APPENDIX A. DATA COLLECTION FORMS

VA ESP – SUICIDE PREVENTION
PRE SCREENER

Article ID:_____

Final 06/25/08

Reviewer:

Date:

Population (check all that apply)

- ❑ Men
- ❑ Women

- ❑ Veterans
- ❑ Military

Age (complete all that are reported)

Mean: _____

Median: _____

Range: _____

Setting (check all)

- ❑ Primary Care
- ❑ Hospital
- ❑ Psychiatric

- ❑ Population Based
- ❑ Other
- ❑ Not stated / Not reported / Not applicable

References to Retrieve: _____ _____ _____

_____ _____ _____

_____ _____ _____

Country (check one)

- ❑ US
- ❑ UK/New Zealand/Canada/Australia
- ❑ Other

Interventions (check all that apply)

- ❑ Physician
- ❑ Patient
- ❑ Population Based

- ❑ Organizational
- ❑ Not stated / Not reported / Not applicable

Outcome (check all)

- ❑ Attempters
- ❑ Completers
- ❑ SI

Design (check one)

- ❑ Experimental
- ❑ Observational

Intervention Codes

_____ _____ _____

Study Design: _____

VA-ESP Suicide Prevention
Detail Intervention & Quality Review Form

Article ID

Reviewer: Steven Bagley **Assigned on:**

1. **Was the study:**

(Check all that apply)

Outpatient……❑
Inpatient .....……❑
Emergency Dept/ Crisis Services….❑
Not reported/Not applicable.....….❑

2. **What was the sample size:** (NR for not reported)

	F/Up Duration	Units	Enrolled
Time 0			_____
F/Up 1	_____	_____	_____
F/Up 2	_____	_____	_____
F/Up 3	_____	_____	_____
F/Up 4	_____	_____	_____

Units
1. Days
2. Weeks
3. Months
4. Years
5. NR

3**. Eligibility Criteria**

4. **The intervention consisted of:**

Quality Measurement (only interventions)

1. **Was the study described as randomized?**
Yes.....❑
No.....❑
Don't know.....❑

2. **Treatment Allocation**
a. **Was a method of randomization performed?**
Yes.....❑
No.....❑
Don't know.....❑
b. **Was the treatment allocation concealed?**
Yes.....❑
No.....❑
Don't know.....❑

3. **Were the groups similar at baseline regarding the most important prognostic indicators?**
Yes.....❑
No.....❑
Don't know.....❑

4. **Were the eligibility criteria specified?**
Yes.....❑
No.....❑
Don't know.....❑

5. **Was the outcome assessor blinded?**
Yes.....❑
No.....❑
Don't know.....❑

6. **Was the care provider blinded?**
Yes.....❑
No.....❑
Don't know.....❑

7. **Were subjects blinded?**
Yes.....❑
No.....❑
Don't know.....❑

8. **Were point estimates and measures of variability presented for the primary outcome measures?**
Yes.....❑
No.....❑
Don't know.....❑

9. **Were all randomized participants analyzed in the group to which they were allocated?**
Yes.....❑
No.....❑
Don't know.....❑

10. **Were co-interventions avoided or similar?**
Yes.....❑
No.....❑
Don't know.....❑

11. **Was the compliance acceptable in all groups?**
Yes.....❑
No.....❑
Don't know.....❑

12. **Was the drop-out rate described and acceptable?**
Yes.....❑
No.....❑
Don't know.....❑

13. **Was the timing of the outcome assessment in all groups similar?**
Yes.....❑
No.....❑
Don't know.....❑

APPENDIX B. EXCLUDED STUDIES

EXCLUDED AFTER INITIAL REVIEW

No Intervention

Cooper, S. L. ; Lezotte, D.; Jacobellis, J., and Diguiseppi, C. Does availability of mental health resources prevent recurrent suicidal behavior? An ecological analysis. Suicide Life Threat Behav. 2006; 36(4):409-17.

Ettlinger, RW. Suicides in a groupd of patients who had previously attempted suicide. Acta Psychiatr Scand. 1964; 40:363-78.

Greer, S. and Lee, H. A. Subsequent progress of potentially lethal attempted suicides. Acta Psychiatr Scand. 1967; 43(4):361-71.

Kessel, N. and McCulloch, W. Repeated acts of self-poisoning and self-injury. Proc R Soc Med. 1966 Feb; 59(2):89-92.

Shah, A. and Bhat, R. Are elderly suicide rates improved by increased provision of mental health service resources? A cross-national study. Int Psychogeriatr. 2008; 1-8.

Foreign Language

Nielsen, A. S. and Nielsen, B. Pattern of choice in preparation of attempted suicide by poisoning--with particular reference to changes in the pattern of prescriptions. Ugeskr Laeger. 1992 Jul 6; 154(28):1972-6.

Rueegsegger, P. Attempted suicide. Clinical statistically and catamnestic studies of 132 attempted suicide patients in Basle University Psychiatric Clinic. 1963;146:81-104.

Duplicate Data

Bateman, A. and Fonagy, P. Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalization: an 18-month follow-up. Am J Psychiatry. 2001 Jan; 158(1):36-42.

McMain, S. Dialectic behaviour therapy reduces suicide attempts compared with non-behavioural psychotherapy in women with borderline personality disorder. Evid Based Ment Health . 2007; 10(1):18.

World Health Organization (WHO). For which strategies of suicide prevention is there evidence of effectiveness? World Health Organitzation: Health Evidence Network; 2004.

Review or Meta-analysis

Althaus, D. and Hegerl, U. The evaluation of suicide prevention activities: state of the art. World J Biol Psychiatry. 2003 Oct; 4(4):156-65.

Anderson, M. and Jenkins, R. The challenge of suicide prevention - an overview of national strategies. Disease Management & Health Outcomes. 2005; 13245-53.

Baldessarini, R. J.; Tondo, L.; Davis, P.; Pompili, M.; Goodwin, F. K., and Hennen, J. Decreased risk of suicides and attempts during long-term lithium treatment: a meta-analytic review. Bipolar Disord. 2006; 8(5 Pt 2):625-39.

Baldessarini, R. J.; Tondo, L.; Strombom, I. M.; Dominguez, S.; Fawcett, J.; Licinio, J.; Oquendo, M. A.; Tollefson, G. D.; Valuck, R. J., and Tohen, M. Ecological studies of antidepressant treatment and suicidal risks. Harv Rev Psychiatry. 2007; 15(4):133-45.

Beautrais, A. ; Fergusson, D.; Coggan, C.; Collings, C.; Doughty, C.; Ellis, P.; Hatcher, S.; Horwood, J.; Merry, S.; Mulder, R.; Poulton, R., and Surgenor, L. Effective strategies for suicide prevention in New Zealand: a review of the evidence. N Z Med J. 2007; 120(1251):U2459 .

Boscarino, J. A. External-cause mortality after psychologic trauma: the effects of stress exposure and predisposition. Compr Psychiatry. 2006; 47(6):503-14.

Chan, J.; Draper, B., and Banerjee, S. Deliberate self-harm in older adults: a review of the literature from 1995 to 2004. Int J Geriatr Psychiatry. 2007; 22(8):720-32.

Cipriani, A.; Pretty, H.; Hawton, K., and Geddes, J. R. Lithium in the prevention of suicidal behavior and all-cause mortality in patients with mood disorders: a systematic review of randomized trials. Am J Psychiatry. 2005; 162(10):1805-19.

Conwell, Y. and Thompson, C. Suicidal behavior in elders. Psychiatr Clin North Am. 2008; 31(2):333-56.

Crawford, M. J.; Thomas, O.; Khan, N., and Kulinskaya, E. Psychosocial interventions following self-harm: systematic review of their efficacy in preventing suicide. Br J Psychiatry. 2007 Jan; 190:11-7.

Daigle, M. S. Suicide prevention through means restriction: assessing the risk of substitution. A critical review and synthesis. Accid Anal Prev. 2005; 37(4):625-32.

Dew, M. A.; Bromet, E. J.; Brent, D., and Greenhouse, J. B. A quantitative literature review of the effectiveness of suicide prevention centers. J Consult Clin Psychol. 1987 Apr; 55(2):239-44.

Diekstra R.F.W. The prevention of suicidal behaviour: evidence for the efficacy of clinical and community based programs. Int J Ment Health. 1992; 21(3):69-87.

Gaynes, B. N.; West, S. L.; Ford, C. A.; Frame, P.; Klein, J., and Lohr, K. N. Screening for suicide risk in adults: a summary of the evidence for the U.S. Preventive Services Task Force. Ann Intern Med. 2004 May 18; 140(10):822-35.

Goldney, R. D. Suicide prevention is possible: a review of recent studies. Archives of Suicide Research. 1998; 4:329-339.

Gunnel, D. and Frankel, S. Prevention of suicide: aspirations and evidence. BMJ. 1994; 308:1227-1233.

Guo, B.; Scott, A., and Bowkers, S. Suicide Prevention Strategies: Evidence from Systematic Reviews. Alberta Heritage Foundation for Medical Research Health Technology Assessment.

Guzzetta, F. ; Tondo, L.; Centorrino, F., and Baldessarini, R. J. Lithium treatment reduces suicide risk in recurrent major depressive disorder. J Clin Psychiatry. 2007; 68(3):380-3.

Hawkins, L. C.; Edwards, J. N., and Dargan, P. I. Impact of restricting paracetamol pack sizes on paracetamol poisoning in the United Kingdom: a review of the literature. Drug Saf. 2007; 30(6):465-79.

Hawton, K.; Townsend, E.; Arensman, E.; Gunnell, D.; Hazell, P., and House, A. et al. Psychosocial and pharmacological treatments for deliberate self harm (Cochrane Review). The Cochran Library, Issue 3, 2002. Oxford: Update Software; 2002.

Heisel, M. J. Suicide and its prevention among older adults. Can J Psychiatry. 2006; 51(3):143-54.

Hirsch, J. K. A review of the literature on rural suicide: risk and protective factors, incidence, and prevention. Crisis. 2006; 27(4):189-99.

Hirsch, S. R.; Walsh, C., and Draper, R. Parasuicide. A review of treatment interventions. J Affect Disord. 1982 Dec; 4(4):299-311.

Isacsson, G. and Rich, C. L. Antidepressant drug use and suicide prevention. Int Rev Psychiatry. 2005; 17(3):153-62.

Lester, D. The effectiveness of suicide prevention centers: a review. Suicide Life Threat Behav. 1997 Fall; 27(3):304-10.

Links, P. S. and Hoffman, B. Preventing suicidal behaviour in a general hospital psychiatric service: priorities for programming. Can J Psychiatry. 2005; 50(8):490-6.

Mackenzie, M.; Blamey, A.; Halliday, E.; Maxwell, M.; McCollam, A.; McDaid, D.; MacLean, J.; Woodhouse, A., and Platt, S. Measuring the tail of the dog that doesn't bark in the night: the case of the national evaluation of Choose Life (the national strategy and action plan to prevent suicide in Scotland). BMC Public Health. 2007; 7146.

Mann, J. J.; Apter, A.; Bertolote, J.; Beautrais, A.; Currier, D.; Haas, A.; Hegerl, U.; Lonnqvist, J.; Malone, K.; Marusic, A.; Mehlum, L.; Patton, G.; Phillips, M.; Rutz, W.; Rihmer, Z.; Schmidtke, A.; Shaffer, D.; Silverman, M.; Takahashi, Y.; Varnik, A.; Wasserman, D.; Yip, P., and Hendin, H. Suicide prevention strategies: a systematic review. JAMA. 2005 Oct 26; 294(16):2064-74.

Moller, H. J. Evidence for beneficial effects of antidepressants on suicidality in depressive patients: a systematic review. Eur Arch Psychiatry Clin Neurosci. 2006; 256(6):329-43.

Morgan, O. and Majeed, A. Restricting paracetamol in the United Kingdom to reduce poisoning: a systematic review. J Public Health (Oxf). 2005 Mar; 27(1):12-8.

NHS Centre for Reviews and Dissemination. Deliberate self-harm. Effective Health Care. 1998; 4(6):1-12.

Pignone, M. P.; Gaynes, B. N.; Rushton, J. L.; Burchell, C. M.; Orleans, C. T.; Mulrow, C. D., and Lohr, K. N. Screening for depression in adults: a summary of the evidence for the U.S. Preventive Services Task Force. Ann Intern Med. 2002 May 21; 136(10):765-76.

Pinkis, J.; Blood, W., and Beautrais, A. et al. Media guidelines on the reporting of suicide. Crisis . 2006; 27(2):82-7.

Rehkopf, D. H. and Buka, S. L. The association between suicide and the socio-economic characteristics of geographical areas: a systematic review. Psychol Med. 2006; 36(2):145-57.

Ritchie, E. C.; Keppler, W. C., and Rothberg, J. M. Suicidal admissions in the United States military. Mil Med. 2003 Mar; 168(3):177-81.

Rodgers, P. L.; Sudak, H. S.; Silverman, M. M., and Litts, D. A. Evidence-based practices project for suicide prevention. Suicide Life Threat Behav. 2007 Apr; 37(2):154-64.

Safer, D. J. and Zito, J. M. Do antidepressants reduce suicide rates? Public Health. 2007; 121(4):274-7.

Seguin, M.; Lesage, A. D.; Turecki, G., and et al. Research project on deaths by suicide in New Brunswick between April 2002 and May 2003. Douglas Hospital Research Centre and New Brunswick Department of Health; 2005.

Staal, M. A. The assessment and prevention of suicide for the 21st century: the Air Force's community awareness training model. Mil Med. 2001 Mar; 166(3):195-8.

Stander, V. A.; Hilton, S. M.; Kennedy, K. R., and Robbins, D. L. Surveillance of completed suicide in the Department of the Navy. Mil Med. 2004 Apr; 169(4):301-6.

van der Sande, R.; Buskens, E.; Allart, E.; van der Graaf, Y., and van Engeland, H. Psychosocial intervention following suicide attempt: a systematic review of treatment interventions. Acta Psychiatr Scand. 1997 Jul; 96(1):43-50.

No Outcome of Interest or Usable Outcome

Preventing patient suicide. Healthc Hazard Manage Monit. 2007; 21(1):1-8.

S-kit Suicide prevention local implementation framework: A strategic multi-agency toolkit aimed at saving lives. National Institute for Mental Health in England, Care Services Improvement Partnership.

Aguilar, E. J. and Siris, S. G. Do antipsychotic drugs influence suicidal behavior in schizophrenia? Psychopharmacol Bull. 2007; 40(3):128-42.

Akroyd, S. and Wyllie, J. Impacts of National Media Campaign to Counter Stigma and Discriminantion Associated with Mental Illness: Survey 4. Wellington, New Zealand: New Zealand Ministry of Health; 2002; Publication 9-20-0004.

Anderson, M. and Jenkins, R. The national suicide prevention strategy for England: the reality of a national strategy for the nursing profession. J Psychiatr Ment Health Nurs. 2006; 13(6):641-50.

Bateman, D. N.; Bain, M.; Gorman, D., and Murphy, D. Changes in paracetamol, antidepressants and opioid poisoning in Scotland during the 1990s. QJM. 2003 Feb; 96(2):125-32.

Beautrais, A. L. Subsequent mortality in medically serious suicide attempts: a 5 year follow-up. Aust N Z J Psychiatry. 2003 Oct; 37(5):595-9.

Bodner, E.; Ben-Artzi, E., and Kaplan, Z. Soldiers who kill themselves: the contribution of dispositional and situational factors. Arch Suicide Res. 2006; 10(1):29-43.

Brent, D. A. and Mann, J. J. Family genetic studies, suicide, and suicidal behavior. Am J Med Genet C Semin Med Genet. 2005 Feb 15; 133(1):13-24.

Bridges, F. S. and Kunselman, J. C. Gun availability and use of guns for suicide, homicide, and murder in Canada. Percept Mot Skills. 2004 Apr; 98(2):594-8.

Burgess, P.; Pirkis, J.; Jolley, D.; Whiteford, H., and Saxena, S. Do nations' mental health policies, programs and legislation influence their suicide rates? An ecological study of 100 countries. Aust N Z J Psychiatry. 2004 Nov-2004 Dec 31; 38(11-12):933-9.

Carrington, P. Gender, gun control, suicide, and homicide in Canada. Archives of Suicide Research. 1999; 5:71-75.

Chan, T. Y. Improvements in the packaging of drugs and chemicals may reduce the likelihood of severe intentional poisonings in adults. Hum Exp Toxicol. 2000 Jul; 19(7):387-91.

Copley, G. B. Epidemiologica risk factors for suicide and attempted suicide in the U.S. Air Force: using administrative data systems and multiple case of death information to improve prevention policy. Diss Abst Int B Sci Eng. 2001; 62807.

Crane, C.; Hawton, K.; Simkin, S., and Coulter, P. Suicide and the media: pitfalls and prevention. Report on a meeting organized by the Reuters Foundation Program at Green College and University of Oxford Centre for Suicide Research at Green College, Oxford, UK, November 18, 2003. Crisis. 2005; 26(1):42-7.

Crome, P. The toxicity of drugs used for suicide. Acta Psychiatr Scand Suppl. 1993; 371:33-7.

Dargan, P. and Jones, A. Effects of legislation restricting pack sizes of paracetamol on self poisoning. It's too early to tell yet. BMJ. 2001 Sep 15; 323(7313):633.

Deutsch, S. and Alt, F. The effect of Massachusetts' gun control law on gun-related crimes in the city of Boston. Evaluation Quarterly. 1977; 1:543-568.

Eaton, K. M. ; Messer, S. C.; Garvey Wilson, A. L., and Hoge, C. W. Strengthening the validity of population-based suicide rate comparisons: an illustration using U.S. military and civilian data. Suicide Life Threat Behav. 2006; 36(2):182-91.

Feightner J and Canadian Task Force on the Periodic Health Examination. Canadian Guide to Clinical Preventitive Health Care. Ottawa, Ontario: Health Canada; 1994.

Florkowski, A.; Gruszczynski, W., and Wawrzyniak, Z. Evaluation of psychopathological factors and origins of suicides committed by soldiers, 1989 to 1998. Mil Med. 2001 Jan; 166(1):44-7.

Gibbons, R. D.; Hur, K.; Bhaumik, D. K., and Mann, J. J. The relationship between antidepressant medication use and rate of suicide. Arch Gen Psychiatry. 2005 Feb; 62(2):165-72.

Gilbody, S.; Whitty, P.; Grimshaw, J., and Thomas, R. Educational and organizational interventions to improve the management of depression in primary care: a systematic review. JAMA. 2003 Jun 18; 289(23):3145-51.

Giles-Sims, J. and Lockhart, C. Explaining cross-state differences in elderly suicide rates and identifying state-level public policy responses that reduce rates. Suicide Life Threat Behav. 2006; 36(6):694-708.

Goldney, R. D.; Fisher, L. J., and Wilson, D. H. Mental health literacy: an impediment to the optimum treatment of major depression in the community. J Affect Disord. 2001 May; 64(2-3):277-84.

Greer, S. and Bagley, C. Effect of psychiatric intervention in attempted suicide: a controlled study. Br Med J. 1971 Feb 6; 1(5744):310-2.

Grossman, D. C.; Mueller, B. A.; Riedy, C.; Dowd, M. D.; Villaveces, A.; Prodzinski, J.; Nakagawara, J.; Howard, J.; Thiersch, N., and Harruff, R. Gun storage practices and risk of youth suicide and unintentional firearm injuries. JAMA. 2005 Feb 9; 293(6):707-14.

Gunnell, D.; Middleton, N., and Frankel, S. Method availability and the prevention of suicide--a re-analysis of secular trends in England and Wales 1950-1975. Soc Psychiatry Psychiatr Epidemiol. 2000 Oct; 35(10):437-43.

Hannaford, P. C.; Thompson, C., and Simpson, M. Evaluation of an educational programme to improve the recognition of psychological illness by general practitioners. Br J Gen Pract. 1996 Jun; 46(407):333-7.

Hartl, T. L. ; Rosen, C.; Drescher, K.; Lee, T. T., and Gusman, F. Predicting high-risk behaviors in veterans with posttraumatic stress disorder. J Nerv Ment Dis. 2005; 193(7):464-72.

Hawton, K.; Simkin, S., and Deeks, J. Co-proxamol and suicide: a study of national mortality statistics and local non-fatal self poisonings. BMJ. 2003 May 10; 326(7397):1006-8.

Hegerl, U.; Althaus, D., and Stefanek, J. Public attitudes towards treatment of depression: effects of an information campaign. Pharmacopsychiatry. 2003 Nov; 36(6):288-91.

Henkel, V.; Mergl, R.; Kohnen, R.; Maier, W.; Moller, H. J., and Hegerl, U. Identifying depression in primary care: a comparison of different methods in a prospective cohort study. BMJ. 2003 Jan 25; 326(7382):200-1.

Hirschfeld, R. M.; Keller, M. B.; Panico, S.; Arons, B. S.; Barlow, D.; Davidoff, F.; Endicott, J.; Froom, J.; Goldstein, M.; Gorman, J. M.; Marek, R. G.; Maurer, T. A.; Meyer, R.; Phillips, K.; Ross, J.; Schwenk, T. L.; Sharfstein, S. S.; Thase, M. E., and Wyatt, R. J. The National Depressive and Manic-Depressive Association consensus statement on the undertreatment of depression. JAMA. 1997 Jan 22-1997 Jan 29; 277(4):333-40.

Isbister, G. and Balit, C. Effects of legislation restricting pack sizes of paracetamol on self poisoning. Authors did not look at effects on all deliberate and accidental self poisoning. BMJ. 2001 Sep 15; 323(7313):633-4.

Jorm, A. F.; Christensen, H., and Griffiths, K. M. The impact of beyondblue: the national depression initiative on the Australian public's recognition of depression and beliefs about treatments. Aust N Z J Psychiatry. 2005 Apr; 39(4):248-54.

Kaleveld, L. and English, B. Evaluating a suicide prevention program: a question of impact. Health Promot J Austr. 2005 Aug; 16(2):129-33.

Kapur, S.; Mieczkowski, T., and Mann, J. J. Antidepressant medications and the relative risk of suicide attempt and suicide. JAMA. 1992 Dec 23-1992 Dec 30; 268(24):3441-5.

Kelly, C. The effects of depression awareness seminars on general practitioners knowledge of depressive illness. Ulster Med J. 1998 May; 67(1):33-5.

Kelly, S. and Bunting, J. Trends in suicide in England and Wales, 1982-96. Popul Trends. 1998 Summer; (92):29-41.

Kennedy, P. Efficacy of a regional poisoning treatment centre in preventing further suicidal behaviour. Br Med J. 1972 Nov 4; 4(5835):255-7.

Laing, W.; Gordon, L.; Lee, D.; Good, A., and Bateman, D. Have the new pack size regulations impacted on UK paracetamol overdose? J Toxicol Clin Toxicol. 2001; 39:301.

Lester, D. Firearm availability and use of firearms for suicide and homicide. Perceptual and Motor Skills. 2000; 91:758.

Lin, E. H.; Simon, G. E.; Katzelnick, D. J., and Pearson, S. D. Does physician education on depression management improve treatment in primary care? J Gen Intern Med. 2001 Sep; 16(9):614-9.

Luoma, J. B.; Martin, C. E., and Pearson, J. L. Contact with mental health and primary care providers before suicide: a review of the evidence. Am J Psychiatry. 2002 Jun; 159(6):909-16.

Mahon, M. J. ; Tobin, J. P.; Cusack, D. A.; Kelleher, C., and Malone, K. M. Suicide among regular-duty military personnel: a retrospective case-control study of occupation-specific risk factors for workplace suicide. Am J Psychiatry. 2005; 162(9):1688-96.

Marzuk, P. M.; Leon, A. C.; Tardiff, K.; Morgan, E. B.; Stajic, M., and Mann, J. J. The effect of access to lethal methods of injury on suicide rates. Arch Gen Psychiatry. 1992 Jun; 49(6):451-8.

McClure, G. M. Changes in suicide in England and Wales, 1960-1997. Br J Psychiatry. 2000 Jan; 176:64-7.

McLeavey, B. C.; Daly, R. J.; Ludgate, J. W., and Murray, C. M. Interpersonal problem-solving skills training in the treatment of self-poisoning patients. Suicide Life Threat Behav. 1994 Winter; 24(4):382-94.

Miller, M.; Hemenway, D., and Azrael, D. Firearms and suicide in the northeast. J Trauma. 2004 Sep; 57(3):626-32.

Mills, P. D. ; Neily, J.; Luan, D.; Osborne, A., and Howard, K. Actions and implementation strategies to reduce suicidal events in the Veterans Health Administration. Jt Comm J Qual Patient Saf. 2006; 32(3):130-41.

Ministry of Health. Suicide and the Media: The Reporting and Portrayal of suicide in the Media. Wellington: Ministry of Health; 1999.

Mundt, R. J. Gun control and rates of firearms violence in Canada and the United States. Canadian Journal of Criminology. 1990; 32:137-154.

Naismith, S. L.; Hickie, I. B.; Scott, E. M., and Davenport, T. A. Effects of mental health training and clinical audit on general practitioners' management of common mental disorders. Med J Aust. 2001 Jul 16; 175 Suppl:S42-7.

Paykel, E. S.; Hart, D., and Priest, R. G. Changes in public attitudes to depression during the Defeat Depression Campaign. Br J Psychiatry. 1998 Dec; 173:519-22.

Pettit, J. W.; Paukert, A. L.; Joiner, T. E. Jr., and Rudd, M. D. Pilot sample of very early onset bipolar disorder in a military population moderates the association of negative life events and non-fatal suicide attempt. Bipolar Disord. 2006; 8(5 Pt 1):475-84.

Pfaff, J. J.; Acres, J. G., and McKelvey, R. S. Training general practitioners to recognise and respond to psychological distress and suicidal ideation in young people. Med J Aust. 2001 Mar 5; 174(5):222-6.

Platt, S.; McLean, J.; McCollam, A.; Blamey, A.; Mackenzie, M.; McDaid, D.; Maxwell, M.; Halliday, E., and Woodhouse, A. Evaluation of the first phase of Choose Life: the National Strategy and Action Plan to Prevent Suicide in Scotland 2006. Edinburgh: Scottish Executive Social Research.

Rabasca, L. Military suicide-prevention program reduces the stigma of seeking help. Am Psychol Assoc Monitor. 1999; 30(9):8.

Rihmer, Z.; Belso, N., and Kalmar, S. Antidepressants and suicide prevention in Hungary. Acta Psychiatr Scand. 2001 Mar; 103(3):238-9.

Sakinofsky, I. The current evidence base for the clinical care of suicidal patients: strengths and weaknesses. Can J Psychiatry. 2007; 52(6 Suppl 1):7S-20S.

Sakinofsky, I. Treating suicidality in depressive illness. Part 2: does treatment cure or cause suicidality? Can J Psychiatry. 2007; 52(6 Suppl 1):85S-101S.

Saunders, K. and Hawton, K. Suicide prevention and audit. Br J Hosp Med (Lond). 2005; 66(11):627-30.

Scarff, E. Evaluation of the Canadian gun control legislation: final report. Ottawa: Canadian Government Publishing Centre; 1983.

Scoville, S. L.; Gubata, M. E.; Potter, R. N.; White, M. J., and Pearse, L. A. Deaths attributed to suicide among enlisted U.S. Armed Forces recruits, 1980-2004. Mil Med. 2007; 172(10):1024-31.

Sheen, C. and Dillon, J. The effect on toxicity and healthcare costs on reducing the size of available acetaminophen pack sizes in the Tayside region of Scotland. Gastroenterology. 2001; 120(Suppl. 1):A-228.

Sheen, C. L.; Dillon, J. F.; Bateman, D. N.; Simpson, K., and MacDonald, T. M. The effect on toxicity on reducing the size of available paracetamol pack sizes. Gut. 2001; 48((Suppl 1)):A105.

Sheen, C. L.; Dillon, J. F.; Bateman, D. N.; Simpson, K. J., and MacDonald, T. M. Paracetamol pack size restriction: the impact on paracetamol poisoning and the over-the-counter supply of paracetamol, aspirin and ibuprofen. Pharmacoepidemiol Drug Saf. 2002 Jun; 11(4):329-31.

Shenassa, E. D.; Rogers, M. L.; Spalding, K. L., and Roberts, M. B. Safer storage of firearms at home and risk of suicide: a study of protective factors in a nationally representative sample. J Epidemiol Community Health. 2004 Oct; 58(10):841-8.

Sloan, J. H.; Rivara, F. P.; Reay, D. T.; Ferris, J. A., and Kellermann, A. L. Firearm regulations and rates of suicide. A comparison of two metropolitan areas. N Engl J Med. 1990 Feb 8; 322(6):369-73.

Sorenson, S. B. and Vittes, K. A. Mental health and firearms in community-based surveys: implications for suicide prevention. Eval Rev. 2008; 32(3):239-56.

Stuart, H. Fighting stigma and discrimination is fighting for mental health. Canadian Public Policy. 2005; S21-S28.

Thoresen, S. and Mehlum, L. Suicide in peacekeepers: risk factors for suicide versus accidental death. Suicide Life Threat Behav. 2006; 36(4):432-42.

Thoresen, S. ; Mehlum, L.; Roysamb, E., and Tonnessen, A. Risk factors for completed suicide in veterans of peacekeeping: repatriation, negative life events, and marital status. Arch Suicide Res. 2006; 10(4):353-63.

Tiet, Q. Q.; Finney, J. W., and Moos, R. H. Recent sexual abuse, physical abuse, and suicide attempts among male veterans seeking psychiatric treatment. Psychiatr Serv. 2006; 57(1):107-13.

Tiet, Q. Q.; Ilgen, M. A.; Byrnes, H. F., and Moos, R. H. Suicide attempts among substance use disorder patients: an initial step toward a decision tree for suicide management. Alcohol Clin Exp Res. 2006; 30(6):998-1005.

Troister, T. ; Links, P. S., and Cutcliffe, J. Review of predictors of suicide within 1 year of discharge from a psychiatric hospital. Curr Psychiatry Rep. 2008; 10(1):60-5.

Unutzer, J.; Katon, W.; Callahan, C. M.; Williams, J. W. Jr; Hunkeler, E.; Harpole, L.; Hoffing, M.; Della Penna, R. D.; Noel, P. H.; Lin, E. H.; Arean, P. A.; Hegel, M. T.; Tang, L.; Belin, T. R.; Oishi, S., and Langston, C. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. JAMA. 2002 Dec 11; 288(22):2836-45.

Valentini, W.; Levav, I.; Kohn, R.; Miranda, C. T.; Mello, A. A.; Mello, M. F., and Ramos, C. P. [An educational training program for physicians for diagnosis and treatment of depression]. Rev Saude Publica. 2004 Aug; 38(4):522-8.

Voaklander, D. C.; Rowe, B. H.; Dryden, D. M.; Pahal, J.; Saar, P., and Kelly, K. D. Medical illness, medication use and suicide in seniors: a population-based case-control study. Epidemiol Community Health. 2008; 62(2):138-46.

Vuorilehto, M. S.; Melartin, T. K., and Isometsa, E. T. Suicidal behaviour among primary-care patients with depressive disorders. Psychol Med. 2006; 36(2):203-10.

Zivin, K.; Kim, H. M.; McCarthy, J. F.; Austin, K. L.; Hoggatt, K. J.; Walters, H., and Valenstein, M. Suicide mortality among individuals receiving treatment for depression in the Veterans Affairs health system: associations with patient and treatment setting characteristics. Am J Public Health. 2007; 97(12):2193-8.

Adolescent

Rotheram-Borus, M. J.; Piacentini, J.; Cantwell, C.; Belin, T. R., and Song, J. The 18-month impact of an emergency room intervention for adolescent female suicide attempters. J Consult Clin Psychol. 2000 Dec; 68(6):1081-93.

Design- Other

Appleby, L. and Sherratt, J. Good clinical practice on suicide and suicide prevention. Psychiatr Bull R Coll Psychiatr. 2001; 2541-42.

EXCLUDED AT FURTHER REVIEW (N=49)

Country

Apter, A.; King, R. A.; Bleich, A.; Fluck, A.; Kotler, M., and Kron, S. Fatal and non-fatal suicidal behavior in Israeli adolescent males. Arch Suicide Res. 2008; 12(1):20-9.

Bellanger, M. M.; Jourdain, A., and Batt-Moillo, A. Might the decrease in the suicide rates in France be due to regional prevention programmes? Soc Sci Med. 2007; 65(3):431-41.

Bradvik, L. and Berglund, M. Long-term treatment and suicidal behavior in severe depression: ECT and antidepressant pharmacotherapy may have different effects on the occurrence and seriousness of suicide attempts. Depress Anxiety. 2006; 23(1):34-41.

Cedereke, M.; Monti, K., and Ojehagen, A. Telephone contact with patients in the year after a suicide attempt: does it affect treatment attendance and outcome? A randomised controlled study. Eur Psychiatry. 2002 Apr; 17(2):82-91.

De Leo, D.; Dello Buono, M., and Dwyer, J. Suicide among the elderly: the long-term impact of a telephone support and assessment intervention in northern Italy. Br J Psychiatry. 2002 Sep; 181:226-9.

Dieserud, G.; Loeb, M., and Ekeberg, O. Suicidal behavior in the municipality of Baerum, Norway: a 12-year prospective study of parasuicide and suicide. Suicide Life Threat Behav. 2000 Spring; 30(1):61-73.

Gunnell, D.; Fernando, R.; Hewagama, M.; Priyangika, W. D.; Konradsen, F., and Eddleston, M. The impact of pesticide regulations on suicide in Sri Lanka. Int J Epidemiol. 2007.

Hegerl, U.; Althaus, D.; Schmidtke, A., and Niklewski, G. The alliance against depression: 2-year evaluation of a community-based intervention to reduce suicidality. Psychol Med. 2006 Sep; 36(9):1225-33.

Kapusta, N. D.; Etzersdorfer, E.; Krall, C., and Sonneck, G. Firearm legislation reform in the European Union: impact on firearm availability, firearm suicide and homicide rates in Austria. Br J Psychiatry. 2007; 191 253-7.

Matakas, F. and Rohrbach, E. Suicide prevention in the psychiatric hospital. Suicide Life Threat Behav. 2007; 37(5):507-17.

Ohberg, A.; Lonnqvist, J.; Sarna, S.; Vuori, E., and Penttila, A. Trends and availability of suicide methods in Finland. Proposals for restrictive measures. Br J Psychiatry. 1995 Jan; 166(1):35-43.

Oyama, H.; Fujita, M.; Goto, M.; Shibuya, H., and Sakashita, T. Outcomes of community-based screening for depression and suicide prevention among Japanese elders. Gerontologist. 2006 Dec; 46(6):821-6.

Oyama, H.; Goto, M.; Fujita, M.; Shibuya, H., and Sakashita, T. Preventing elderly suicide through primary care by community-based screening for depression in rural Japan. Crisis. 2006; 27(2):58-65.

Oyama, H.; Koida, J.; Sakashita, T., and Kudo, K. Community-based prevention for suicide in elderly by depression screening and follow-up. Community Ment Health J. 2004 Jun; 40(3):249-63.

Oyama, H.; Ono, Y.; Watanabe, N.; Tanaka, E.; Kudoh, S.; Sakashita, T.; Sakamoto, S.; Neichi, K.; Satoh, K.; Nakamura, K., and Yoshimura, K. Local community intervention through depression screening and group activity for elderly suicide prevention. Psychiatry Clin Neurosci. 2006; 60(1):110-4.

Oyama, H.; Watanabe, N.; Ono, Y.; Sakashita, T.; Takenoshita, Y.; Taguchi, M.; Takizawa, T.; Miura, R., and Kumagai, K. Community-based suicide prevention through group activity for the elderly successfully reduced the high suicide rate for females. Psychiatry Clin Neurosci. 2005; 59(3):337-44.

Raj, M. A. J.; Kumaraiah, V., and Bhide, A. V. Cognitive-behavioural intervention in deliberate self-harm. Acta Psychiatr Scand. 2001; 104:340-5.

Rutz, W.; von Knorring, L., and Walinder, J. Frequency of suicide on Gotland after systematic postgraduate education of general practitioners. Acta Psychiatr Scand. 1989 Aug; 80(2):151-4.

Szanto, K.; Kalmar, S.; Hendin, H.; Rihmer, Z., and Mann, J. J. A suicide prevention program in a region with a very high suicide rate. Arch Gen Psychiatry. 2007; 64(8):914-20.

Torhorst, A.; Moller, H. J.; Burk, F.; Kurz, A.; Wachtler, C., and Lauter, H. The psychiatric management of parasuicide patients: a controlled clinical study comparing different strategies of outpatient treatment. Crisis. 1987 Mar; 8(1):53-61.

Torhorst, A.; Moller, H. J., and Schimid-Bode, K. W. Comparing a 3-month and a 12-month outpatient aftercare program for parasuicide repeaters. Current Issues of SuicidologyBerlin, Germany: Springer-Verlag; 1988; pp. 19-24.

Vaiva, G.; Vaiva, G.; Ducrocq, F.; Meyer, P.; Mathieu, D.; Philippe, A.; Libersa, C., and Goudemand, M. Effect of telephone contact on further suicide attempts in patients discharged from an emergency department: randomised controlled study. Bmj. 2006; 332(7552):1241-5.

van den Bosch, L. M.; Koeter, M. W.; Stijnen, T. ; Verheul, R., and van den Brink, W. Sustained efficacy of dialectical behaviour therapy for borderline personality disorder. Behav Res Ther. 2005; 43(9):1231-41.

van der Sande, R.; van Rooijen, L.; Buskens, E.; Allart, E.; Hawton, K.; van der Graaf, Y., and van Engeland, H. Intensive in-patient and community intervention versus routine care after attempted suicide. A randomised controlled intervention study. Br J Psychiatry. 1997 Jul; 171:35-41.

Van Heeringen, C.; Jannes, S.; Buylaert, W.; Henderick, H.; De Bacquer, D., and Van Remoortel, J. The management of non-compliance with referral to out-patient after-care among attempted suicide patients: a controlled intervention study. Psychol Med. 1995 Sep; 25(5):963-70.

Varnik, A.; Kolves, K.; Vali, M.; Tooding, L. M., and Wasserman, D. Do alcohol restrictions reduce suicide mortality? Addiction. 2007; 102(2):251-6.

Verkes, R. J.; Van der Mast, R. C.; Hengeveld, M. W.; Tuyl, J. P.; Zwinderman, A. H., and Van Kempen, G. M. Reduction by paroxetine of suicidal behavior in patients with repeated suicide attempts but not major depression. Am J Psychiatry. 1998 Apr; 155(4):543-7.

Zonda, T. and Lester, D. Preventing suicide by educating general practitioners. Omega (Westport). 2006; 54(1):53-7.

Pharmacotherapy

Battaglia, J.; Wolff, T. K.; Wagner-Johnson, D. S.; Rush, A. J.; Carmody, T. J., and Basco, M. R. Structured diagnostic assessment and depot fluphenazine treatment of multiple suicide attempters in the emergency department. Int Clin Psychopharmacol. 1999 Nov; 14(6):361-72.

Coryell, W.; Arndt, S.; Turvey, C.; Endicott, J.; Solomon, D.; Mueller, T.; Leon, A. C., and Keller, M. Lithium and suicidal behavior in major affective disorder: a case-control study. Acta Psychiatr Scand. 2001 Sep; 104(3):193-7.

Ludwig, J.; Marcotte, D. E., and Norberg, K. Anti-Depressants and Suicide. 2007 Feb.

Montgomery, D. B.; Roberts, A.; Green, M.; Bullock, T.; Baldwin, D., and Montgomery, S. A. Lack of efficacy of fluoxetine in recurrent brief depression and suicidal attempts. Eur Arch Psychiatry Clin Neurosci. 1994; 244(4):211-5.

Montgomery, S.; Cronholm, B.; Asberg, M., and Montgomery, D. B. Differential effects on suicidal ideation of mianserin, maprotiline and amitriptyline. Br J Clin Pharmacol. 1978; 5 Suppl 1:77S-80S.

Montgomery, S. A.; Roy, D., and Montgomery, D. B. The prevention of recurrent suicidal acts. Br J Clin Pharmacol. 1983; 15 Suppl 2:183S-188S.

Verkes, R. J.; Van der Mast, R. C.; Hengeveld, M. W.; Tuyl, J. P.; Zwinderman, A. H., and Van Kempen, G. M. Reduction by paroxetine of suicidal behavior in patients with repeated suicide attempts but not major depression. Am J Psychiatry. 1998 Apr; 155(4):543-7.

Psychotherapy

Bateman, A. and Fonagy, P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. Am J Psychiatry. 1999 Oct; 156(10):1563-9.

Blum, N.; St John, D.; Pfohl, B.; Stuart, S.; McCormick, B.; Allen, J.; Arndt, S., and Black, D. W. Systems Training for Emotional Predictability and Problem Solving (STEPPS) for outpatients with borderline personality disorder: a randomized controlled trial and 1-year follow-up. Am J Psychiatry. 2008; 165(4):468-78.

Bradvik, L. and Berglund, M. Long-term treatment and suicidal behavior in severe depression: ECT and antidepressant pharmacotherapy may have different effects on the occurrence and seriousness of suicide attempts. Depress Anxiety. 2006; 23(1):34-41.

Evans, K.; Tyrer, P.; Catalan, J.; Schmidt, U.; Davidson, K.; Dent, J.; Tata, P.; Thornton, S.; Barber, J., and Thompson, S. Manual-assisted cognitive-behaviour therapy (MACT): a randomized controlled trial of a brief intervention with bibliotherapy in the treatment of recurrent deliberate self-harm. Psychol Med. 1999 Jan; 29(1):19-25.

Liberman, R. P. and Eckman, T. Behavior therapy vs insight-oriented therapy for repeated suicide attempters. Arch Gen Psychiatry. 1981 Oct; 38(10):1126-30.

Linehan, M. M.; Armstrong, H. E.; Suarez, A.; Allmon, D., and Heard, H. L. Cognitive-behavioral treatment of chronically parasuicidal borderline patients. Arch Gen Psychiatry. 1991 Dec; 48(12):1060-4.

Linehan, M. M.; Comtois, K. A.; Murray, A. M.; Brown, M. Z.; Gallop, R. J.; Heard, H. L.; Korslund, K. E.; Tutek, D. A.; Reynolds, S. K., and Lindenboim, N. Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. Arch Gen Psychiatry. 2006; 63(7):757-66.

Matakas, F. and Rohrbach, E. Suicide prevention in the psychiatric hospital. Suicide Life Threat Behav. 2007; 37(5):507-17.

Patsiokas, A. T. and Clum, G. A. Effects of psychotherapeutic strategies in the treatment of suicide attempters. Journal of Psychotherapy. 1985; 22(281).

Raj, M. A. J.; Kumaraiah, V., and Bhide, A. V. Cognitive-behavioural intervention in deliberate self-harm. Acta Psychiatr Scand. 2001; 104:340-5.

Rudd, M. D.; Rajab, M. H.; Orman, D. T.; Joiner, T.; Stulman, D. A., and Dixon, W. Effectiveness of an outpatient intervention targeting suicidal young adults: preliminary results. J Consult Clin Psychol. 1996 Feb; 64(1):179-90.

Salkovskis, P. M.; Atha, C., and Storer, D. Cognitive-behavioural problem solving in the treatment of patients who repeatedly attempt suicide. A controlled trial. Br J Psychiatry. 1990 Dec; 157:871-6.

Tarrier, N.; Haddock, G.; Lewis, S.; Drake, R., and Gregg, L. Suicide behaviour over 18 months in recent onset schizophrenic patients: the effects of CBT. Schizophr Res. 2006; 83(1):15-27.

Torhorst, A.; Moller, H. J.; Burk, F.; Kurz, A.; Wachtler, C., and Lauter, H. The psychiatric management of parasuicide patients: a controlled clinical study comparing different strategies of outpatient treatment. Crisis. 1987 Mar; 8(1):53-61.

Tyrer, P.; Thompson, S.; Schmidt, U.; Jones, V.; Knapp, M.; Davidson, K.; Catalan, J.; Airlie, J.; Baxter, S.; Byford, S.; Byrne, G.; Cameron, S.; Caplan, R.; Cooper, S.; Ferguson, B.; Freeman, C.; Frost, S.; Godley, J.; Greenshields, J.; Henderson, J.; Holden, N.; Keech, P.; Kim, L.; Logan, K.; Manley, C.; MacLeod, A.; Murphy, R.; Patience, L.; Ramsay, L.; De Munroz, S.; Scott, J.; Seivewright, H.; Sivakumar, K.; Tata, P.; Thornton, S.; Ukoumunne, O. C., and Wessely, S. Randomized controlled trial of brief cognitive behaviour therapy versus treatment as usual in recurrent deliberate self-harm: the POPMACT study. Psychol Med. 2003 Aug; 33(6):969-76.

van den Bosch, L. M.; Koeter, M. W.; Stijnen, T. ; Verheul, R., and van den Brink, W. Sustained efficacy of dialectical behaviour therapy for borderline personality disorder. Behav Res Ther. 2005; 43(9):1231-41.

Weinberg, I.; Gunderson, J. G.; Hennen, J., and Cutter, C. J. Jr. Manual assisted cognitive treatment for deliberate self-harm in borderline personality disorder patients. J Personal Disord. 2006; 20(5):482-92.

Suicidal Ideation

Bruce, M. L.; Ten Have, T. R.; Reynolds, C. F. 3rd; Katz, I. I.; Schulberg, H. C.; Mulsant, B. H.; Brown, G. K.; McAvay, G. J.; Pearson, J. L., and Alexopoulos, G. S. Reducing suicidal ideation and depressive symptoms in depressed older primary care patients: a randomized controlled trial. JAMA. 2004 Mar 3; 291(9):1081-91.

Montgomery, S.; Cronholm, B.; Asberg, M., and Montgomery, D. B. Differential effects on suicidal ideation of mianserin, maprotiline and amitriptyline. Br J Clin Pharmacol. 1978; 5 Suppl 1:77S-80S.

Patsiokas, A. T. and Clum, G. A. Effects of psychotherapeutic strategies in the treatment of suicide attempters. Journal of Psychotherapy. 1985; 22(281).

Raj, M. A. J.; Kumaraiah, V., and Bhide, A. V. Cognitive-behavioural intervention in deliberate self-harm. Acta Psychiatr Scand. 2001; 104:340-5.

APPENDIX C. EVIDENCE TABLES

Evidence Table 1. Studies Describing Suicide Prevention Interventions in Military Personnel and Veterans

Author, Year	Study Design	Country / Setting	Veteran / Military	Outcome	Intervention	Detailed Intervention	Results
James LC et al 1996[13]	Cohort	US / Population & Other	No / Yes	Completers	Population / Organizational	25th Infantry Division (Light) Suicide Prevention Program implementation beginning in 1992. This program incorporated warning signs and risk factors along with community education.	In the two years following complete implementation (1994) the suicide rate decreased to 3.
McDaniel WW et al. 1990[14]	Cohort	US / Other	No / Yes	Attempters & SI	Organizational	This two year retrospective study examines a suicide prevention program at the training command center aimed at the instructors. The classes, provided in 1986 and then again from June 1987-January 1988, were targeted at informing instructors on how to recognize signs of distress and students at risk.	The average number of suicide attempts was 9.4 per 100,000 per month. The number of instructors who received training was negatively correlated (-0.65, $p<0.001$) with number of suicide attempts per month.
Knox KL et al. 2003[15]	Interrupted Time Series	US / Population	No / Yes	Completers	Population / Organizational	To assess the impact of the US Air Force suicide prevention program implemented in 1996, this study looked at 5,260,292 air force personnel. The program aimed to reduce risk factors for suicide and enhance protective factors as well as increasing understanding of mental health and policies while decreasing the stigma of seeking mental health assistance.	The relative risk for suicide when comparing the pre-implementation population and post-implementation population was 0.67(95% CI: 0.57, 0.80). There was a 33% relative risk reduction for those in the post implementation group.
Jones DE et al. 2001[16]	Observational	US / Population	No / Yes	Completers	Population	Existing resources (education in suicide awareness and life skills training, counseling, post-suicide interventions, and suicide incident reporting) were augmented with new training video using positive role models to increase detection and referral.	For Navy, suicide rate dropped to 9.2/100000, the lowest rate in 10 years. For the Marine Corps, the rate was 15.6/100000.
Kennedy CH et al. 2005[17]	Cohort	US / Other	No / Yes	Attempters	Patient	This is a one year follow up on a gambling treatment program implemented in January 2003 as a part of the Substance Abuse Rehabilitation Program at the US Naval Hospital in Okinawa, Japan. There was 35 participants.	Prior to treatment 7 participants expressed suicidal ideation and 3 (8.5%) made suicide attempts related to their gambling. Post-implementation, no participants expressed suicidal ideation or attempted suicide.
Rozanov VA et al. 2002[18]	Cohort	Ukraine / Population	No / Yes	Completers	Population / Organizational	This two year suicide prevention program, implemented in 2000, used training seminars for soldiers, professional officers, and commanders that spanned the course of one year. Brochures on suicide prevention were distributed to more than 2000 soldiers.	The average number of suicides per year between 1988 and 1999 was 32.6per 100,000. In 1999 the suicide rate was 74.7per 100,000. During the first year of the program there was no reported suicides and in the 2nd year there were 16.7 per 100,000 reported suicides.
Gordana DJ et al. 2007[19]	Cohort	Serbia & Montenegro / Other	No / Yes	Completers	Organizational	Two year follow up on a Suicide Prevention Program, based on the U.S. Air force suicide prevention program, that was implemented in 2003. The program focused on early prevention and identification of those at increased risk of committing suicide. The long-term objective was modifying military-specific risk factors for suicide. The program was applied by selection, education, and motivation.	Suicides decreased from 15 in 2003 (pre-implementation) to 9 in 2004 and 7 in 2005. After one year of implementation, suicides decreased from 13 per 100,000 of military personnel to 5 per 100,000 military personnel.
Koons CR et al. 2001[22]	RCT	UC / Psychiatric	Yes / No	Attempters & SI	Patient	Dialectical behavior therapy (DBT) in with borderline personality disorder. 28 women veterans were randomized to DBT or usual care groups. 20 patients (10 in each group) completed the treatment.	Patients in the DBT reported significantly greater decrease in depression (as measured by the BDI), suicidal ideation, and hopelessness than usual care patients.
Gibbons RD et al. 2007[24]	Observational	US / Primary Care & Psychiatric	Yes / No	Attempters	Patient	Comparison of 226,866 patients in a VHA data set who were diagnosed with depression and had one of the following treatments: no antidepressant, SSRI, non-SSRI, tricyclic or combinations.	Odds ratio for comparing the SSRI treatment to the no antidepressant, non-SSRI and tricycle categories was 0.34 (95% CI: 0.31 to 0.38, $p<0.0001$).
Ilgen MA et al. 2007[23]	Observational	US / Psychiatric	Yes / No	Attempters	Patient	This study followed 3733 veterans entering either a residential or outpatint substance abuse program. Data on suicide attempts were collected for 12 months prior to entry, during treatment and 12 months after entry.	During treatment, residential treatment was associated with a lower rate of suicide attempts than outpatient treatment. Predicting suicide attempts after drug abuse treatment was not significant for either setting.

SI: Suicidal Ideation

Evidence Table 2. RCT and CCTs Describing Suicide Interventions

Author, Year	Study Design / Setting	Sample Size Enrolled	Follow Up Time Points / Follow Up	Veterans / Military	Country / Mean Age	Eligibility Criteria	Quality Measurements: Described as Randomized; Method of Randomization; Allocation Concealment; Similarity at Baseline between groups	Quality Measurements: Eligibility Criteria Specified; Outcome Assessor Blinded; Care provider blinded; Patients Blinded	Quality Measurements: Point estimates & measures of variability for primary outcomes variable; Randomized patients analyzed in group they were allocated to	Quality Measurements: Co-interventions avoided; Compliance acceptable; Drop-out rate described; Timing of Outcome Assessment Similar	Intervention	Duration of Treatment	Outcome	Adverse Events
Koons CJ et al. 2001[22]	RCT / Psychiatric	28	3 mths / NR 6 mths/ 20	Yes / No	US / 35	Female veterans with borderline personality disorder	Yes Don't Know Don't Know Yes	Yes Yes No No	Yes	Yes Yes Yes Yes	dialectical behavior therapy (DBT) and treatment as usual (TAU)	weekly meetings of 90 minutes each?	Attempters & SI	30% in DBT, 20% in TAU at post treatment reported self harm
Welu T 1977[25]	RCT / Psychiatric	120	4 mths / 119	No / No	US / 29	ED contact for suicide attempt	Yes Yes Don't Know Don't Know	Yes Don't Know No No	Yes	Don't Know Yes Yes Yes	follow up outreach program by therapists	4 month follow up outreach program	Attempters	at 4 months there were 3 repeated attempts in experimental group & 9 in control
Termansen PE et al. 1975[26]	CCT / Psychiatric	202	3 mths / 128	No / No	Canada / NR	ER presentation for suicide attempt	No No No Don't Know	Yes No No No	Yes	Don't Know Don't Know No Yes	1. Mental health follow up 2. Phone follow up 3. Reassessment at 3 mths. 4. assessment at 3 mths.	12 weeks	Attempters	Reattempt rate, 1: 2.2%, 2: 6.1%, 3: 22%, 4: 11.1%
Allard R et al. 1992[27]	RCT / Psychiatric	150	12 mths/ NR 18 mths/ NR 24 mths/ 126	No / No	Canada / NR	Seen in ED after suicide attempt	Yes Don't Know Don't Know Yes	Yes Don't Know No No	Yes	Don't Know Yes Yes Yes	a treatment plan, follow up visits, one home visit, reminder for missed appointments. Treatment could include meds or therapy	18 therapy sessions & a home visit over 1 year	Attempters & Completers	3 suicides in experimental & 1 in control

Evidence Table 2. RCT and CCTs Describing Suicide Interventions Continued

Author, Year	Study Design / Setting	Sample Size Enrolled	Follow Up Time Points / Follow Up	Veterans / Military	Country / Mean Age	Eligibility Criteria	Quality Measurements: Described as Randomized; Method of Randomization; Allocation Concealment; Similarity at Baseline between groups	Quality Measurements: Eligibility Criteria Specified; Outcome Assessor Blinded; Care provider blinded; Patients Blinded	Quality Measurements: Point estimates & measures of variability for primary outcomes variable; Random-ized patients analyzed in group they were al-located to	Quality Measurements: Co-inter-ventions avoided; Compliance acceptable; Drop-out rate de-scribed; Timing of Outcome Assessment Similar	Intervention	Duration of Treat-ment	Outcome	Adverse Events
Chowdhury N et al. 1973[28]	CCT / Psychiatric	155	6 mths/ NR	No / No	UK / NR	Hospital contact for deliberate self harm for repeat patients	No No Don't Know Yes	Yes Don't Know No No	Yes No	Don't Know Don't Know Yes Yes	outpatient clinic, home visits, tele-phone hotline	6 months from dis-charge	Attempters	24% acts of parasuicide in treatment & 23% in control
Gardner R et al. 1977[29]	RCT / Hospital	312	1 yr / 273	No / No	UK / NR	Patient admitted to hospital for self poison-ing	Yes Yes Don't Know Don't Know	Yes Yes No No	Yes Yes	Don't Know Yes Yes Yes	Inpatient as-sessment by medical vs. psychiatric team	Not reported. Assessment during following year.	Attempters & Com-pleters	10% repeat attempts for medical team, 13% repeat at-tempts for psychiatrist. 0% suicide for medical team, 0.4% for psychia-trist.
Gibbons JS et al. 1978[30]	RCT / Psychiatric & Other	400	1 yr/ 400	No / No	UK / NR	ED contact for deliber-ate self poi-soning, not requiring immediate psychiatric treatment	Yes Don't Know Don't Know Don't Know	Yes Don't Know No No	Yes Yes	Don't Know Don't Know Yes Yes	social worker to assist with task oriented problem solv-ing	Not reported. Assessment at one year.	Attempters	13.5 re-peated self poisoning in treatment group & 14.5 in control
Hawton K et al. 1981[31]	RCT / Psychiatric	96	1 yr/ 96	No / No	UK / 25.2	Hospital-ization for deliberate self poison-ing	Yes Yes Yes Yes	Yes Yes No No	Yes Yes	Don't Know No Yes Yes	outpatient vs. home based therapy	Maxi-mum of 3 months, 1st 2 as frequent as needed	Attempters & SI	10% repeated attempts in home-based, 15% in outpati-ients.

Evidence Table 2. RCT and CCTs Describing Suicide Interventions Continued

Author, Year	Study Design / Setting	Sample Size Enrolled	Follow Up Time Points / Follow Up	Veterans / Military	Country / Mean Age	Eligibility Criteria	Quality Measurements				Intervention	Duration of Treatment	Outcome	Adverse Events
							Described as Randomized	Eligibility Criteria Specified	Point estimates & measures of variability for primary outcomes variable	Co-interventions avoided				
							Method of Randomization	Outcome Assessor Blinded		Compliance acceptable				
							Allocation Concealment	Care provider blinded	Randomized patients analyzed in group they were allocated to	Drop-out rate described				
							Similarity at Baseline between groups	Patients Blinded		Timing of Outcome Assessment Similar				
Hawton K et al. 1987[32]	RCT / Psychiatric & Primary Care	80	9 mths / 65	No / No	UK / 29.3	Hospitalized for overdose, not in need of formal psychiatric care	Yes Don't Know Don't Know Yes	Yes Yes No No	Yes	Don't Know Yes Yes Yes	brief problem oriented counseling	Not reported. Assessment at one year.	Attempters & Completers	1 patient in counseling group committed suicide, 15.4% in general practitioner group repeated, 7.3% in counseling repeated
Guthrie E et al. 2001[33]	RCT / Psychiatric	119	6 mths/ 95	No / No	UK / 31.2	ED contact for deliberate self poisoning	Yes Yes Don't Know Yes	Yes Yes No No	Yes	Don't Know Yes Yes Yes	four sessions of psychodynamic interpersonal therapy in patient's home	4 weekly at home sessions	Attempters & Completers & SI	9% repeated self-harm in intervention & 28% in control, no completers
Bennewith O et al. 2002[34]	RCT / Primary Care	1932	12 mths/ 1932	No / No	UK / 32.6	Seen in ED for deliberate self harm	Yes Don't Know Don't Know Don't Know	Yes Yes No No	Yes	Don't Know Don't Know Yes Yes	letter from GP, use of guidelines for GP to use	1 year after first self harm episode	Attempters	211repeat self-harm in intervention group & 189 in the control
Clarke T et al. 2002[35]	RCT / Other	526	12 mths/ 467	No / No	UK / 33	ED contact for deliberate self harm	Yes Yes Yes Yes	Yes Don't Know No No	Yes	Don't Know Yes Yes Yes	case management led by nurse practitioner	1 year follow up after first admission	Attempters	19 readmitted in treatment & 25 in control

Evidence Table 2. RCT and CCTs Describing Suicide Interventions Continued

Author, Year	Study Design / Setting	Sample Size Enrolled	Follow Up Time Points / Follow Up	Veterans / Military	Country / Mean Age	Eligibility Criteria	Quality Measurements: Described as Randomized; Method of Randomization; Allocation Concealment; Similarity at Baseline between groups	Quality Measurements: Eligibility Criteria Specified; Outcome Assessor Blinded; Care provider blinded; Patients Blinded	Quality Measurements: Point estimates & measures of variability for primary outcomes variable; Randomized patients analyzed in group they were allocated to	Quality Measurements: Co-interventions avoided; Compliance acceptable; Drop-out rate described; Timing of Outcome Assessment Similar	Intervention	Duration of Treatment	Outcome	Adverse Events
Motto JA et al. 2001[37]	RCT / Psychiatric	843	1 yr/ 843 5 yrs/ 843 15 yrs/ 843	No / No	US / NR	Hospitalized for depression or suicidality	Yes Don't Know Don't Know Don't Know	Yes Don't Know No No	Yes	Don't Know Don't Know No Yes	follow up letter	15 years from discharge	Completers	after 15 years there were 25 suicides in the contact group, & 26 in the no contact group.
Morgan HG et al. 1993[38]	RCT / Psychiatric	212	1 yr/ 212	No / No	UK / 30.1	Admission follow up episode of deliberate self harm	Yes Yes Don't Know Yes	Yes Don't Know No No	Yes	Don't Know Don't Know Yes Yes	"green card" offering easy access to psychiatrist on call	1 year follow up after first admission	Attempters & Completers	No suicides occurred; 5 repeated self harm (serious threats) in experiment & 15 in control
Evans MO et al. 1999[39]	RCT / Other	827	6 mths/ 827	No / No	UK / 33.3	Hospitalization for deliberate self harm	Yes Yes Don't Know Yes	Yes Yes No No	Yes	Don't Know Don't Know Yes Yes	"green card" offering 24 hr crisis phone consultation	6 months following discharge	Attempters	2 suicides in "green card" group & 1 in control
Carter GL et al. 2005[40]	RCT / Psychiatric	772	12 mths/ 772	No / No	Australia / NR	ED contact for deliberate self poisoning	Yes Yes Yes Yes	Yes Yes NA No	Yes	Don't Know Yes Yes Yes	postcard sent at 1,2,3,4,6,8,10,12 months after discharge	12 months	Attempters	57 repeat self harm in intervention & 68 in control

Evidence Table 2. RCT and CCTs Describing Suicide Interventions Continued

Author, Year	Study Design / Setting	Sample Size Enrolled	Follow Up Time Points / Follow Up	Veterans / Military	Country / Mean Age	Eligibility Criteria	Quality Measurements: Described as Randomized	Quality Measurements: Eligibility Criteria Specified	Quality Measurements: Point estimates & measures of variability for primary outcomes	Quality Measurements: Co-interventions avoided	Intervention	Duration of Treatment	Outcome	Adverse Events
							Method of Randomization: Yes	Outcome Assessor Blinded: Yes		Compliance acceptable: Don't Know				
							Allocation Concealment: Yes	Care provider blinded: No	Randomized patients analyzed in group they were allocated to: Yes	Drop-out rate described: Don't Know				
Waterhouse J et al. 1990[43]	RCT / Primary Care & Hospital	99	1 wk/ NR 16 wk/ NR	No / No	UK / NR	ED contact for parasuicidal act by self poisoning	Similarity at Baseline between groups: Don't Know	Patients Blinded: No		Timing of Outcome Assessment Similar: Don't Know	hospitalization	16 months	Attempters & SI	at 16 weeks a total of 3 admitted & 4 discharged patients repeated parasuicide
							Yes	Yes		Don't Know				
							Yes	Yes	Yes	Don't Know	collaborative care program, including a depression case manager in primary care clinic			
Unutzer J et al. 2006[45]	RCT / Primary Care	1801	2 yrs/ NR	Yes / No	US / 71.2	Elderly with depression	Yes	No		Don't Know		12 months	Completers & SI	No completed suicides during 2 year follow up
							Yes	No	Yes	Yes				
							No	Yes		Don't Know				
						Family friend (of suicidal men) who called suicide hotline	No	No	Yes	Yes	family friend of suicidal men were assigned to one of four programs	post test after 2 months with 6 month follow up		22.0% attempt rate at entry, 10.6% at 2 mo., 2.7% at 6 mo.
Mishara BL et al. 2005[46]	CCT / Other	120	2 mths/ 120 6 mths/ 120	No / No	Canada / NR		Don't Know	No	Don't Know	Yes			Attempters	

Evidence Table 3. Studies Describing Interventions Restricting the Access to Firearms

Author, Year	Study Design	Country / Setting	Veteran / Military	Legislation	Study Period	Outcome	Results
Loftin C et al. 1991[47]	Interrupted Time Series	US / Population	No / No	District of Columbia's Firearms Control Regulations Act 1976	1968-1987	Mean number of suicides per month	Suicides using firearms decreased from 2.6 per month to 2.0 per month (p=.005). Non-firearm related suicides did not experience a decrease of similar magnitude.
Ludwig J et al. 2000[48]	Interrupted Time Series	US / Population	No / No	Brady Handgun Violence Prevention Act, 1994	1985-1997	Total suicide rates per 100,000 of population for adults (≥21 years and ≥55 years) controlling for age, race, poverty and income levels, urban residence, and alcohol consumption, the effected states (32 states where Brady handgun act was implemented)	Firearm suicide rates declined by 0.32 (95% CI: -0.73, 0.20) for adults over 21 years old. For adults 55 or older suicide rates declined by 0.92 (95% CI: -1.43, -0.42, p<.05).
Lott JR et al. 2001[49]	Interrupted Time Series	US / Population	No / No	State Safe-Storage laws passed between October 1,1989 through January 1,1996	1979-1996	Comparison of suicide rates, accidental deaths and crimes in states with and without Safe-Storage laws	Regression estimates were not statistically significant from 0 or from each other with and without including control variables. Thus the gun laws did not seem to have a statistically significant effect on suicide rates.
Rosengart M et al. 2005[50]	Interrupted Time Series	US / Population	No / No	Multi-State: "Shall issue" (concealed weapons), minimum age of private purchase 21, minimum age of private possession 21, on gun per month, Junk gun ban	1979-1998	A cross sectional time series study of firearm suicides and homicides	None of the 5 laws were associated with a statistically significant change in firearm suicide rates.
Webster et al. 2004[51]	Interrupted Time Series	US / Population	No / No	State and federal Child Access Prevention laws (requiring safe storage)	1976-2001	Number of total suicides per 100,000 and methods used for youth between 14 to 20 years old.	Of the 63,954 suicides between 1976-2001, 62% were committed with firearms. Firearm suicides increased from 2.6 in 1976 to a high of 5.7 in 1994. They quickly decreased to 2.5 in 2001. For youth between 14-17 child access prevention laws at the state level are associated with a 10.8% decrease in firearm suicides (RR, 0.89; 95% CI: 0.83-0.96). For adults between 18-20 state child access prevention laws are associated with a 11.1% decrease in suicides from firearms (RR, 0.89; 95% CI: 0.85-0.93).
Rich CL et al. 1990[52]	Interrupted Time Series	Canada & US / Population	No / No	1978 Criminal Code of Canada	1973-1983	Number of suicides in Ontario and Toronto and method of suicide for Toronto	The mean percent of suicides by firearms decreased significantly after the legislation went into effect (23.2% to 16.2%, difference 7%, p<0.0001). The total number of suicides did not significantly decrease.
Carrington PJ et al. 1994[53]	Interrupted Time Series	Canada / Population	No / No	1978 Criminal Code of Canada	1965-1977	Mean suicide rates per 100,000 and trends.	The suicide rate did not change significantly from the 5 years before and the 5 years after the 1978 gun control law (13.5 to 12.8, p=0.12). Regression analysis found no slope for the 5 years following the legislation.
Lester D et al. 1993[54]	Interrupted Time Series	Canada / Population	No / No	Canada's Criminal Law Amendment Act of 1977 (Bill C-51)	1969-1985	Annual suicide rates per 100,000 by all methods.	Suicide by firearm rates decreased after Bill C-51 (4.27 to 2.09, p=0.05). But the total suicide rate increased, suggesting that people turned to other methods.
Lester D et al. 1994[55]	Interrupted Time Series	Canada & US / Population	No / No	Comment on assertion that Bill C-51 did not lessen suicide rates	1969-1991	Change in suicide rates for the period following the 1977 Bill C-51.	Before the passage of Bill C-51, firearm suicide rate was increasing (simple linear regression slope, b= 0.608, p=0.01), as were the total suicide rate and suicide rate from other methods. From 1978 to 1985 the overall suicide rate did not change and the rate by other methods did not change. The percentage of suicides by firearms did decrease (b= -0.574, p=0.03).

Evidence Table 3. Studies Describing Interventions Restricting the Access to Firearms, Continued

Author, Year	Study Design	Country / Setting	Veteran / Military	Legislation	Study Period	Outcome	Results
Leenaars AA et al. 1996[56]	Interrupted Time Series	Canada / Popula-tion	No / No	Canada's Criminal Law Amendment Act of 1977 (Bill C-51)	1969-1985	Suicide rates before (1969-1976) and after (1978-1985) the enactment of Bill C-51	Suicide rates by firearms decreased significantly ($p<0.05$) after the passage of Bill C-51. Also the percentage of suicides by firearms also significantly decreased.
Lester D et al. 2001[57]	Interrupted Time Series	Canada / Popula-tion	No / No	Canada's Criminal Law Amendment Act of 1977 (Bill C-51)	1970-1995	Firearm suicide and homi-cide rates per 100,000	The correlation between year and the percentage of suicides and homicides by firearms is -0.86 (one-tailed $p<0.001$).
Leenaars AA et al. 1997[58]	Observational	Canada / Popula-tion	No / No	Canada's Criminal Law Amendment Act of 1977 (Bill C-51)	1969-1985	Suicide and homicide rates per 100,000 before and after Bill C-51 was passed	The mean annual number suicides decreased for those in the following age groups 15-24 ($p<0.001$), 35-64 ($p<0.05$), and 75 and over ($p<0.01$). Prior to the law the rate of suicides was increasing (regression line slope = 0.16) where as after the law went into effect the rate began to decrease (regression line slope = -0.13).
Leenaars AA et al. 2003[59]	Interrupted Time Series	Canada / Popula-tion	No / No	Canada's Criminal Law Amendment Act of 1977 (Bill C-51)	1969-1985	Suicide rates compared from before and after the 1977 Bill C-51.	Least squares regression showed that the introduction of the Bill had no statistically significant increase or decrease in the rate of suicides, overall or by firearms. However the Bill had a negative effect on the slope of the line, thus the Bill decreased the trend in suicide rates.
Bridges FS 2004[60]	Interrupted Time Series	Canada / Popula-tion	No / No	Canadian Bill C-17	1984-1998	Total suicide and homicide rates per 100,000, as well as methods, before and after Bill C-17.	The mean annual number of suicides significantly decreased from the first 7 year period to the 7 years following instatement of the Bill (4.09 to 3.17, $p=.001$). The rates by other methods increased significantly (9.02 to 9.76, $p=.01$). The total average number of suicides did not significantly differ between the 2 study periods (13.11 to 12.93).
Chung AH et al 2005[61]	Interrupted Time Series	Canada / Popula-tion	No / No	Canadian Bill C-17	1979-1999	Suicide rates and methods for youth between the ages of 15-19 before and after Bill C-17.	The percent of suicide by firearms decreased from 55% in 1979 to 25% in 1999. Death by other means increased during this time. The overall rate of suicides did not decrease.
Snowdon J et al. 1992[62]	Observational	Australia / Popula-tion	No / No	Several?	1968-1989	Suicide rates per 100,000 by gender, State, age and residence.	The mean rate of firearm suicides was 6.13 for men and 0.43 for women ($p<0.005$).
Chapman S et al. 2006[63]	Interrupted Time Series	Australia / Popula-tion	No / No	1996 gun law reform, fol-lowing the 1996 firearm massacre in Tasmania	1979-2003	Changes in trends of total firearm suicides and suicides per 100,000 of population	Before 1996, annual average of 491.7 firearm suicides. From 1997 to 2003, annual average of 246.6 firearm suicides.
Cantor CH et al. 1995[64]	Observational	Australia / Popula-tion	No / No	Weapons Act 1990 (Qld)	1990-1993	Firearm suicide mean annual rates per 100,000 and method for different geographical areas two years before and two years after the legislation went into effect	Suicide rates decreased in metropolitan (3.6 to 2.3) and provincial areas (5.2 to 3.1) ($p<0.05$). The mean annual rate per 100,000 for rural areas was about double that of metropolitan and provincial areas. This rate did not decrease after the legislation. There was also a significant decrease in suicide rates among men and adults between 15 and 29 years old.
Ozanne-Smith J et al 2004[65]	Interrupted Time Series	Australia / Popula-tion	No / No	Victoria Response (1988) and Firearms Act of 1996	1979-2000	Following gun control regu-lations, death rates, trends, and ownership in Victoria and Australia.	The overall death rate decreased for Australia (-3.9%; 95% CI: -4.8% ro -3.1%) and Victoria(-4.9% 95% CI: -5.9, -3.9) from 1979 - 2000. Significant decreases in firearm related suicides were seen in Victoria. Suicides by firearms dropped by 54.5% from 1979 to 2000.
Beautrais A et al. 2006[66]	Interrupted Time Series	New Zealand / Popula-tion	No / No	Amendment to the Arms Act, 1992	1985-2002	Age-specific suicide rates per 100,000 of population for firearm and Non-firearm related suicides	For youths (15-24years), firearm suicides were reduced by 39% in the 3 year implementation period and decreased 66% in the 5 year post-implementation period. For adults (25+ years) firearm suicides decreased by 25% in the 3 year implementation period and decreased by 39% in the 5 year post-implementation period.

APPENDIX D. PEER REVIEW COMMENTS

Appendix D. Peer Review Comments

Section	Comment	Change
General	Outcome information was collected for only three categories: "Attempters, Completers, SI." The synthesis project does not address any literature demonstrating if suicide prevention strategies impact: a) the need for hospitalization, b) number of ER visits, c) patient and provider satisfaction, etc.	The scope of the report was set in consultation with the ESP Advisory Committee and the outcomes were restricted to the ones included in this report. These additional outcomes could be included in an update or new ESP report
General	The literature review was detailed but narrative, and it would be helpful to see the summation in a data table. It's very difficult to find the "take home messages" amidst all the detail. There apparently were data collection forms in Appendix D. Would like to see data tables for the data collected in these forms to better understand the results of the synthesis project.	Summarizing the results of disparate studies is always a challenge. We have included Evidence Tables summarizing most of the data from the included studies in Appendix C. Each report section then also has a narrative summary, as does the report's conclusion.
General	Are there any studies on suicide prevention related to this report that we have overlooked?: The use of telemedicine for suicide prevention	We reported all studies identified as of the search date. We found no studies reporting outcomes from telemedicine interventions.
General	The VA National Center for Suicide Prevention and the MIRECC in Denver may have at least some published data describing the impact of the recent VA national suicide prevention hotline. This would obviously be the most relevant information, yet there was no mention of this in the project synthesis. It would be helpful if the document states explicitly one way or another if there is any recent data to be factored from either of these VA suicide prevention centers, either in the literature, in press or otherwise.	We used standard search techniques to find published literature, and did not attempt to identify unpublished or not yet published results. *We'll check with VA to see if there is anything published abpout the impact of the VA hotline.*
Executive Summary, Methods	even in this brief summary, it would be useful to list the inclusion critieria yielding studies below, e.g., interventions, controlled studies, outcomes limited to attempts, completed suicides?))	We have added a list of the search criteria in the executive summary.
Introduction, Background	Section contains much useful information; some statements would benefit from references, to guide the interested reader—e.g., what is known or theorized about media-induced imitation or contagion?	We have added a reference to a recent review on media-induced imitation.
Methods, Study Selection	This exclusion makes sense but doesn't seem to be consistently followed. I'll note examples below. If interional, maybe further clarification of the exclusion here would be useful	Our original description in Study Selection was imprecise. We have added text to clarify the search criteria, especially with respect to exclusion of mental health interventions.

Appendix D. Peer Review Comments Continued

Methods, Grade	I may have missed it, but it's not clear to me where these quantitative instructions are applied to the studies in this report. If in an appendix, might be useful to steer the reader to it here.	The quality assessment of individual articles appears in tables in Appendix C. The GRADE ratings were applied to sets of evidence taken together, and appear in the text of the results section.
Key Questions 1 & 2	All of these studies are quite well described. This one, though, left me with a question. Did the study employ a chaplain to deliver a secular counseling/educational intervention? Or was there a religious component to the education? Seems basic to understanding the study/	The article in question does not provide enough detail to allow us to accurately answer this question.
Key Questions 1 & 2	Referring to Koons et al. This study would seem to be excluded as a "mental health intervention only". Its foundational efficacy studies specifically addressed suicide. If there's a reason to include it, consider clarifying critera?	See answer to item 8
Key Questions 1 & 2	referring to Ilgen Also would seem to be excluded as a "mental health intervention only". If SUD or 'program' features set it apart, consider clarifying criteria?	See answer to item 8
Key Questions 1 & 2	referring to Gibbons Would seem to be excluded as a "mental health intervention only". If reason is that the study addresses an induction effect rather than a treatment effect, consider clarifying here.	See answer to item 8
Key Questions 1 & 2	referring to Webster et al. Not sure I understand, because it's not clear to me how representative any one state is (of the country?) Consider listing states and characteristics, e.g., more rural, higher prevalence of alcoholism, etc.?	We have re-written the description of this study's results to avoid the question of "representativeness."
Limitations, Study Quality	I'm sure the authors know more about this than I do; I thought this work consistutes a 'systematic review' and that a 'meta-analysis' would be distinguished from this review by the pooling of data across studies.	This comment is correct, this synthesis is not a meta-analysis and we have changed the text to reflect that.
Executive Summary, Key Questions 1 & 2	What about access to and treatment of mental health or sud disorders- does that reduce suicide – addiction treatment, clozapine, etc	See answer to item 8
Executive Summary, Key Question 3	Perhaps a major statement here on defining terms is needed – this is really a problem in the literature. Define gesture, attempt, ideation, death ideation etc.	We have added more text highlighting the critical nature of such terminology for advancing the field.

Appendix D. Peer Review Comments Continued

Methods, Figure 1	Alcohol and drug use isn't listed as a factor involved in behavior –this seems like an oversight	We have added a comment about the role of substance abuse and other factors not explcitly appearing in the Mann conceptual model to the introduction.
Methods	Another target might be social situation – homelessness, employment (there is a strong correlation in the jobless rate and suicde rates) so programs like CWT or Supported employment might be important to mention.	Same answer as item 18.
Methods	How about those in mh care	See answer to item 8
Methods	Transition from inpatient to outpatient care – I believe there is data on a critical time intervention by lisa dixon on this issue	We found no study by Dixon reporting a direct effect on suicide attempts or completions.
Results, Literature Flow	It isn't clear what this means: " were rejected at title review as clearly irrelevant to the project"	If the title clearly indicated that the study did not report an outcome relevant to our search, then it was rejected. This is standard practice in systematic reviews and meta-analyses.
Key Questions 1 & 2	The prospect study (M Bruce showed a reduction in suicide ideation when treating depression in primary care, should these type studys not be included?	We did not consider studies reporting changes in rates of suicidal ideation, only studies that reported direct effects on suicide attempts or completions.
Limitations	Probably worth saying in the summary: "Our review did not focus on purely menthal health interventions. These have been the subject of other reviews. Perhaps somewhat surprisingly given the role of depressive disorders as significant risk factors for suicide, the evidence in support of the use of antidepressants is rather weak"	See answer to item 8
General	However, I am at a loss to explain why the IMPACT study was discussed but the PROSPECT study was noted as excluded given the extremely similar study designs (perhaps because IMPACT included some VA sites?).	If the study reported including veterans, then it was included, but not otherwise. See item 8.
General	This manuscript is still at a developmental stage so I delineate that which I would like to see in a final version more than providing a peer review per se [interspersed with other editorial observations roughly in order of appearance]:	No reply needed.
Introduction	An initial discussion of known correlates of suicide and suicidality (manuscript leads off suggesting the primary one is substance abuse) and/or conceptual framework for approaching this topic	In the Introduction, we described the Mann review's conceptual model in moderate detail, because we used its search strategy. Our goal was not to review existing conceptual frameworks or to develop new ones.

Appendix D. Peer Review Comments Continued

Results	Greater connection and discussion to policy issues and programs; at present it is a very dry list of vignettes from research papers	The results section lists in a narrative format the results of our search. The summary section contains some comments related to research and policy development.
Key Question 1	Summary of strategies for key question #1 is largely absent	Questions 1 and 2 were answered together.
Results	Specific data from the quality review are not presented	The quality data appear in Appendix C for the RCTs and CCTs.
General	Page numbers end partway into the manuscript	This problem has been fixed.
General	Needs editing for consistency of tone and some substitution of colloquial or inappropriate word choices [e.g., 'repertoire', 'more easily had']	These phrases have been rewritten.
Executive Summary, Key Question 3	Page 10, penultimate paragraph: would revise to "similar…profiles to the antemortem profiles of suicide completers."	We have made the suggested change.
Introduction	Page 14, first paragraph: consider "nonclinician gatekeepers," such as "medical clerks, chaplains, or military unit commanders," since education programs may provide gatekeeper education to staff at medical facilities	We have made the suggested change.
Introduction	Page 14, last paragraph: brief summaries miss some elements (firearm purchase background checks and waiting periods; drug package configurations not just sizes)	We have made the suggested change.
General	Beautrais study: should describe the nature of the additional data; as it reads now it is not clear what distinction is being made in the last sentence	We have added a brief description of the additional data to clarify this point.
General	The objectives of the report are not clear. Why was this report commissioned? In response to what pressures? Several key questions were developed following a conference call (page 14). It is not clear who commissioned the Office of R&D for the Evidence Synthesis Project; why were these topics (i.e suicide screening) selected. What were the "key questions" responding to? Why was a key question formulated but not addressed at all in the review?? Therefore, in my opinion additional background might be helpful to better delineate whether the objectives and scope of the report were appropriate. On the other hand, the methods are clearly described.	As noted in the report, this topic was nominated by Office of Research and Development to the ESP Advisory Committee, and the Key Questions were developed by these two groups working together. The pressures leading to the nomination of this topic, other than VA's concern for the mental health of the veteran population, are outside our scope.

Appendix D. Peer Review Comments Continued

General	I was impressed with the objectivity of the report. Studies are presented without bias. The strengths and weaknesses of the studies are briefly but clearly described. After each topic, the results of the relevant studies pertaining to that topic are summarized. These are strengths of the review.	No changes needed.
General	Are there any studies on suicide prevention related to this report that we have overlooked?: No to my knowledge. Critical studies that have influenced national VHA policy regarding suicide screening and intervention have been included. One possible criticism is that studies that have been pivotal should be identified as such and perhaps discussed more fully. An example might be the US Air Force Study from the BMJ (Knox et al, reference #14).	We agree the methodological advantages of the Knox study and have added extra detail about it.
Key Questions 1, 2, & 3	This report is well constructed, well written and very helpful. It summarizes a broad range of studies, providing brief commentary in the form of summary statements. The report stops short of suggesting national guidelines or policy based upon the available data (i.e. evidence based recommendations), potentially a limitation as the authors are probably particularly well poised to do so after this thorough review. In fact, Key Question #1 directly asks this question and is left unanswered. The responses to Key Questions #1 and #2 are tentative and very general. For example, the response to Key Question #3 suggests that preliminary data be collected from the computerized medical record (page 8), without discussing any specific thoughts or recommendations as to what data should be collected and how. The use of the computer to help address Key Question #2 is not mentioned although the ability to track patients and ensure that they receive appropriate interventions is a very well recognized use of this resource.	The purpose of the report was to conduct a literature review, not report a policy analysis. We included a few general recommendations in the conclusion. Key Questions 1 and 2 were answered together.
Executive Summary	Page 8 suggest choosing another word than “Rare” in first sentence. Current debate in Congress, press, and email is why rates are so high for veterans. It might be the wrong tone to set.	We have removed that word and simplified the statement.

Appendix D. Peer Review Comments Continued

General	Are there any studies on suicide prevention related to this report that we have overlooked?: Is there any work from VISN19 MIRECC which was designed to focus on suicide issues that might assist with this analysis?	We used standard search techniques to find published literature. *We'll check with the MIRECC to see if there is anything additional we might have missed.*
General	This review demonstrated an embarrassing lack of evidence for Veterans in this critical and highly publicized topic. Research $$ should be directed toward remedying this. Perhaps a combination of the currently funded VISN 19 MIRECC and new studies?	No changes needed.
General	After reading this review and the synthesis review on depression, there seems a consistent theme in those studies having positive impact of additional or directed staff who build a "relationship" with the patient that plays the role of support and intervention as well as providing social contact for discussion, venting of issues, and advice. Perhaps the social isolation component should be studied as a variable that might have predictive value?	We agree that such factors are likely to be important. We have added a comment about this in the conclusion.
General	Consider studies involving telebuddy type devices, web access and response, etc.	No studies of such interventions were identified.