some homework tasks	4 sessions (length unclear)	4	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	N
Torhorst 1987[59]	Therapy is undefined but two interventions arms were offered this therapy either at a specialised suicide prevention centre with a different therapist as was seen at hospital or to the same therapist seen at the outpatient clinic of the hospital. Four therapists were trained in psychoanalytical focal psychotherapy, one in client-centred psychotherapy and one began training in behaviour methods	Up to 12 weekly sessions (length unclear) were provided within 3 months post discharge	12	N	No other contact described	One motivational interview was provided at the commencement of therapy	N: Standard for therapy is that same therapist delivered the intervention	N	N
Torhorst 1988[60]	Therapy is undefined but two interventions arms were offered either 3 months or 12 months of therapy	12 sessions delivered over 3 months (weekly) vs delivered monthly over 12 months	12	N	No other contact described	N	N: Standard for therapy is that same therapist delivered the intervention	N	Patients were inpatients at the commencement of therapy
Other Psychosocial									
Armitage 2016[91]	**Self help: participants instructed to identify critical situations and appropriate responses to produce a plan to not self harm**	**NA**	**0**	**N**	**N**	**N**	**N**	**N**	**N**
Crawford 2010[61]	An appointment card asking the patient to re-attend the ED for an appointment with an alcohol	1 session (30 minutes)	0.5	N	No other contact	Appointment card was designed to	N	N	N

	specialist nurse plus an information leaflet on alcohol and health. The appointment comprised 30 minutes assessment and discussion of current and previous drinking using a specific FRAMES approach				described	prompt attendance			
Grimholt 2015[62]	**GP consultation within one week of self harm and a minimum of five consultations in the following 6 months; GPs given guidelines on topics to discuss including** suggestions for motivating patients to follow treatment, assessing personal problems and suicidal ideation, and availability in the case of suicidal crisis.	**Minimum of 6 sessions (time not stated) over 6 months**	**Assume up to 3**	**N**	**N**	**Y**	**N**	**Y**	**N**
Mouaffak 2015[83]	**OSTA program: three telephone calls (two weeks, 1 and 3 months post discharge) to assess risk and adherence to treatment plus a focus on increasing interprofessionnal collaboration**	**Three phone calls (unclear length) over 3 months**	**Assume up to 1.5 hours**	**N**	**Y**	**Y**	**N**	**Y**	**N**
O'Connor 2015[88]	**Teachable Moment Brief Intervention (TMBI), informed by the Collaborative Assessment and Management of Suicidality and the functional analysis of self-directed violence from DBT with the overall aim to identify the factors underlying suicide attempt and crisis response plan**	**Unclear: assume one session**	**Average length was 43 mins**	**N**	**N**	**N**	**N**	**N**	**N**
Wang 2016[74]	**Coping card: these were individually tailored and developed in the context of case management (TAU) and included self-awareness of suicide ideation, coping**	**NA**	**NA**	**Y**	**N**	**N**	**N**	**N**	**N**

	strategies with suicide ideation by emotion regulation including shifting attention and engaging in enjoyable activities, resources that were of help in seeking help, and a 24-hour crisis hotline telephone number and local medical information								
Waterhouse 1990[72]	No therapy is described; two interventions were 1. Hospital admission or 2. Discharge home	NA	NA	N	No other contact described	N	N	N	One intervention arm were admitted to an inpatient unit