# National Institute for Health and Care Excellence

# Self-harm: assessment, management and preventing recurrence

## [L] Evidence review for harm minimisation strategies

*NICE guideline number tbc*

*Evidence review underpinning recommendations 1.10.10-1.10.12 in the NICE guideline*

*January 2022*

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**Disclaimer**

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

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# Contents

# 1 Harm minimisation strategies

## 2 Review question

3 What is the effectiveness of harm minimisation strategies for people who have self-harmed?

## 4 Introduction

5 Harm minimisation strategies can be used to minimise the severity of physical harm caused
6 to a person during and after an episode of self-harm, which can prevent more serious injuries
7 and reduce the risk of fatal self-harm. Harm minimisation is also sometimes used to refer to
8 strategies that are seen as alternatives to self-harm (such as substituting for other
9 behaviours) or distraction techniques. People who repeatedly self-harm without suicidal
10 intent may find these strategies useful when stopping self-harm is not yet possible, as a way
11 to self-harm 'safely'. However, in existing practice, self-harm prevention is usually seen as
12 the highest priority when providing care for people who have self-harmed, whereas providing
13 information about harm minimisation strategies to people who have self-harmed might not
14 promote this overall goal if they can be seen as an acceptance that repeat self-harm is
15 inevitable. Additionally, people use multiple different methods to self-harm, for which harm
16 minimisation may not be possible or appropriate. As a result, it is important to evaluate the
17 effectiveness of harm minimisation strategies for people who have self-harmed in order to
18 assess whether the benefits of implementing harm minimisation strategies outweigh the
19 potential risks.

## 20 Summary of the protocol

21 See **Error! Reference source not found.** for a summary of the Population, Intervention,
22 Comparison and Outcome (PICO) characteristics of this review.

23 **Table 1:  Summary of the protocol (PICO table)**

| | |
|---|---|
| **Population** | Inclusion:<br>All people who have self-harmed, including those with a mental health problem, neurodevelopmental disorder or a learning disability<br>Exclusion:<br>People displaying repetitive stereotypical self-injurious behaviour, for example head-banging in people with a significant learning disability |
| **Intervention** | Any harm minimisation strategy, including, for example:<br>• Strategies based on distraction (such as elastic band snapping)<br>• Safer self-harming techniques (such as clean razor blades, showing where to cut) |
| **Comparison** | No harm minimisation strategy |
| **Outcome** | **Critical**<br>• Frequency of self-harm<br>• Distress<br>• Suicide<br>**Important**<br>• Severity of self-harm |

| | • Quality of life |
| | • Self-efficacy/autonomy (person feeling like they are in control) |
| | • Hopelessness |

1    For further details see the review protocol in appendix A.

## Methods and process

3    A modified version of the GRADE approach to rate the certainty of evidence in systematic
4    reviews was used as part of a pilot project undertaken by NICE. Instead of using predefined
5    clinical decision/minimal important difference (MID) thresholds to assess imprecision in
6    GRADE tables, imprecision was assessed qualitatively during committee discussions. Other
7    than this modification, GRADE was used to assess the quality of evidence for the selected
8    outcomes and this evidence review developed using the methods and process described in
9    Developing NICE guidelines: the manual. Methods specific to this review question are
10   described in the review protocol in appendix A and the methods document (supplementary
11   document 1).

12   Declarations of interest were recorded according to NICE's conflicts of interest policy.

## Effectiveness evidence

### Included studies

16   A systematic review of the literature was conducted but no studies were identified which
17   were applicable to this review question.

19   See the literature search strategy in appendix B and study selection flow chart in appendix C.

### Excluded studies

21   Studies not included in this review are listed, and reasons for their exclusion are provided, in
22   appendix J.

## Summary of included studies

24   No studies were identified which were applicable to this review question (and so there are no
25   evidence tables Appendix D).

## Summary of the evidence

28   No studies were identified which were applicable to this review question (and so there are no
29   GRADE tables in Appendix F).

## Economic evidence

### Included studies

32   A single economic search was undertaken for all topics included in the scope of this
33   guideline but no economic studies were identified which were applicable to this review
34   question. See the literature search strategy in appendix B and economic study selection flow
35   chart in appendix G.

1 **Excluded studies**

2 Economic studies not included in the guideline economic literature review are listed, and
3 reasons for their exclusion are provided in appendix J.

4 **Economic model**

5 No economic modelling was undertaken for this review because the committee agreed that
6 other topics were higher priorities for economic evaluation.

7 **Evidence statements**

8 **Economic**

9 No economic studies were identified which were applicable to this review question.

10 **The committee's discussion and interpretation of the evidence**

11 **The outcomes that matter most**

12 Frequency of self-harm, distress and suicide were prioritised as critical outcomes by the
13 committee. The committee agreed that self-harming behaviours serve as coping
14 mechanisms for many people who self-harm. Frequency of self-harm and distress were
15 prioritised as critical outcomes because they are direct measures of any differential
16 effectiveness associated with the interventions that can capture even minor changes in self-
17 harming behaviour, which is one of the primary aims of harm minimisation interventions.
18 Suicide was prioritised as a critical outcome because it is a direct measure of any differential
19 effectiveness associated with the interventions that captures fatal self-harm associated with
20 the attempted modification of the self-harming behaviour.

21 The committee agreed that severity of self-harm, quality of life, self-efficacy/ autonomy and
22 hopelessness were important outcomes. Severity of self-harm, self-efficacy/ autonomy and
23 hopelessness were chosen as important outcomes because these outcomes capture both
24 whether harm-minimisation is successful in reducing the severity of self-harm as well as
25 whether such a potential reduction comes at a cost in terms of feelings of self-efficacy/
26 autonomy and hopelessness. The committee agreed that self-efficacy/ autonomy would
27 capture participants' feelings of ownership of decisions relating to their care, collaboration of
28 care, plus any coercion by caregivers, for example to prevent self-harm. Quality of life was
29 chosen as an important outcome as this is a global measure of well-being and may capture
30 aspects of effectiveness of the interventions not captured by any of the other outcome
31 measures.

32 **The quality of the evidence**

33 No studies were identified that met the inclusion criteria so the committee based the
34 recommendations on their own knowledge and experience.

35 Despite the lack of evidence, the committee decided not to prioritise this topic for research
36 recommendations because very few people who have self-harmed are offered this support,
37 and evidence regarding this niche group of people would be unlikely to affect
38 recommendations in a meaningful way. Although the committee had agreed to search for
39 randomised controlled trials (RCTs) within this review, this was because they expected to
40 find minimal evidence on this subject and so included RCTs in the inclusion criteria so any
41 trials that existed would be picked up. The committee agreed it would be logistically difficult
42 to conduct an RCT on harm minimisation because randomising people to harm minimisation

1  versus treatment as usual (TAU) in a trial of this nature would require informed consent. The
2  committee discussed whether it would be possible to conduct naturalistic or experimental
3  lab-based studies, but agreed these would be unlikely to provide important evidence that
4  would affect recommendations.

5  **Benefits and harms**

6  Due to the lack of evidence available from this review that demonstrated the benefits or risks
7  of harm minimisation strategies and the sensitive nature of this area, the committee wanted
8  to acknowledge the importance of providing strategies to prevent future self-harm as an initial
9  step before suggesting harm minimisation as a last resort. The committee discussed the
10 potential risks of harm minimisation strategies with specific reference to providing advice on
11 safer self-harm methods, based on their own knowledge and experience. They noted that the
12 provision of such advice without additional support or treatment could have the effect of
13 implying therapeutic nihilism, as well as encouraging further episodes of self-harm, especially
14 in people who do not have a prior history of self-harm. However, the committee also
15 considered their experience of the positive impact of safer self-harm methods on people who
16 regularly self-harmed and noted that harm minimisation strategies could reduce the number
17 of instances of high-risk self-harm. The committee considered these benefits and risks before
18 concluding that harm-minimisation strategies should only be suggested to service users after
19 having considered their unique situation, as part of an overall provision of support
20 maintaining the expectation of recovery and not as a standalone intervention.

21 The committee felt strongly that it was important to note harm minimisation was more than
22 just safer self-harm methods, and that often harm minimisation is referring to distraction
23 techniques to prevent harm. They agreed based on their experience that providing advice on
24 distraction techniques, self-care and avoiding substances such as alcohol could reduce the
25 risk of future self-harm, and no risks were identified from the use of this approach. On the
26 other hand, the committee agreed that providing information to people who have self-harmed
27 about safer self-harm methods carried risks if, for example, this information was interpreted
28 as encouragement for someone who was otherwise not intending to repeat self-harm. As a
29 result, the committee agreed it would be inappropriate to recommend providing information
30 about safer self-harm methods to people who have self-harmed, especially in light of the lack
31 of evidence.

32 The committee agreed that it was important to acknowledge the inability to self-poison safely.
33 However, the committee used their expertise to identify multiple other forms of self-harm
34 (such as burning or swallowing non-ingestible objects) for which harm-minimisation
35 strategies would also be inappropriate. The committee discussed the potential risks of
36 attempting to implement harm-minimisation strategies for these methods and agreed that,
37 while it would be inappropriate to list all the forms of self-harm for which a harm minimisation
38 approach should not be used, awareness should be brought to the inapplicability of harm-
39 minimisation strategies to many forms of self-harm.

40 **Cost effectiveness and resource use**

41 The committee noted that no relevant published economic evaluations had been identified
42 and no additional economic analysis had been undertaken in this area. They recommended
43 specific strategies to reduce the likely variation across the NHS in the current practice in
44 terms of harm minimisation strategies. The committee agreed that there was unlikely to be a
45 significant resource impact from the recommendations made, as these are in line with self-
46 management and/or harm minimisation strategies that are currently used in the management
47 of people with self-harm. Moreover, they highlighted how the provision of the recommended
48 strategies is expected to have benefits for the person in terms of a reduction in the severity
49 and/or recurrence of injury and associated resource use savings.

1 **Recommendations supported by this evidence review**

2 This evidence review supports recommendations 1.10.10-1.10.12.

3 # References – included studies

4 **Effectiveness**

5 No studies were identified that met the inclusion criteria.

6 **Economic**

7 No studies were identified that met the inclusion criteria.

# 1 Appendices

## 2 Appendix A  Review protocols

**3 Review protocol for review question: What is the effectiveness of harm minimisation strategies for people who have self-
4 harmed?**

**5 Table 2:  Review protocol**

| Field | Content |
| --- | --- |
| PROSPERO registration number | CRD42020203761 |
| Review title | Harm minimisation strategies |
| Review question | What is the effectiveness of harm minimisation strategies for people who have self-harmed? |
| Objective | To identify the effectiveness of harm minimisation strategies for people who have self-harmed. |
| Searches | The following databases will be searched:<br>• Cochrane Central Register of Controlled Trials (CENTRAL)<br>• Cochrane Database of Systematic Reviews (CDSR)<br>• Database of Abstracts of Reviews of Effects (DARE)<br>• Embase<br>• Emcare<br>• International Health Technology Assessment (IHTA) database<br>• MEDLINE & MEDLINE In-Process<br>• PsycINFO<br><br>Searches will be restricted by:<br>• English language studies<br>• Human studies<br>• Date: 2000 onwards as harm minimisation strategies were not used in practice before then.<br><br>Other searches:<br>• Inclusion lists of systematic reviews |

| Field | Content |
|---|---|
| | The full search strategies will be published in the final review. |
| Condition or domain being studied | All people who have self-harmed, including those with a mental health problem, neurodevelopmental disorder or a learning disability.<br><br>'Self-harm' is defined as intentional self-poisoning or injury irrespective of the apparent purpose of the act. This does not include repetitive stereotypical self-injurious behaviour, for example head-banging in people with a significant learning disability. |
| Population | Inclusion:<br>• All people who have self-harmed, including those with a mental health problem, neurodevelopmental disorder or a learning disability<br><br>Exclusion:<br>• People displaying repetitive stereotypical self-injurious behaviour, for example head-banging in people with a significant learning disability |
| Intervention | Inclusion:<br>Any harm minimisation strategy, including, for example:<br>• Strategies based on distraction (such as elastic band snapping)<br>• Safer self-harming techniques (such as clean razor blades, showing where to cut) |
| Comparator/Reference standard/Confounding factors | No harm minimisation strategy |
| Types of study to be included | • Systematic review of randomised controlled trials (RCTs) or non-randomised comparative prospective and retrospective cohort studies<br>• RCTs<br>• Non-randomised comparative prospective cohort studies with N≥50 per treatment arm<br>• Non-randomised comparative retrospective cohort studies with N≥50 per treatment arm<br><br>Conference abstracts will not be included.<br><br>Non-randomised studies should adjust for the following covariates in their analysis when there are differences between groups at baseline: age, gender, previous self-harm, comorbidities (e.g. alcohol and drug misuse, psychiatric illness, physical illness), and current psychiatric treatment. Studies will be downgraded for risk of bias if important covariates are not adequately adjusted for, but will not be excluded for this reason. |
| Other exclusion criteria | Studies will not be included for the following reasons:<br>• Language: Non-English<br>• Publication status: Abstract only<br><br>Studies published in languages other than English will not be considered due to time and resource constraints with translation. |
| Context | Settings: |

| Field | Content |
|---|---|
| | Inclusion:<br>• Primary, secondary and tertiary healthcare settings (including pre-hospital care, accident and emergency departments, community pharmacies, inpatient care, and transitions between departments and services)<br>• Home, residential and community settings, such as supported accommodation<br>• Supported care settings<br>• Education and childcare settings<br>• Criminal justice system<br>• Immigration removal centres. |
| Primary outcomes (critical outcomes) | Critical:<br>• Frequency of self-harm<br>• Distress<br>• Suicide |
| Secondary outcomes (important outcomes) | Important:<br>• Severity of self-harm<br>• Quality of life<br>• Self-efficacy/autonomy (person feeling like they are in control)<br>• Hopelessness |
| Data extraction (selection and coding) | All references identified by the searches and from other sources will be uploaded into EPPI and de-duplicated.<br><br>Titles and abstracts of the retrieved citations will be screened to identify studies that potentially meet the inclusion criteria outlined in the review protocol.<br><br>Dual sifting will be performed on 10% of records; 90% agreement is required. Disagreements will be resolved via discussion between the two reviewers, and consultation with senior staff if necessary.<br><br>Full versions of the selected studies will be obtained for assessment. Studies that fail to meet the inclusion criteria once the full version has been checked will be excluded at this stage. Each study excluded after checking the full version will be listed, along with the reason for its exclusion.<br><br>A standardised form will be used to extract data from studies. The following data will be extracted: study details (reference, country where study was carried out, type and dates), participant characteristics, inclusion and exclusion criteria, details of the interventions, setting and follow-up, relevant outcome data, risk of bias and source of funding. One reviewer will extract relevant data into a standardised form, and this will be quality assessed by a senior reviewer. |
| Risk of bias (quality) assessment | Quality assessment of individual studies will be performed using the following checklists:<br>• ROBIS tool for systematic reviews<br>• Cochrane RoB tool v.2 for RCTs and quasi-RCTs<br>• Cochrane ROBINS-I tool for non-randomised (clinical) controlled trials and cohort studies<br>The quality assessment will be performed by one reviewer and this will be quality assessed by a senior reviewer. |

| Field | Content | | |
|---|---|---|---|
| Strategy for data synthesis | Quantitative findings will be formally summarised in the review. Where multiple studies report on the same outcome for the same comparison, meta-analyses will be conducted using Cochrane Review Manager software. A fixed effect meta-analysis will be conducted and data will be presented as risk ratios if possible or odds ratios when required (for example if only available in this form in included studies) for dichotomous outcomes, and mean differences or standardised mean differences for continuous outcomes. Heterogeneity in the effect estimates of the individual studies will be assessed using the I2 statistic. I2 values of greater than 50% and 80% will be considered as significant and very significant heterogeneity, respectively. Heterogeneity will be explored as appropriate using sensitivity analyses and subgroup analyses based on identified covariates if they have not been adjusted for. If heterogeneity cannot be explained through subgroup analysis then a random effects model will be used for meta-analysis, or the data will not be pooled if the random effects model does not adequately address heterogeneity. The confidence in the findings across all available evidence will be evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group: http://www.gradeworkinggroup.org/ | | |
| Analysis of sub-groups | Evidence will be stratified by: <br> • Type of harm minimisation strategy: distraction, safer self-harm | | |
| Type and method of review | Intervention | | |
| Language | English | | |
| Country | England | | |
| Anticipated or actual start date | 05/08/2020 | | |
| Anticipated completion date | 26/01/2022 | | |
| Stage of review at time of this submission | Review stage | Started | Completed |
| | Preliminary searches | ☐ | ☑ |
| | Piloting of the study selection process | ☐ | ☑ |
| | Formal screening of search results against eligibility criteria | ☐ | ☑ |
| | Data extraction | ☐ | ☑ |
| | Risk of bias (quality) assessment | ☐ | ☑ |

Self-harm: assessment, management and preventing recurrence: evidence review for harm minimisation strategies DRAFT (January 2022)

| Field | Content |
|---|---|
| | Data analysis ☐ ☑ |
| Named contact | 5a. Named contact:<br>National Guideline Alliance<br><br>5b Named contact e-mail:<br>selfharm@nice.org.uk<br><br>5e Organisational affiliation of the review:<br>National Institute for Health and Care Excellence (NICE) and National Guideline Alliance |
| Review team members | National Guideline Alliance |
| Funding sources/sponsor | This systematic review is being completed by the National Guideline Alliance which receives funding from NICE. |
| Conflicts of interest | All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline. |
| Collaborators | Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: https://www.nice.org.uk/guidance/indevelopment/gid-ng10148. |
| Other registration details | None |
| URL for published protocol | https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=203761 |
| Dissemination plans | NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as:<br>notifying registered stakeholders of publication<br>publicising the guideline through NICE's newsletter and alerts<br>issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE. |
| Keywords | Self-harm, assessment, management, prevention, first contact, health care |
| Details of existing review of | None |

| Field | Content |
|---|---|
| same topic by same authors | |
| Current review status | Ongoing |
| Additional information | Not applicable |
| Details of final publication | www.nice.org.uk |

1  *CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; GRADE: Grading of Recommendations Assessment, Development and Evaluation;*
2  *NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; RCT(s): randomised controlled trial(s); RevMan: review manager; RoB: risk of bias; ROBINS-I: Risk Of*
3  *Bias In Non-randomized Studies - of Interventions*

# Appendix B   Literature search strategies

**Literature search strategies for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

## Clinical

**Database(s): MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily – OVID interface**
Date of last search: 10th August 2020

| # | searches |
|---|----------|
| 1 | exp self-injurious behavior/ or self mutilation/ or suicide/ or suicidal ideation/ or suicide, attempted/ or suicide, completed/ |
| 2 | (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*).ti,ab. |
| 3 | or/1-2 |
| 4 | risk management/ or risk reduction behavior/ |
| 5 | (((controlled or safe*) adj self harm) or (((nurs* adj2 present) or supervis*) adj2 (selfharm* or self harm)) or (harm adj (minimi* or reduc*))).ti,ab. or (harm* adj2 (minimi* or reduc*)).ti. or (((approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or work shop*) adj4 ((cut* or decreas* or diminish* or fall* or fell or less* or limit* or low or lower* or minimi* or reduc*) adj2 risk)).ti,ab. and 2) or ((((method* or strateg* or technique*) adj3 alternative* adj3 self harm) or selfharm or (less adj2 (destructive or harmful) adj3 (method* or strateg* or technique) adj3 (self harm or selfharm))).ti,ab. and 2) |
| 6 | (((access* or provid*) adj3 (first aid or (medical adj (attention* or care)))) or ((clean* or sterile) adj2 (bandag* or blade* or cutt* or equipment or instrument* or razor* or wound*)) or dialectical behavio?r therap* or ((educat* or information* or instruct* or learn* or pamphlet*) adj3 (cut* or sever*) adj3 (arter* or nerve* or tendon*)) or ((advice or advis* or educat* or information* or learn* or pamphlet*) adj5 (infection* or safety or scar* or woundcare or wound care)) or damage limitation).ti,ab. |
| 7 | ((comfort* adj3 (intervention* or manag* or strateg* or technique* or tool*)) or self comfort*).ti,ab. |
| 8 | ((cuddle adj2 tedd*) or (strok* adj2 pet*)).ti,ab. |
| 9 | emergency box.ti,ab. |
| 10 | ((have or take) adj2 (bath* or shower*)).ti,ab. |
| 11 | (hug* adj2 (person* or someone or themselv* or yourself)).ti,ab. |
| 12 | (massag* adj3 (arm* or hand* or leg* or feet)).ti,ab. |
| 13 | ((paint* adj2 nail*) or hairdresser* or (hair adj2 done)).ti,ab. |
| 14 | (chew* adj2 (ginger or ice)).ti,ab. |

| # | searches |
|---|---|
| 15 | (((draw or write) adj2 skin*) or fake blood or marker pen* or red marker*).ti,ab. |
| 16 | (((elastic or rubber) adj band*) or ((flick* or ping* or snap*) adj2 band*)).ti,ab. |
| 17 | ((hit* or punch*) adj2 cushion*).ti,ab. |
| 18 | (listen* adj2 music).ti,ab. |
| 19 | (physical* adj3 (intervention* or strateg* or technique*)).ti,ab. |
| 20 | (scream adj2 loud*).ti,ab. |
| 21 | ((squeez* adj2 ice) or icecube* or ice cube*).ti,ab. |
| 22 | (stress ball* or (pinch* adj2 skin)).ti,ab. |
| 23 | (keep* adj2 chart*).ti,ab. |
| 24 | (reward* adj3 (intervention* or strateg* or technique*)).ti,ab. |
| 25 | (reward* adj2 (themselve* or yoursel*)).ti,ab. |
| 26 | (baking or cooking).ti,ab. |
| 27 | (((call* or meet* or ring* or talk*) adj2 (famil* or friend*)) or (call in or callline* or call line* or help line* or helpline* or hotline* or hot line* or phone in or phonein or (caller*1 adj3 (interven* or program* or therap* or treat*)) or (talk* adj2 friend*) or ((phone* or telephone*) adj2 (friend* or support*)))).ti,ab. |
| 28 | (clear out or chores or housework* or house work or (tidy* adj2 (room or up*1))).ti,ab. |
| 29 | ((distract* adj4 (intervention* or manag* or strateg* or technique* or tool*)) or distractions or (((divert adj2 attention) or distract*) adj5 (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*))).ti,ab. |
| 30 | (juggl* or (learn adj2 skill*) or loom band* or sew or sewing or knit or knitting).ti,ab. |
| 31 | paper chain*.ti,ab. |
| 32 | (picture* adj2 cloud*).ti,ab. |
| 33 | (watch* adj2 (tv or television)).ti,ab. |
| 34 | (talk* adj3 feeling*).ti,ab. |
| 35 | (((control?ed or deep) adj breathing) or ((positive* adj2 (emotion* or therap* or think* or psycho*)) or (emotion* adj2 (cope or coping or psychotherap* or therap*))) or (damag* adj2 limit*) or (goal* adj2 set*) or therapeutic contract or ((cope* or coping) adj3 (approach* or assist* or coach* or educat* or help* or imagery or instruct* or interven* or learn* or manag* or modif* or program* or seminar* or strateg* or support* or teach* or technique* or therap* or train* or treat* or workshop* or work shop*))).ti,ab. |
| 36 | or/4-35 |
| 37 | (((automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*) adj3 (decreas* or minimis* or prevent* or reduc* or safe*) adj6 |

| # | searches |
|---|---|
| | (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or train* or treat* or workshop* or work shop*)) or ((automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*) adj4 (((decreas* or diminish* or fall* or fell or less* or limit* or low or lower*) adj2 risk*) or less destruc* or less harmful or minimi* or more safe* or reduc*) adj8 (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or work shop*))).ti,ab. |
| 38 | exp self-injurious behavior/pc or self mutilation/pc or suicide/pc or suicidal ideation/pc or suicide, attempted/pc or suicide, completed/pc |
| 39 | or/37-38 |
| 40 | animal assisted therapy/ or baths/ or community networks/ or cooking/ or exp exercise/ or friends/ or housekeeping/ or exp leisure activities/ or massage/ or exp mind-body therapies/ or music/ or patient comfort/ or peer group/ or self care/ or self help groups/ or self management/ or exp sensory art therapies/ or television/ or hotline*.sh. or ((first aid or wound infection) and educat*).sh. or first aid/ed |
| 41 | (meditat* or relax* or yoga).ti,ab. |
| 42 | (active living or bicycling or ((a?robic* or physical*) adj (activit* or agil* or educat* or fitness*)) or (cycling not rapid cycling) or dance or dancing or gardening or hobby or hobbies or jogging or recreation* or running or sport* or swimming or tidying or walking or yoga).ti,ab. |
| 43 | ((self adj (care or instruct* or manag* or monitor* or regulat* or reinforc* or re inforc*)) or selfcare or selfinstruct* or selfmanag* or selfmonitor* or selfregulat* or (minimal adj (contact or guidance)) or (mutual adj (help or aid or support*))).ti,ab. |
| 44 | ((support* adj (based or cent* or focus?ed)) or (support* adj2 (approach* or educat* or friend* or family or instruct* or interven* or learn* or module* or network* or peer*1 or program* or strateg* or technique* or therap* or train* or treat* or workshop* or work shop*)) or ((community or emotion* or network* or organi?ation* or peer*) adj2 support*) or (network* adj2 (discuss* or exchang* or interact* or meeting*))).ti,ab. |
| 45 | (or/40-44) and 39 |
| 46 | or/36,45 |
| 47 | 3 and 46 |
| 48 | letter/ or editorial/ or news/ or exp historical article/ or anecdotes as topic/ or comment/ or case report/ or (letter or comment*).ti. or (animals not humans).sh. or exp animals, laboratory/ or exp animal experimentation/ or exp models, animal/ or exp rodentia/ or (rat or rats or mouse or mice).ti. |
| 49 | 47 not 48 |
| 50 | limit 49 to yr="2000-current" |
| 51 | limit 50 to english language |

Self-harm: assessment, management and preventing recurrence: evidence review for harm minimisation strategies DRAFT (January 2022)

## Database(s): Embase and Emcare – OVID interface
Date of last search: 10th August 2020

| # | searches |
|---|----------|
| 1 | automutilation/ or exp suicidal behavior/ |
| 2 | (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*).ti,ab. |
| 3 | or/1-2 |
| 4 | risk management/ or risk reduction/ |
| 5 | (((controlled or safe*) adj self harm) or (((nurs* adj2 present) or supervis*) adj2 (selfharm* or self harm)) or (harm adj (minimi* or reduc*))).ti,ab. or (harm* adj2 (minimi* or reduc*)).ti. or (((approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or work shop*) adj4 ((cut* or decreas* or diminish* or fall* or fell or less* or limit* or low or lower* or minimi* or reduc*) adj2 risk)).ti,ab. and 2) or ((((method* or strateg* or technique*) adj3 alternative* adj3 self harm) or selfharm or (less adj2 (destructive or harmful) adj3 (method* or strateg* or technique) adj3 (self harm or selfharm))).ti,ab. and 2) |
| 6 | (((access* or provid*) adj3 (first aid or (medical adj (attention* or care)))) or ((clean* or sterile) adj2 (bandag* or blade* or cutt* or equipment or instrument* or rarisk zor* or wound*)) or dialectical behavio?r therap* or ((educat* or information* or instruct* or learn* or pamphlet*) adj3 (cut* or sever*) adj3 (arter* or nerve* or tendon*)) or ((advice or advis* or educat* or information* or learn* or pamphlet*) adj5 (infection* or safety or scar* or woundcare or wound care)) or damage limitation).ti,ab. |
| 7 | ((comfort* adj3 (intervention* or manag* or strateg* or technique* or tool*)) or self comfort*).ti,ab. |
| 8 | ((cuddle adj2 tedd*) or (strok* adj2 pet*)).ti,ab. |
| 9 | emergency box.ti,ab. |
| 10 | ((have or take) adj2 (bath* or shower*)).ti,ab. |
| 11 | (hug* adj2 (person* or someone or themselv* or yourself)).ti,ab. |
| 12 | (massag* adj3 (arm* or hand* or leg* or feet)).ti,ab. |
| 13 | ((paint* adj2 nail*) or hairdresser* or (hair adj2 done)).ti,ab. |
| 14 | (chew* adj2 (ginger or ice)).ti,ab. |
| 15 | (((draw or write) adj2 skin*) or fake blood or marker pen* or red marker*).ti,ab. |
| 16 | (((elastic or rubber) adj band*) or ((flick* or ping* or snap*) adj2 band*)).ti,ab. |
| 17 | ((hit* or punch*) adj2 cushion*).ti,ab. |
| 18 | (listen* adj2 music).ti,ab. |
| 19 | (physical* adj3 (intervention* or strateg* or technique*)).ti,ab. |
| 20 | (scream adj2 loud*).ti,ab. |
| 21 | ((squeez* adj2 ice) or icecube* or ice cube*).ti,ab. |

| # | searches |
|---|---|
| 22 | (stress ball* or (pinch* adj2 skin)).ti,ab. |
| 23 | (keep* adj2 chart*).ti,ab. |
| 24 | (reward* adj3 (intervention* or strateg* or technique*)).ti,ab. |
| 25 | (reward* adj2 (themselve* or yoursel*)).ti,ab. |
| 26 | (baking or cooking).ti,ab. |
| 27 | (((call* or meet* or ring* or talk*) adj2 (famil* or friend*)) or (call in or callline* or call line* or help line* or helpline* or hotline* or hot line* or phone in or phonein or (caller*1 adj3 (interven* or program* or therap* or treat*)) or (talk* adj2 friend*) or ((phone* or telephone*) adj2 (friend* or support*)))).ti,ab. |
| 28 | (clear out or chores or housework* or house work or (tidy* adj2 (room or up*1))).ti,ab. |
| 29 | ((distract* adj4 (intervention* or manag* or strateg* or technique* or tool*)) or distractions or (((divert adj2 attention) or distract*) adj5 (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*))).ti,ab. |
| 30 | (juggl* or (learn adj2 skill*) or loom band* or sew or sewing or knit or knitting).ti,ab. |
| 31 | paper chain*.ti,ab. |
| 32 | (picture* adj2 cloud*).ti,ab. |
| 33 | (watch* adj2 (tv or television)).ti,ab. |
| 34 | (talk* adj3 feeling*).ti,ab. |
| 35 | (((control?ed or deep) adj breathing) or ((positive* adj2 (emotion* or therap* or think* or psycho*)) or (emotion* adj2 (cope or coping or psychotherap* or therap*))) or (damag* adj2 limit*) or (goal* adj2 set*) or therapeutic contract or ((cope* or coping) adj3 (approach* or assist* or coach* or educat* or help* or imagery or instruct* or interven* or learn* or manag* or modif* or program* or seminar* or strateg* or support* or teach* or technique* or therap* or train* or treat* or workshop* or work shop*))).ti,ab. |
| 36 | or/4-35 |
| 37 | (((automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*) adj3 (decreas* or minimis* or prevent* or reduc* or safe*) adj6 (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or train* or treat* or workshop* or work shop*)) or ((automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*) adj4 (((decreas* or diminish* or fall* or fell or less* or limit* or low or lower*) adj2 risk*) or less destruc* or less harmful or minimi* or more safe* or reduc*) adj8 (approach* or communicat* or counsel* or educat* or |

| # | searches |
|---|---|
|  | instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or work shop*))).ti,ab. |
| 38 | (*automutilation/ or exp *suicidal behavior/) and prevention.hw. |
| 39 | or/37-38 |
| 40 | exp animal assisted therapy/ or exp bath/ or exp community care/ or cooking/ or exp exercise/ or friend/ or housekeeping/ or leisure/ or exp recreation/ or exp massage/ or exp alternative medicine/ or music/ or patient comfort/ or  exp peer group/ or exp self care/ or art therapy/ or television/ or hotline/ or wound infection/ or first aid/ |
| 41 | (meditat* or relax* or yoga).ti,ab. |
| 42 | (active living or bicycling or ((a?robic* or physical*) adj (activit* or agil* or educat* or fitness*)) or (cycling not rapid cycling) or dance or dancing or gardening or hobby or hobbies or jogging or recreation* or running or sport* or swimming or tidying or walking or yoga).ti,ab. |
| 43 | ((self adj (care or instruct* or manag* or monitor* or regulat* or reinforc* or re inforc*)) or selfcare or selfinstruct* or selfmanag* or selfmonitor* or selfregulat* or (minimal adj (contact or guidance)) or (mutual adj (help or aid or support*))).ti,ab. |
| 44 | ((support* adj (based or cent* or focus?ed)) or (support* adj2 (approach* or educat* or friend* or family or instruct* or interven* or learn* or module* or network* or peer*1 or program* or strateg* or technique* or therap* or train* or treat* or workshop* or work shop*)) or ((community or emotion* or network* or organi?ation* or peer*) adj2 support*) or (network* adj2 (discuss* or exchang* or interact* or meeting*))).ti,ab. |
| 45 | (or/40-44) and 39 |
| 46 | or/36,45 |
| 47 | 3 and 46 |
| 48 | (animal/ not human/) or exp Animal Experiment/ or animal model/ or exp Experimental Animal/ or nonhuman/ or exp Rodent/ or (rat or rats or mouse or mice).ti. |
| 49 | 47 not 48 |
| 50 | limit 49 to yr="2000-current" |
| 51 | limit 50 to english language |

## Database(s): PsycINFO – OVID interface
Date of last search: 10th August 2020

| # | searches |
|---|---|
| 1 | self-injurious behavior/ or self-destructive behavior/ or self-inflicted wounds/ or self-mutilation/ or self-poisoning/ or exp suicide/ or suicidal ideation/ |
| 2 | (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*).ti,ab. |
| 3 | or/1-2 |

Self-harm: assessment, management and preventing recurrence: evidence review for harm minimisation strategies DRAFT (January 2022)

| # | searches |
|---|---|
| 4 | risk management/ |
| 5 | (((controlled or safe*) adj self harm) or (((nurs* adj2 present) or supervis*) adj2 (selfharm* or self harm)) or (harm adj (minimi* or reduc*))).ti,ab. or (harm* adj2 (minimi* or reduc*)).ti. or (((approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or work shop*) adj4 ((cut* or decreas* or diminish* or fall* or fell or less* or limit* or low or lower* or minimi* or reduc*) adj2 risk)).ti,ab. and 2) or ((((method* or strateg* or technique*) adj3 alternative* adj3 self harm) or selfharm or (less adj2 (destructive or harmful) adj3 (method* or strateg* or technique) adj3 (self harm or selfharm))).ti,ab. and 2) |
| 6 | (((access* or provid*) adj3 (first aid or (medical adj (attention* or care)))) or ((clean* or sterile) adj2 (bandag* or blade* or cutt* or equipment or instrument* or razor* or wound*)) or dialectical behavio?r therap* or ((educat* or information* or instruct* or learn* or pamphlet*) adj3 (cut* or sever*) adj3 (arter* or nerve* or tendon*)) or ((advice or advis* or educat* or information* or learn* or pamphlet*) adj5 (infection* or safety or scar* or woundcare or wound care)) or damage limitation).ti,ab. |
| 7 | ((comfort* adj3 (intervention* or manag* or strateg* or technique* or tool*)) or self comfort*).ti,ab. |
| 8 | ((cuddle adj2 tedd*) or (strok* adj2 pet*)).ti,ab. |
| 9 | emergency box.ti,ab. |
| 10 | ((have or take) adj2 (bath* or shower*)).ti,ab. |
| 11 | (hug* adj2 (person* or someone or themselv* or yourself)).ti,ab. |
| 12 | (massag* adj3 (arm* or hand* or leg* or feet)).ti,ab. |
| 13 | ((paint* adj2 nail*) or hairdresser* or (hair adj2 done)).ti,ab. |
| 14 | (chew* adj2 (ginger or ice)).ti,ab. |
| 15 | (((draw or write) adj2 skin*) or fake blood or marker pen* or red marker*).ti,ab. |
| 16 | (((elastic or rubber) adj band*) or ((flick* or ping* or snap*) adj2 band*)).ti,ab. |
| 17 | ((hit* or punch*) adj2 cushion*).ti,ab. |
| 18 | (listen* adj2 music).ti,ab. |
| 19 | (physical* adj3 (intervention* or strateg* or technique*)).ti,ab. |
| 20 | (scream adj2 loud*).ti,ab. |
| 21 | ((squeez* adj2 ice) or icecube* or ice cube*).ti,ab. |
| 22 | (stress ball* or (pinch* adj2 skin)).ti,ab. |
| 23 | (keep* adj2 chart*).ti,ab. |
| 24 | (reward* adj3 (intervention* or strateg* or technique*)).ti,ab. |
| 25 | (reward* adj2 (themselve* or yoursel*)).ti,ab. |
| 26 | (baking or cooking).ti,ab. |
| 27 | (((call* or meet* or ring* or talk*) adj2 (famil* or friend*)) or (call in or callline* or call line* or help line* or helpline* or hotline* or hot line* or phone in or phonein or (caller*1 adj3 (interven* or program* or therap* or |

| # | searches |
|---|----------|
| | treat*)) or (talk* adj2 friend*) or ((phone* or telephone*) adj2 (friend* or support*)))).ti,ab. |
| 28 | (clear out or chores or housework* or house work or (tidy* adj2 (room or up*1))).ti,ab. |
| 29 | ((distract* adj4 (intervention* or manag* or strateg* or technique* or tool*)) or distractions or (((divert adj2 attention) or distract*) adj5 (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*)))).ti,ab. |
| 30 | (juggl* or (learn adj2 skill*) or loom band* or sew or sewing or knit or knitting).ti,ab. |
| 31 | paper chain*.ti,ab. |
| 32 | (picture* adj2 cloud*).ti,ab. |
| 33 | (watch* adj2 (tv or television)).ti,ab. |
| 34 | (talk* adj3 feeling*).ti,ab. |
| 35 | (((control?ed or deep) adj breathing) or ((positive* adj2 (emotion* or therap* or think* or psycho*)) or (emotion* adj2 (cope or coping or psychotherap* or therap*))) or (damag* adj2 limit*) or (goal* adj2 set*) or therapeutic contract or ((cope* or coping) adj3 (approach* or assist* or coach* or educat* or help* or imagery or instruct* or interven* or learn* or manag* or modif* or program* or seminar* or strateg* or support* or teach* or technique* or therap* or train* or treat* or workshop* or work shop*))).ti,ab. |
| 36 | or/4-35 |
| 37 | (((automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*) adj3 (decreas* or minimis* or prevent* or reduc* or safe*) adj6 (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or train* or treat* or workshop* or work shop*)) or ((automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*) adj4 (((decreas* or diminish* or fall* or fell or less* or limit* or low or lower*) adj2 risk*) or less destruc* or less harmful or minimi* or more safe* or reduc*) adj8 (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or work shop*))).ti,ab. |
| 38 | exp self-injurious behavior/pc or self mutilation/pc or suicide/pc or suicidal ideation/pc or suicide, attempted/pc or suicide, completed/pc |
| 39 | or/37-38 |
| 40 | animal assisted therapy/ or social networks/ or food preparation/ or exp exercise/ or friendship/ or household management/ or exp leisure time/ or |

| # | searches |
|---|---|
| | exp recreation/ or massage/ or mind-body therapy/ or music/ or music therapy/ or peer relations/ or self care/ or exp self help techniques/ or exp creative arts therapy/ or television viewing/ or hot line services/ or (wounds/ and educat*).sh. |
| 41 | (meditat* or relax* or yoga).ti,ab. |
| 42 | (active living or bicycling or ((a?robic* or physical*) adj (activit* or agil* or educat* or fitness*)) or (cycling not rapid cycling) or dance or dancing or gardening or hobby or hobbies or jogging or recreation* or running or sport* or swimming or tidying or walking or yoga).ti,ab. |
| 43 | ((self adj (care or instruct* or manag* or monitor* or regulat* or reinforc* or re inforc*)) or selfcare or selfinstruct* or selfmanag* or selfmonitor* or selfregulat* or (minimal adj (contact or guidance)) or (mutual adj (help or aid or support*))).ti,ab. |
| 44 | ((support* adj (based or cent* or focus?ed)) or (support* adj2 (approach* or educat* or friend* or family or instruct* or interven* or learn* or module* or network* or peer*1 or program* or strateg* or technique* or therap* or train* or treat* or workshop* or work shop*)) or ((community or emotion* or network* or organi?ation* or peer*) adj2 support*) or (network* adj2 (discuss* or exchang* or interact* or meeting*))).ti,ab. |
| 45 | (or/40-44) and 39 |
| 46 | or/36,45 |
| 47 | 3 and 46 |
| 48 | limit 47 to yr="2000-current" |
| 49 | limit 48 to english language |

## Database(s): Cochrane Library - Wiley interface

Cochrane Database of Systematic Reviews, Issue 8 of 12, August 2020; Cochrane Central Register of Controlled Trials, Issue 8 of 12, August 2020
Date of last search: 10th August 2020

| # | searches |
|---|---|
| 1 | MeSH descriptor: [poisoning] this term only |
| 2 | MeSH descriptor: [self-injurious behavior] explode all trees |
| 3 | MeSH descriptor: [self mutilation] this term only |
| 4 | MeSH descriptor: [suicide] this term only |
| 5 | MeSH descriptor: [suicidal ideation] this term only |
| 6 | MeSH descriptor: [suicide, attempted] this term only |
| 7 | MeSH descriptor: [suicide, completed] this term only |
| 8 | (automutilat* or "auto mutilat*" or cutt* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*):ti,ab. |
| 9 | {or #1-#8} |
| 10 | MeSH descriptor: [risk management] this term only |
| 11 | MeSH descriptor: [risk reduction behavior] this term only |

| # | searches |
|---|---|
| 12 | (((controlled or safe*) next "self harm") or (((nurs* near/2 present) or supervis*) near/2 (selfharm* or "self harm")) or (harm next (minimi* or reduc*))):ti,ab. or (harm* near/2 (minimi* or reduc*)):ti. or (((approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or "work shop*") near/4 ((cut* or decreas* or diminish* or fall* or fell or less* or limit* or low or lower* or minimi* or reduc*) near/2 risk)):ti,ab.) or ((((method* or strateg* or technique*) near/3 alternative* near/3 "self harm") or selfharm or (less near/2 (destructive or harmful) near/3 (method* or strateg* or technique) near/3 (self harm or selfharm))):ti,ab.) |
| 13 | #12 and #8 |
| 14 | (((access* or provid*) near/3 ("first aid" or (medical next (attention* or care)))) or ((clean* or sterile) near/2 (bandag* or blade* or cutt* or equipment or instrument* or razor* or wound*)) or "dialectical behavio?r" therap* or ((educat* or information* or instruct* or learn* or pamphlet*) near/3 (cut* or sever*) near/3 (arter* or nerve* or tendon*)) or ((advice or advis* or educat* or information* or learn* or pamphlet*) near/5 (infection* or safety or scar* or woundcare or "wound care")) or "damage limitation"):ti,ab. |
| 15 | ((comfort* near/3 (intervention* or manag* or strateg* or technique* or tool*)) or "self comfort*"):ti,ab. |
| 16 | ((cuddle near/2 tedd*) or (strok* near/2 pet*)):ti,ab. |
| 17 | "emergency box":ti,ab. |
| 18 | ((have or take) near/2 (bath* or shower*)):ti,ab. |
| 19 | (hug* near/2 (person* or someone or themselv* or yourself)):ti,ab. |
| 20 | (massag* near/3 (arm* or hand* or leg* or feet)):ti,ab. |
| 21 | ((paint* near/2 nail*) or hairdresser* or (hair near/2 done)):ti,ab. |
| 22 | (chew* near/2 (ginger or ice)):ti,ab. |
| 23 | (((draw or write) near/2 skin*) or "fake blood" or "marker pen*" or "red marker*"):ti,ab. |
| 24 | (((elastic or rubber) next band*) or ((flick* or ping* or snap*) near/2 band*)):ti,ab. |
| 25 | ((hit* or punch*) near/2 cushion*):ti,ab. |
| 26 | (listen* near/2 music):ti,ab. |
| 27 | (physical* near/3 (intervention* or strateg* or technique*)):ti,ab. |
| 28 | (scream near/2 loud*):ti,ab. |
| 29 | ((squeez* near/2 ice) or icecube* or "ice cube*"):ti,ab. |
| 30 | ("stress ball*" or (pinch* near/2 skin)):ti,ab. |
| 31 | (keep* near/2 chart*):ti,ab. |
| 32 | (reward* near/3 (intervention* or strateg* or technique*)):ti,ab. |
| 33 | (reward* near/2 (themselve* or yoursel*)):ti,ab. |
| 34 | (baking or cooking):ti,ab. |
| 35 | (((call* or meet* or ring* or talk*) near/2 (famil* or friend*)) or ("call in" or callline* or "call line*" or "help line*" or helpline* or hotline* or "hot line*" or "phone in" or phonein or (caller* near/3 (interven* or program* or therap* or |

| # | searches |
|---|---|
| | treat*)) or (talk* near/2 friend*) or ((phone* or telephone*) near/2 (friend* or support*)))):ti,ab. |
| 36 | ("clear out" or chores or housework* or "house work" or (tidy* near/2 (room or up*))):ti,ab. |
| 37 | ((distract* near/4 (intervention* or manag* or strateg* or technique* or tool*)) or distractions or (((divert near/2 attention) or distract*) near/5 (automutilat* or "auto mutilat*" or cutt* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*))):ti,ab. |
| 38 | (juggl* or (learn near/2 skill*) or "loom band*" or sew or sewing or knit or knitting):ti,ab. |
| 39 | "paper chain*":ti,ab. |
| 40 | (picture* near/2 cloud*):ti,ab. |
| 41 | (watch* near/2 (tv or television)):ti,ab. |
| 42 | (talk* near/3 feeling*):ti,ab. |
| 43 | (((control?ed or deep) next breathing) or ((positive* near/2 (emotion* or therap* or think* or psycho*)) or (emotion* near/2 (cope or coping or psychotherap* or therap*))) or (damag* near/2 limit*) or (goal* near/2 set*) or "therapeutic contract" or ((cope* or coping) near/3 (approach* or assist* or coach* or educat* or help* or imagery or instruct* or interven* or learn* or manag* or modif* or program* or seminar* or strateg* or support* or teach* or technique* or therap* or train* or treat* or workshop* or "work shop*"))):ti,ab. |
| 44 | #10 or #11 or #13 |
| 45 | {OR #14-#43} |
| 46 | #44 or #45 |
| 47 | (((automutilat* or "auto mutilat*" or cutt* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*) near/3 (decreas* or minimis* or prevent* or reduc* or safe*) near/6 (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or train* or treat* or workshop* or "work shop*")) or ((automutilat* or "auto mutilat*" or cutt* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*) near/4 (((decreas* or diminish* or fall* or fell or less* or limit* or low or lower*) near/2 risk*) or "less destruc*" or "less harmful" or minimi* or "more safe*" or reduc*) near/8 (approach* or communicat* or counsel* or educat* or instruct* or interven* or learn* or manag* or module* or network* or program* or psychoanaly* or psychotherap* or rehab* or skill* or strateg* or support* or taught or teach* or technique* or therap* or tool* or train* or treat* or workshop* or "work shop*"))):ti,ab. |

| # | searches |
|---|---|
| 48 | MeSH descriptor: [exp self-injurious behavior ] explode all trees and with qualifier(s): [prevention & control - PC] |
| 49 | MeSH descriptor: [ self mutilation ] this term only and with qualifier(s): [prevention & control - PC] |
| 50 | MeSH descriptor: [ suicide ] this term only and with qualifier(s): [prevention & control - PC] |
| 51 | MeSH descriptor: [ suicidal ideation ] this term only and with qualifier(s): [prevention & control - PC] |
| 52 | MeSH descriptor: [ suicide, attempted ] this term only and with qualifier(s): [prevention & control - PC] |
| 53 | MeSH descriptor: [suicide, completed ] this term only and with qualifier(s): [prevention & control - PC] |
| 54 | {OR #47-#53} |
| 55 | MeSH descriptor: [animal assisted therapy] this term only |
| 56 | MeSH descriptor: [baths] this term only |
| 57 | MeSH descriptor: [community networks] this term only |
| 58 | MeSH descriptor: [cooking] this term only |
| 59 | MeSH descriptor: [exercise] explode all trees |
| 60 | MeSH descriptor: [friends] this term only |
| 61 | MeSH descriptor: [housekeeping] this term only |
| 62 | MeSH descriptor: [leisure activities] explode all trees |
| 63 | MeSH descriptor: [massage] this term only |
| 64 | MeSH descriptor: [ mind-body therapies] explode all trees |
| 65 | MeSH descriptor: [music] this term only |
| 66 | MeSH descriptor: [patient comfort ] this term only |
| 67 | MeSH descriptor: [peer group] this term only |
| 68 | MeSH descriptor: [self care] this term only |
| 69 | MeSH descriptor: [self help groups] this term only |
| 70 | MeSH descriptor: [self management] this term only |
| 71 | MeSH descriptor: [sensory art therapies] explode all trees |
| 72 | MeSH descriptor: [television] this term only |
| 73 | hotline*:kw. |
| 74 | ((first aid or wound infection) and educat*):kw. |
| 75 | MeSH descriptor: [first aid] this term only and with qualifier(s): [education – ED] |
| 76 | (meditat* or relax* or yoga):ti,ab. |
| 77 | ("active living" or bicycling or ((a?robic* or physical*) next (activit* or agil* or educat* or fitness*)) or (cycling not "rapid cycling") or dance or dancing or gardening or hobby or hobbies or jogging or recreation* or running or sport* or swimming or tidying or walking or yoga):ti,ab. |
| 78 | ((self next (care or instruct* or manag* or monitor* or regulat* or reinforc* or re inforc*)) or selfcare or selfinstruct* or selfmanag* or selfmonitor* or selfregulat* or (minimal next (contact or guidance)) or (mutual next (help or aid or support*))):ti,ab. |

| # | searches |
|---|---|
| 79 | ((support*next (based or cent* or focus?ed)) or (support* near/2 (approach* or educat* or friend* or family or instruct* or interven* or learn* or module* or network* or peer* or program* or strateg* or technique* or therap* or train* or treat* or workshop* or "work shop*")) or ((community or emotion* or network* or organi?ation* or peer*) near/2 support*) or (network* near/2 (discuss* or exchang* or interact* or meeting*))):ti,ab. |
| 80 | {OR #55-#79} |
| 81 | #46 or (#54 and #80) |
| 82 | (#9 and #81) with Cochrane Library publication date Between Jan 2000 and Aug 2020 |

## Database(s): CDSR and HTA – CRD interface
Date of last search: 10th August 2020

| # | Searches |
|---|---|
| 1 | MeSH descriptor: poisoning IN CDSR, HTA |
| 2 | MeSH descriptor: self-injurious behavior EXPLODE ALL TREES IN CDSR, HTA |
| 3 | MeSH descriptor: self mutilation IN CDSR, HTA |
| 4 | MeSH descriptor: suicide IN CDSR, HTA |
| 5 | MeSH descriptor: suicidal ideation IN CDSR, HTA |
| 6 | MeSH descriptor: suicide, attempted IN CDSR, HTA |
| 7 | MeSH descriptor: suicide, completed IN CDSR, HTA |
| 8 | (automutilat* or "auto mutilat*" or cutt* or (self near2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*) IN CDSR, HTA |
| 9 | (#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8) from 2000 to 2020 |

## Economic

A global, population based search was undertaken to find for economic evidence covering all parts of the guideline.

## Database(s): MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily – OVID interface
Date of last search: 12th August 2021

| # | Searches |
|---|---|
| 1 | poisoning/ or exp self-injurious behavior/ or self mutilation/ or suicide/ or suicidal ideation/ or suicide, attempted/ or suicide, completed/ |
| 2 | (automutilat* or auto mutilat* or cutt* or (self adj2 cut*) or selfdestruct* or self destruct* or selfharm* or self harm* or selfimmolat* or self immolat* or selfinflict* or self inflict* or selfinjur* or self injur* or selfmutilat* or self mutilat* or selfpoison* or self poison* or selfwound* or self wound* or suicid*).ti,ab. |
| 3 | or/1-2 |
| 4 | Economics/ |

| # | Searches |
|---|---|
| 5 | Value of life/ |
| 6 | exp "Costs and Cost Analysis"/ |
| 7 | exp Economics, Hospital/ |
| 8 | exp Economics, Medical/ |
| 9 | Economics, Nursing/ |
| 10 | Economics, Pharmaceutical/ |
| 11 | exp "Fees and Charges"/ |
| 12 | exp Budgets/ |
| 13 | budget*.ti,ab. |
| 14 | cost*.ti. |
| 15 | (economic* or pharmaco?economic*).ti. |
| 16 | (price* or pricing*).ti,ab. |
| 17 | (cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab. |
| 18 | (financ* or fee or fees).ti,ab. |
| 19 | (value adj2 (money or monetary)).ti,ab. |
| 20 | Quality-Adjusted Life Years/ |
| 21 | Or/4-20 |
| 22 | 3 and 21 |
| 23 | limit 22 to yr="2000 -current" |

**Database(s): Embase and Emcare – OVID interface**
Date of last search: 12th August 2021

| # | searches |
|---|---|
| 1 | automutilation/ or exp suicidal behavior/ |
| 2 | (auto mutilat* or automutilat* or self cut* or selfcut* or self destruct* or selfdestruct* or self harm* or selfharm* or self immolat* or selfimmolat* or self inflict* or selfinflict* or self injur* or selfinjur* or self mutilat* or selfmutilat* or self poison* or selfpoison* or suicid*).ti,ab. |
| 3 | or/1-2 |
| 4 | health economics/ |
| 5 | exp economic evaluation/ |
| 6 | exp health care cost/ |
| 7 | exp fee/ |
| 8 | budget/ |
| 9 | funding/ |
| 10 | budget*.ti,ab. |
| 11 | cost*.ti. |
| 12 | (economic* or pharmaco?economic*).ti. |
| 13 | (price* or pricing*).ti,ab. |

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| # | searches |
|---|---|
| 14 | (cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab. |
| 15 | (financ* or fee or fees).ti,ab. |
| 16 | (value adj2 (money or monetary)).ti,ab. |
| 17 | Quality-Adjusted Life Year/ |
| 18 | Or/4-17 |
| 19 | 3 and 18 |
| 20 | limit 19 to yr="2000 -current" |

**Database(s): Cochrane Library - Wiley interface**
Cochrane Central Register of Controlled Trials, Issue 8 of 12, August 2021
Date of last search: 12th August 2021

| # | Searches |
|---|---|
| 1 | MeSH descriptor: [poisoning] this term only |
| 2 | MeSH descriptor: [self-injurious behavior] explode all trees |
| 3 | MeSH descriptor: [self mutilation] this term only |
| 4 | MeSH descriptor: [suicide] this term only |
| 5 | MeSH descriptor: [suicidal ideation] this term only |
| 6 | MeSH descriptor: [suicide, attempted] this term only |
| 7 | MeSH descriptor: [suicide, completed] this term only |
| 8 | (automutilat* or "auto mutilat*" or cutt* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*):ti,ab. |
| 9 | {or #1-#8} |
| 10 | MeSH descriptor: [Economics] this term only |
| 11 | MeSH descriptor: [Value of life] this term only |
| 12 | MeSH descriptor: [Costs and Cost Analysis] explode all trees |
| 13 | MeSH descriptor: [Economics, Hospital] explode all trees |
| 14 | MeSH descriptor: [Economics, Medical] explode all trees |
| 15 | MeSH descriptor: [Economics, Nursing] this term only |
| 16 | MeSH descriptor: [Economics, Pharmaceutical] this term only |
| 17 | MeSH descriptor: [Fees and Charges"] |
| 18 | MeSH descriptor: [Budgets] this term only |
| 19 | budget*:ti,ab. |
| 20 | cost*.ti. |
| 21 | (economic* or pharmaco?economic*):ti. |
| 22 | (price* or pricing*):ti,ab. |
| 23 | (cost* near/2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)):ab. |
| 24 | (financ* or fee or fees):ti,ab. |
| 25 | (value near/2 (money or monetary)):ti,ab. |
| 26 | MeSH descriptor: [Quality-Adjusted Life Years] this term only |

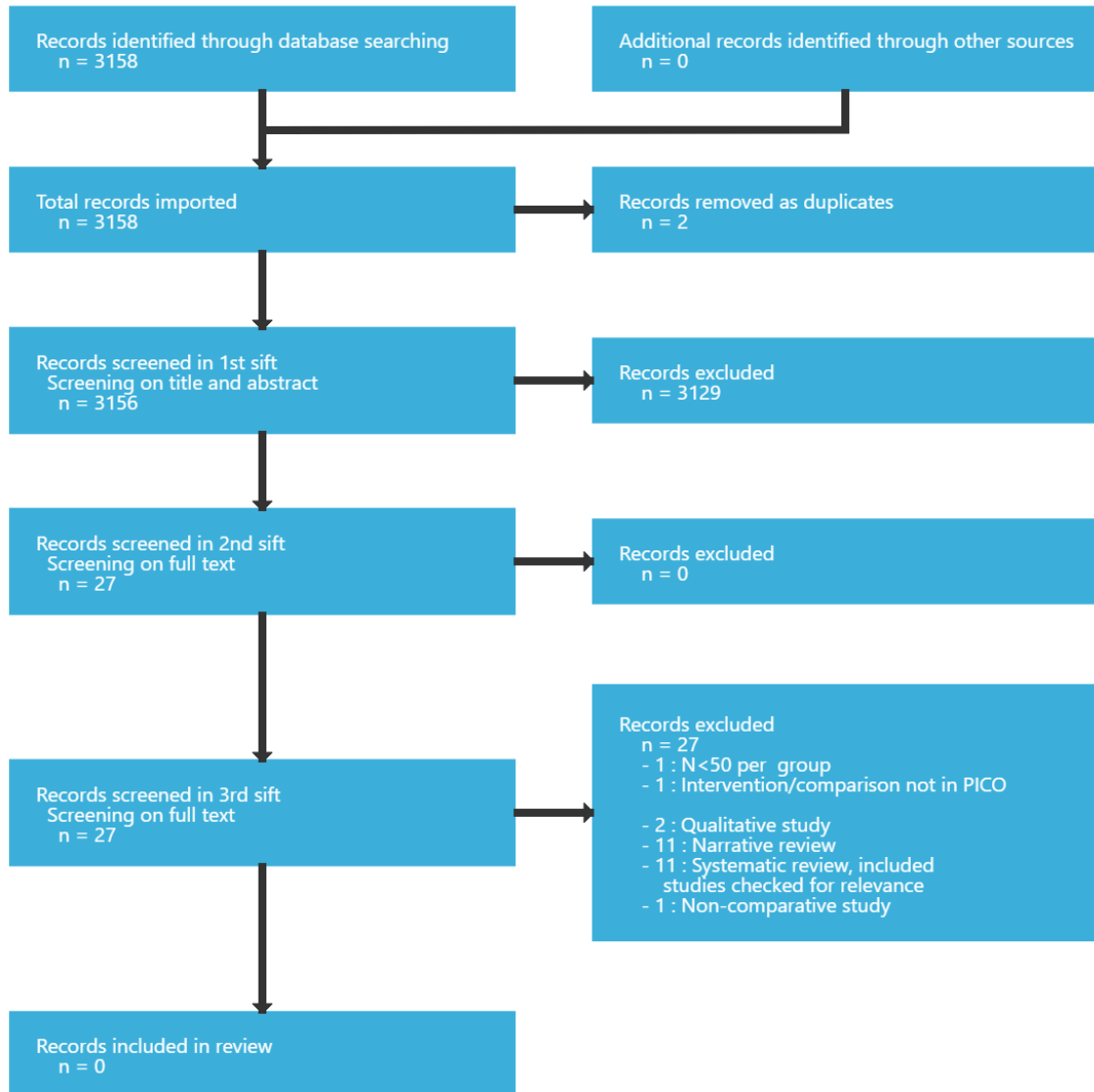| # | Searches |
|---|----------|
| 27 | {OR #10-#26} |
| 28 | (#9 and #27) with Cochrane Library publication date Between Jan 2000 and Aug 2021 |

## Database(s): NHS EED and HTA – CRD interface
Date of last search: 12th August 2021

| # | Searches |
|---|----------|
| 1 | MeSH descriptor: poisoning IN NHSEED, HTA |
| 2 | MeSH descriptor: self-injurious behavior EXPLODE ALL TREES IN NHSEED, HTA |
| 3 | MeSH descriptor: self mutilation IN NHSEED, HTA |
| 4 | MeSH descriptor: suicide IN NHSEED, HTA |
| 5 | MeSH descriptor: suicidal ideation IN NHSEED, HTA |
| 6 | MeSH descriptor: suicide, attempted IN NHSEED, HTA |
| 7 | MeSH descriptor: suicide, completed IN NHSEED, HTA |
| 8 | (automutilat* or "auto mutilat*" or cutt* or (self near2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or selfwound* or "self wound*" or suicid*) IN NHSEED, HTA |
| 9 | (#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8) from 2000 to 2021 |

# Appendix C  Clinical evidence study selection

**Study selection for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

**Figure 1: Study selection flow chart**

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# Appendix D  Evidence tables

**Evidence tables for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

No studies were identified that met the inclusion criteria.

# Appendix E  Forest plots

**Forest plots for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

No studies were identified that met the inclusion criteria.

# Appendix F  Modified GRADE tables

**Modified GRADE tables for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**
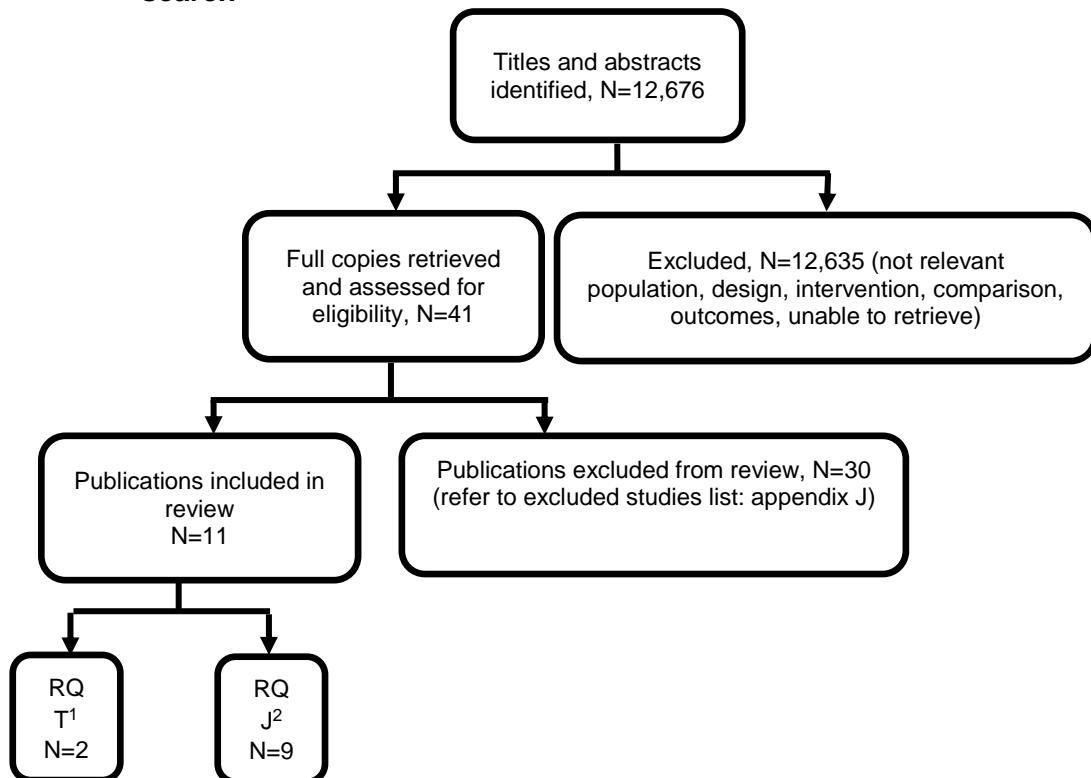
No studies were identified that met the inclusion criteria.

# Appendix G Economic evidence study selection

**Study selection for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

A global health economics search was undertaken for all areas covered in the guideline. Figure 2 shows the flow diagram of the selection process for economic evaluations of interventions and strategies associated with the care of people who have self-harmed.

**Figure 2: Flow diagram of economic article selection for global health economic search**

Titles and abstracts identified, N=12,676

Full copies retrieved and assessed for eligibility, N=41

Excluded, N=12,635 (not relevant population, design, intervention, comparison, outcomes, unable to retrieve)

Publications included in review N=11

Publications excluded from review, N=30 (refer to excluded studies list: appendix J)

RQ T[1] N=2

RQ J[2] N=9

*Abbreviations: RQ: Research question*
*Notes:*
*1 What are the most effective models of care for people who have self-harmed?*
*2 What psychological and psychosocial interventions (including safety plans and electronic health-based interventions) are effective for people who have self-harmed?*

# Appendix H  Economic evidence tables

**Economic evidence tables for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

No evidence was identified which was applicable to this review question.

# Appendix I   Economic model

**Economic model for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

No economic analysis was conducted for this review question.

# Appendix J  Excluded studies

**Excluded studies for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

**Excluded effectiveness studies**

**Table 3:  Excluded studies and reasons for their exclusion**

| Study | Code [Reason] |
|---|---|
| Barker, E.; Kolves, K.; De Leo, D. (2014) Management of suicidal and self-harming behaviors in prisons: systematic literature review of evidence-based activities. Archives of Suicide Research 18: 227-40 | - Systematic review, included studies checked for relevance |
| Birch, S., Cole, S., Hunt, K. et al. (2011) Self-harm and the positive risk taking approach. Can being able to think about the possibility of harm reduce the frequency of actual harm?. Journal of Mental Health 20: 293-303 | - N<50 per group<br>*Total N=45* |
| Comtois, K. A. (2002) A review of interventions to reduce the prevalence of parasuicide. Psychiatric Services 53: 1138-44 | - Narrative review |
| Congdon, P. and Clarke, T. (2005) Assessing intervention effects in a community-based trial to reduce self-harm: A methodological case study. Public Health 119: 1011-1015 | - Intervention/comparison not in PICO<br>*Routine care + a psychosocial assessment + a negotiated care plan + direct access to a case manager versus routine care alone* |
| Edwards, S. D. and Hewitt, J. (2011) Can supervising self-harm be part of ethical nursing practice?. Nursing Ethics 18: 79-87 | - Narrative review |
| Ganeshalingam, Y. (2008) Assessing risk and managing patients who deliberately self harm. British Journal of Hospital Medicine 69: M156-7 | - Narrative review |
| Glenn, Catherine R., Esposito, Erika C., Porter, Andrew C. et al. (2019) Evidence base update of psychosocial treatments for self-injurious thoughts and behaviors in youth. Journal of Clinical Child and Adolescent Psychology 48: 357-392 | - Systematic review, included studies checked for relevance |
| Gonzales, A. H. and Bergstrom, L. (2013) Adolescent non-suicidal self-injury (NSSI) interventions. Journal of Child and Adolescent Psychiatric Nursing 26: 124-130 | - Systematic review, included studies checked for relevance<br>*Not really meeting the criteria to be a systematic review, but included studies checked anyway* |
| Hanratty, Donal, Kilicaslan, Jan, Wilding, Helen et al. (2019) A systematic review of efficacy of Collaborative Assessment and Management of Suicidality (CAMS) in managing suicide risk and deliberate self-harm in adult populations. Australasian Psychiatry 27: 559-564 | - Systematic review, included studies checked for relevance |

| Study | Code [Reason] |
|---|---|
| Holley, C., Horton, R., Cartmail, L. et al. (2012) Self-injury and harm minimisation on acute wards. Nursing standard (Royal College of Nursing (Great Britain) : 1987) 26: 50-56; quiz 58 | - Narrative review |
| Horgan, Aine (2013) Review: Service user involvement in the evaluation of psycho-social intervention for self-harm: A systematic literature review. Journal of Research in Nursing 18: 131-132 | - Narrative review |
| Howson, S. and Huline-Dickens, S. (2016) Do interventions reduce the risk of repeat self-harm or suicide in young people?: Commentary on... cochrane corner. BJ Psych Advances 22: 287-291 | - Narrative review |
| Inckle, Kay (2011) The first cut is the deepest: A harm-reduction approach to self-injury. Social Work in Mental Health 9: 364-378 | - Qualitative study |
| Iyengar, U., Snowden, N., Asarnow, J. R. et al. (2018) A further look at therapeutic interventions for suicide attempts and self-harm in adolescents: An updated systematic review of randomized controlled trials. Frontiers in Psychiatry 9: 1-16 | - Systematic review, included studies checked for relevance |
| Mumme, T. A.; Mildred, H.; Knight, T. (2017) How Do People Stop Non-Suicidal Self-Injury? A Systematic Review. Archives of suicide research : official journal of the International Academy for Suicide Research 21: 470-489 | - Systematic review, included studies checked for relevance |
| Ougrin, D., Tranah, T., Leigh, E. et al. (2012) Practitioner review: Self-harm in adolescents. Journal of child psychology and psychiatry, and allied disciplines 53: 337-350 | - Systematic review, included studies checked for relevance |
| Ougrin, D., Tranah, T., Stahl, D. et al. (2015) Therapeutic interventions for suicide attempts and self-harm in adolescents: Systematic review and meta-analysis. Journal of the American Academy of Child and Adolescent Psychiatry 54: 97-107.e2 | - Systematic review, included studies checked for relevance |
| Padmanathan, Prianka, Hall, Katherine, Moran, Paul et al. (2020) Prevention of suicide and reduction of self-harm among people with substance use disorder: A systematic review and meta-analysis of randomised controlled trials. Comprehensive Psychiatry 96 | - Systematic review, included studies checked for relevance |
| Pembroke, L. (2006) Limiting self harm. Emergency nurse : the journal of the RCN Accident and Emergency Nursing Association 14: 8-10 | - Narrative review |

| Study | Code [Reason] |
|---|---|
| Pengelly, Nicky, Ford, Barry, Blenkiron, Paul et al. (2008) Harm minimisation after repeated self-harm: Development of a trust handbook. Psychiatric Bulletin 32: 60-63 | - Qualitative study |
| Pickard, H. and Pearce, S. (2017) Balancing costs and benefits: a clinical perspective does not support a harm minimisation approach for self-injury outside of community settings. Journal of medical ethics 43: 324-326 | - Narrative review |
| Shaw, C. (2012) Harm-minimisation for self-harm. Mental health today (Brighton, England): 19-21 | - Narrative review |
| Sullivan, P. J. (2017) Should healthcare professionals sometimes allow harm? The case of self-injury. Journal of medical ethics 43: 319-323 | - Narrative review |
| Sullivan, Patrick Joseph (2019) Risk and responding to self injury: Is harm minimisation a step too far?. The Journal of Mental Health Training, Education and Practice 14: 1-11 | - Narrative review |
| Timberlake, L. M.; Beeber, L. S.; Hubbard, G. (2020) Nonsuicidal Self-Injury: Management on the Inpatient Psychiatric Unit[Formula: see text. Journal of the American Psychiatric Nurses Association 26: 10-26 | - Systematic review, included studies checked for relevance |
| Turner, B. J.; Austin, S. B.; Chapman, A. L. (2014) Treating nonsuicidal self-injury: A systematic review of psychological and pharmacological interventions. Canadian Journal of Psychiatry 59: 576-585 | - Systematic review, included studies checked for relevance |
| Wadman, R., Nielsen, E., O'Raw, L. et al. (2019) "These Things Don't Work." Young People's Views on Harm Minimization Strategies as a Proxy for Self-Harm: A Mixed Methods Approach. Archives of suicide research : official journal of the International Academy for Suicide Research: 1-18 | - Non-comparative study |

**Excluded economic studies**

**Table 4: Excluded studies from the guideline economic review**

| Study | Reason for Exclusion |
|---|---|
| Adrian, M., Lyon, A. R., Nicodimos, S., Pullmann, M. D., McCauley, E., Enhanced "Train and Hope" for Scalable, Cost-Effective Professional Development in Youth Suicide Prevention, Crisis, 39, 235-246, 2018 | Not relevant to any of the review questions in the guideline - this study examined the impact of an educational training ongoing intervention, and the effect of the post-training reminder system, on mental health practitioners' knowledge, attitudes, and behaviour surrounding suicide |

| Study | Reason for Exclusion |
|---|---|
|  | assessment and intervention. As well, this study was not a full health economic evaluation |
| Borschmann R, Barrett B, Hellier JM, et al. Joint crisis plans for people with borderline personality disorder: feasibility and outcomes in a randomised controlled trial. Br J Psychiatry. 2013;202(5):357-364. | Not relevant to any of the review questions in the guideline - this study examined the feasibility of recruiting and retaining adults with borderline personality disorder to a pilot randomised controlled trial investigating the potential efficacy and cost-effectiveness of using a joint crisis plan |
| Bustamante Madsen, L., Eddleston, M., Schultz Hansen, K., Konradsen, F., Quality Assessment of Economic Evaluations of Suicide and Self-Harm Interventions, Crisis, 39, 82-95, 2018 | Study design - this review of health economics studies has been excluded for this guideline, but its references have been hand-searched for any relevant health economic study |
| Byford, S., Barrett, B., Aglan, A., Harrington, V., Burroughs, H., Kerfoot, M., Harrington, R. C., Lifetime and current costs of supporting young adults who deliberately poisoned themselves in childhood and adolescence, Journal of Mental Health, 18, 297-306, 2009 | Study design – no comparative cost analysis |
| Byford, S., Leese, M., Knapp, M., Seivewright, H., Cameron, S., Jones, V., Davidson, K., Tyrer, P., Comparison of alternative methods of collection of service use data for the economic evaluation health care interventions, Health Economics, 16, 531-536, 2007 | Study design – no comparative cost analysis |
| Byford, Sarah, Barber, Julie A., Harrington, Richard, Barber, Baruch Beautrais Blough Brent Brodie Byford Carlson Chernoff Collett Fergusson Garland Goldberg Harman Harrington Hawton Huber Kazdin Kazdin Kerfoot Kerfoot Kerfoot Knapp Lindsey McCullagh Miller Netten Reynolds Sadowski Shaffer Simms Wu, Factors that influence the cost of deliberate self-poisoning in children and adolescents, Journal of Mental Health Policy and Economics, 4, 113-121, 2001 | Study design – no comparative cost analysis |
| Denchev, P., Pearson, J. L., Allen, M. H., Claassen, C. A., Currier, G. W., Zatzick, D. F., Schoenbaum, M., Modeling the cost-effectiveness of interventions to reduce suicide risk among hospital emergency department patients, Psychiatric Services, 69, 23-31, 2018 | Not relevant to any of the review questions in the guideline - this study estimated the cost-effectiveness of outpatient interventions (Postcards, Telephone outreach, Cognitive Behaviour Therapy) to reduce suicide risk among patients presenting to general hospital emergency departments |
| Dunlap, L. J., Orme, S., Zarkin, G. A., Arias, S. A., Miller, I. W., Camargo, C. A., Sullivan, A. F., Allen, M. H., Goldstein, A. B., Manton, A. P., Clark, R., Boudreaux, E. D., Screening and Intervention for Suicide Prevention: A Cost-Effectiveness Analysis of the ED-SAFE Interventions, Psychiatric services (Washington, D.C.), appips201800445, 2019 | Not relevant to any of the review questions in the guideline - this study estimated the cost-effectiveness of suicide screening followed by an intervention to identify suicidal individuals and prevent recurring self-harm |
| Fernando, S. M., Reardon, P. M., Ball, I. M., van Katwyk, S., Thavorn, K., Tanuseputro, P., Rosenberg, E., Kyeremanteng, K., Outcomes and Costs of Patients Admitted to the Intensive Care Unit Due to Accidental or Intentional Poisoning, Journal of Intensive Care Medicine, 35, 386-393, 2020 | Study design – no comparative cost analysis |

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| Study | Reason for Exclusion |
|---|---|
| Flood, C., Bowers, L., Parkin, D., Estimating the costs of conflict and containment on adult acute inpatient psychiatric wards, Nursing economic$, 26, 325-330, 324, 2008 | Study design – no comparative cost analysis |
| Fortune, Z., Barrett, B., Armstrong, D., Coid, J., Crawford, M., Mudd, D., Rose, D., Slade, M., Spence, R., Tyrer, P., Moran, P., Clinical and economic outcomes from the UK pilot psychiatric services for personality-disordered offenders, International Review of Psychiatry, 23, 61-9, 2011 | Not relevant to any of the review questions in the guideline |
| George, S., Javed, M., Hemington-Gorse, S., Wilson-Jones, N., Epidemiology and financial implications of self-inflicted burns, Burns, 42, 196-201, 2016 | Study design – no comparative cost analysis |
| Gunnell, D., Shepherd, M., Evans, M., Are recent increases in deliberate self-harm associated with changes in socio-economic conditions? An ecological analysis of patterns of deliberate self-harm in Bristol 1972-3 and 1995-6, Psychological medicine, 30, 1197-1203, 2000 | Study design - cost-of-illness study |
| Kapur, N., House, A., Dodgson, K., Chris, M., Marshall, S., Tomenson, B., Creed, F., Management and costs of deliberate self-poisoning in the general hospital: A multi-centre study, Journal of Mental Health, 11, 223-230, 2002 | Study design – no comparative cost analysis |
| Kapur, N., House, A., May, C., Creed, F., Service provision and outcome for deliberate self-poisoning in adults - Results from a six centre descriptive study, Social Psychiatry and Psychiatric Epidemiology, 38, 390-395, 2003 | Study design – no comparative cost analysis |
| Kinchin, I., Russell, A. M. T., Byrnes, J., McCalman, J., Doran, C. M., Hunter, E., The cost of hospitalisation for youth self-harm: differences across age groups, sex, Indigenous and non-Indigenous populations, Social Psychiatry and Psychiatric Epidemiology, 55, 425-434, 2020 | Study design – no comparative cost analysis |
| O'Leary, F. M., Lo, M. C. I., Schreuder, F. B., "Cuts are costly": A review of deliberate self-harm admissions to a district general hospital plastic surgery department over a 12-month period, Journal of Plastic, Reconstructive and Aesthetic Surgery, 67, e109-e110, 2014 | Study design – no comparative cost analysis |
| Olfson, M., Gameroff, M. J., Marcus, S. C., Greenberg, T., Shaffer, D., National trends in hospitalization of youth with intentional self-inflicted injuries, American Journal of Psychiatry, 162, 1328-1335, 2005 | Study design – no comparative cost analysis |
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| Study | Reason for Exclusion |
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| Ougrin, D., Corrigall, R., Poole, J., Zundel, T., Sarhane, M., Slater, V., Stahl, D., Reavey, P., Byford, S., Heslin, M., Ivens, J., Crommelin, M., Abdulla, Z., Hayes, D., Middleton, K., Nnadi, B., Taylor, E., Comparison of effectiveness and cost-effectiveness of an intensive community supported discharge service versus treatment as usual for adolescents with psychiatric emergencies: a randomised controlled trial, The Lancet Psychiatry, 5, 477-485, 2018 | Not self-harm. In addition, the interventions evaluated in this economic analysis (a supported discharge service provided by an intensive community treatment team compared to usual care) were not relevant to any review questions |
| Palmer, S., Davidson, K., Tyrer, P., Gumley, A., Tata, P., Norrie, J., Murray, H., Seivewright, H., The cost-effectiveness of cognitive behavior therapy for borderline personality disorder: results from the BOSCOT trial, Journal of Personality Disorders, 20, 466-481, 2006 | Not self-harm |
| Quinlivan L, Steeg S, Elvidge J, et al. Risk assessment scales to predict risk of hospital treated repeat self-harm: A cost-effectiveness modelling analysis. J Affect Disord. 2019;249:208-215. | Not relevant to any of the review questions in the guideline - this study estimated the cost-effectiveness of risk assessment scales versus clinical assessment for adults attending an emergency department following self-harm |
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| Smits, M. L., Feenstra, D. J., Eeren, H. V., Bales, D. L., Laurenssen, E. M. P., Blankers, M., Soons, M. B. J., Dekker, J. J. M., Lucas, Z., Verheul, R., Luyten, P., Day hospital versus intensive out-patient mentalisation-based treatment for borderline personality disorder: Multicentre randomised clinical trial, British Journal of Psychiatry, 216, 79-84, 2020 | Not self-harm |
| Tsiachristas, A., Geulayov, G., Casey, D., Ness, J., Waters, K., Clements, C., Kapur, N., McDaid, D., Brand, F., Hawton, K., Incidence and general hospital costs of self-harm across England: estimates based on the multicentre study of self-harm, Epidemiology & Psychiatric Science, 29, e108, 2020 | Study design – no comparative cost analysis |
| Tsiachristas, A., McDaid, D., Casey, D., Brand, F., Leal, J., Park, A. L., Geulayov, G., Hawton, K., General hospital costs in England of medical and psychiatric care for patients who self-harm: a retrospective analysis, The Lancet Psychiatry, 4, 759-767, 2017 | Study design – no comparative cost analysis |
| Tubeuf, S., Saloniki, E. C., Cottrell, D., Parental Health Spillover in Cost-Effectiveness Analysis: Evidence from Self-Harming Adolescents in England, PharmacoEconomics, 37, 513-530, 2019 | This study is not a separate study from one already included in the guideline for topic 5.2 (Cottrel 2018). This secondary analysis presents alternative parental health spillover quantification methods in the context of a randomised controlled trial comparing family therapy with treatment as usual as an intervention for self-harming adolescents of (Cottrel 2018), and discusses the practical limitations of those methods |

| Study | Reason for Exclusion |
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| 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., Wessely, S., Randomized controlled trial of brief cognitive behaviour therapy versus treatment as usual in recurrent deliberate self-harm: The POPMACT study, Psychological medicine, 33, 969-976, 2003 | Study design - no economic evaluation |
| Van Roijen, L. H., Sinnaeve, R., Bouwmans, C., Van Den Bosch, L., Cost-effectiveness and Cost-utility of Shortterm Inpatient Dialectical Behavior Therapy for Chronically Parasuicidal BPD (Young) Adults, Journal of Mental Health Policy and Economics, 18, S19-S20, 2015 | Conference abstract |
| van Spijker, B. A., Majo, M. C., Smit, F., van Straten, A., Kerkhof, A. J., Reducing suicidal ideation: cost-effectiveness analysis of a randomized controlled trial of unguided web-based self-help, Journal of medical Internet research, 14, e141, 2012 | Not self-harm |

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# Appendix K  Research recommendations – full details

**Research recommendations for review question: What is the effectiveness of harm minimisation strategies for people who have self-harmed?**

No research recommendations were made for this review question.