National Institute for Health and Care Excellence

Final

Self-harm: assessment, management and preventing recurrence

[E] Evidence review for assessment in nonspecialist settings

NICE guideline number NG225

Evidence review underpinning recommendations 1.7.1 to 1.7.27 and 1.8.1 to 1.8.12 and research recommendation 2 in the NICE guideline

September 2022

Final



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Assessment in non-specialist settings

Review question

How should assessment for people who have self-harmed be undertaken in non-specialist settings, such as

- primary care
- social care
- community pharmacy
- ambulances
- emergency departments (by non-specialist staff)
- schools, colleges and universities
- · the criminal justice system and immigration removal centres
- acute general hospitals?

Introduction

Frequently, people who have self-harmed initially present to or are identified by staff in non-specialist settings, including community, educational, healthcare, and secure settings. Assessment is a key stage in establishing a positive therapeutic relationship with health services and in ensuring that people receive the treatment that they need, both for their physical and mental health, but experiences of assessment by staff in non-specialist settings following self-harm are sometimes reported to be less than positive. The aim of this review is to identify how assessment should be undertaken in non-specialist settings.

Summary of the protocol

See Table 1 for a summary of the Population, Intervention, Comparison and Outcome (PICO) characteristics of this review.

Table 1: Summary of the protocol (PICO table)

Population

Inclusion:

All people who have self-harmed, including those with a mental health problem, neurodevelopmental disorder or a learning disability, who have presented to a non-specialist setting.

Exclusion:

- People displaying repetitive stereotypical self-injurious behaviour, for example head-banging in people with a significant learning disability
- People who have self-harmed who have presented to specialist settings

Intervention

Model of assessment A, for example:

- · assessment including principles of active listening,
- therapeutic assessment,
- comprehensive biopsychosocial assessment,
- assessment performed by different professions [such as nurses],
- culturally sensitive assessment

Comparator

Model of assessment B, for example:

- assessment not including principles of active listening,
- triage assessment,
- assessment performed by different professions [such as doctors],
- uniform assessment (that is, not taking culture into account)

Outcome	Critical
	Self-harm repetition (for example, self-poisoning or self-cutting)
	Service user satisfaction (dignity, compassion and respect)
	Suicide
	Important
	Quality of life
	Initiation of safeguarding procedures
	Distress
	Engagement with after-care

For further details see the review protocol in appendix A.

Methods and process

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

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

Effectiveness evidence

Included studies

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

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

Excluded studies

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

Summary of included studies

No studies were identified that met the inclusion criteria (and so there are no evidence tables Appendix D).

Summary of the evidence

No studies were identified that met the inclusion criteria (and so there are no GRADE tables in Appendix F).

Economic evidence

Included studies

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

Excluded studies

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

Economic model

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

Evidence statements

Economic

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

The committee's discussion and interpretation of the evidence

The outcomes that matter most

Self-harm repetition, suicide and service user satisfaction were prioritised as critical outcomes by the committee. Self-harm repetition and suicide were prioritised as critical outcomes because they are direct measures of any differential effectiveness associated with the types of assessment and captures both fatal and non-fatal self-harm. Service user satisfaction was chosen as a critical outcome due to the importance of delivering services which are centred on the patients' experiences and because patient satisfaction is likely to influence whether the patient engages with the intervention.

Quality of life, initiation of safeguarding procedures, distress, and engagement with after-care were considered important outcomes by the committee. Engagement with after-care was chosen as an important outcome because repetition of self-harm is common after initial assessment and the assessment may therefore have indicated a need for further care. However, if the type of assessment influences the likelihood of whether a person who has self-harmed attends follow-up sessions, then this will influence whether after-care will be effective. Quality of life was chosen as an important outcome as it is a multidimensional concept encompassing health-related outcomes beyond those of repeat self-harm or survival. Distress was chosen as an important outcome as, given that self-harm is an expression of personal distress, different assessment types may affect an individual's distress levels in different ways. Initiation of safeguarding procedures following assessment was considered an important outcome because repetition of self-harm is common after initial assessment. Assessment may identify individuals with immediate safety concerns for whom the initiation of safeguarding procedures may be beneficial.

The quality of the evidence

No studies were identified that met the inclusion criteria.

Given the lack of evidence, the committee prioritised this area for research as they wanted to review more evidence on the effectiveness of different models of assessment (see Appendix K).

Benefits and harms

There was no evidence on how assessment should be undertaken for people who have self-harmed in non-specialist settings, so the committee made recommendations based on their knowledge and experience. They agreed it was important to give advice regarding how assessment should generally be provided in different settings; however, the lack of evidence meant they were unable to be more specific about models of assessment.

The committee made recommendations in part split according to setting specialty, and in part split according to staff speciality. This was because both specialist and non-specialist staff work in some settings, such as Emergency Departments (EDs), making it difficult to define these settings as either specialist or non-specialist. The committee agreed that in these situations, staff with different levels of responsibility would provide different assessments for people who have self-harmed, regardless of setting type.

Principles for assessment and care by healthcare professionals and social care practitioners

The recommendation regarding principles of assessment by non-mental health professionals was based on best current practise, as well as the committee's experience and knowledge that assessment for people who have self-harmed should be collaborative and should prioritise preserving the person's dignity in order to minimise distress. Qualitative evidence from the review on information and support needs (Evidence report A) also showed that people who had self-harmed valued positive, compassionate support after an episode of selfharm. Based on their experience and qualitative evidence from the reviews on staff skills (Evidence reports P and R), the committee were also aware that a person's cultural background can influence their care and support preferences as well as the drivers for selfharm, and agreed this should be taken into account during assessments. The committee discussed the benefits and risks of removing means of self-harm, and agreed that while removing the means could prevent further physical harm, doing so without consent from the person often causes further distress. The committee therefore agreed that any professional should work with the person collaboratively to remove the means of self-harm, in order to preserve the person's dignity and minimise further distress, while also ensuring the safety of the person and the professional. The committee also discussed the fact that non-specialist professionals may find it difficult to determine a person's capacity and competence during an initial assessment, especially because they are unlikely to be providing a full psychosocial assessment. The committee therefore agreed, based on their knowledge and expertise, that professionals should seek advice from senior colleagues in such scenarios where there are concerns that may impact a person's ability to consent. The committee agreed on the importance of working collaboratively with the person to ensure their views are listened to in decision making. This would be particularly relevant in situations where there is a power imbalance between the professional and the person who has self-harmed – for example in prisons or secure settings. The recommendation was additionally based on the committee's knowledge that the person giving the assessment should seek information regarding the motive for self-harm and potential coping strategies, so that this information can be passed on to other health professionals. The committee agreed this would allow professionals to begin to gather useful information that can then be used to inform a full psychosocial assessment, increasing the likelihood for the person to engage with services and therefore preventing future self-harm.

The committee agreed all non-specialist staff, including healthcare professionals and social care practitioners and other professionals, should establish a number of presenting factors to inform the person's assessment and care. For example, injury severity should be assessed

so staff can prioritise the provision of physical care and prevent further physical damage. Assessment of the person's mental state and immediate safety could help to inform decisions made regarding the balance of autonomy and the person's safety, although the committee agreed it was still important to prioritise the use of least restrictive measures for the sake of de-escalation. Knowledge of safeguarding concerns would allow staff to make more informed decisions about, for example, the involvement of family members or carers, while establishing whether someone has a care plan is important to facilitate their usage. The committee agreed all non-specialist professionals should also be involved in the care of people who have self-harmed as much as possible but know when to refer them to mental health services to ensure the person receives comprehensive care. The committee agreed this recommendation sets out the most important aspects of assessment by all non-specialist staff, while more detailed recommendations were made in the setting-specific assessment sections of the guideline.

The committee agreed, based on their knowledge and expertise, that physical and mental health care should always be delivered concurrently as much as possible in order to prevent a delay in treatment and ensure the patient's mental or physical needs are not prioritised at the expense of the other. The governance recommendations that care procedures should be clearly set out and agreed are additionally based on the Healthcare Safety Information
Branch (HSIB) report on investigation into the provision of mental health care to patients presenting at the emergency department (2018), which found that clarity regarding service pathways and good communication between teams can result in successful safeguarding, de-escalation of mental health crises, and prevent immediate repeat self-harm.

The committee discussed the fact that non-specialist healthcare professionals and social care practitioners were often required to carry out immediate physical care for self-harm. They referred to existing guidance relating to poisoning, such as the BNF's and the UK National Poisons Information Service, and agreed that healthcare professionals should use this advice to ensure they provide the correct care for people who have self-poisoned.

The committee discussed their concerns that there was still misinformation about self-harm which could lead to the use of punitive or aversive treatment approaches such as denying assessment to people who have self-harmed. The committee agreed that the use of punitive or aversive approaches such as behaviour modification should be strongly recommended against despite the lack of evidence, based on their knowledge that such approaches are considered malpractice and often have harmful effects on people who have self-harmed, potentially leading to increased distress and repeat self-harm or suicide.

Assessment and care in primary care

The committee agreed that people presenting to primary care for self-harm should be referred to mental health services based on their expertise, but that any decisions made in this respect should always be done with the person's consent as well as the consent of their family members and carers if they are actively involved in the person's care. The committee agreed that referring people who had immediate safety concerns would be reassuring and ensure that people were in the most appropriate setting for their care, such as people who were highly distressed, or those who had distressed parents or carers. The committee acknowledged that non-specialist staff often rely on risk assessment tools and scales to assess whether a person needs referral to mental health professionals, and agreed that the alternative to using these would be for staff to use their clinical judgment and refer on if they have concerns about the person's safety that they do not feel equipped to provide adequate care for. The committee also agreed if a person specifically expresses that they want referral to mental health services, their decisions should be respected to prioritise person-centred care.

The committee agreed based on their expertise that if people are being cared for in primary care following an episode of self-harm, they should receive continuity of care, regular reviews of factors relating to their self-harm for example in regular GP appointments or in medicine reviews, and information about available services for further care. The committee agreed this would ensure the person who has self-harmed feels supported, is receiving the correct care, and to facilitate their engagement with services.

Assessment and care by ambulance staff and paramedics

The committee agreed that any care provided by ambulance staff and paramedics should be collaborative in order to prioritise person-centred care and to preserve the person's dignity and autonomy, and that in order to do so the ambulance staff should have a discussion with the person about the way the staff can best provide help. The recommendations were also based on the committee's knowledge that, where a care plan or a safety plan is in place, they should be followed where possible because they will be based on the individual's needs and therefore provide information about the best way to care for and support the person. The committee agreed that collaboration between ambulance staff and the person who has selfharmed regarding their care would allow for these preferences to be accommodated by ambulance staff, and going forward, in other settings as well. There was qualitative evidence from the review on non-specialist staff skills (Evidence report R) that ambulance staff find access to advice from mental health professionals invaluable, and the committee agreed ambulance staff should seek advice where necessary to ensure they are providing high quality care. Information gathered by ambulance staff regarding the person's situation is invaluable in order for mental health staff to provide assessment and the appropriate necessary mental and/ or physical care, and therefore should be recorded to facilitate good communication between services.

Qualitative evidence from the review on non-specialist staff skills showed that ambulance staff often found the emergency department (ED) to be an inappropriate place to take people who had self-harmed and did not require urgent physical care, because EDs could be busy and noisy and were often unable to provide individual care, or they may not be the preferred place of the person who has self-harmed to be taken. As a result, they wanted to be able to refer patients to more appropriate settings. Ambulance staff and paramedics are often not equipped to carry out a full psychosocial assessment without support from other services, and the committee agreed that people who had self-harmed but did not require urgent physical care should receive an assessment from staff who were equipped to provide this. They agreed based on the qualitative evidence and their own knowledge and experience that assessment by alternative services would facilitate the person's engagement with services, especially when agreed in collaboration with the person who has self-harmed. However, the committee were aware of important situation-specific factors that could influence whether referral to an alternative service was appropriate, such as whether such services were accessible and had capacity, or whether there were immediate safety concerns that indicated the need for ED care. The committee agreed any decisions about using alternative services should be based on the individual situation in relation to these factors.

Assessment and care by non-mental health emergency department professionals. The committee agreed that a rapid initial assessment of the mental and physical care needs of a person who has self-harmed is necessary in the ED to quickly establish the best course of action, accommodate those needs and prevent risk of further harm to the person, based on their expertise.

The committee agreed that people who have self-harmed should be referred to, and have the opportunity to speak with, liaison mental health services in the ED, based on their knowledge that such services have demonstrated a positive influence on managing the care of patients who have self-harmed. The committee agreed such services should be age-appropriate to ensure individual factors relating to the age of the person and how this might interact with

self-harm are taken into account during assessment. As a result, a crisis response service might be more appropriate for children and young people. The committee also agreed that physical and mental health care should be delivered concurrently in both settings so neither is prioritised at the expense of the other. These recommendations are also based on evidence from the review on models of care (see Evidence Report T), which showed that specialist psychosocial assessment by mental health staff had an important benefit in terms of self-harm repetition over 12 months when compared to usual care. The committee also discussed the guideline on acute medical emergencies (NG94) which similarly recommends access to liaison psychiatry, and agreed that their guidance should align.

The committee agreed that an assessment should take place in a private area, based on their experience that the person who has self-harmed might feel self-conscious or as though they were not being taken seriously, and therefore unable to talk candidly about confidential and sensitive topics when assessments take place where they could be overheard. The committee agreed that an area should be designated for assessment purposes and that this area should be appropriate for discussing private matters where other people cannot walk through or overhear. Evidence from the qualitative review on the information and support needs of people who have self-harmed (see Evidence Report A) also showed that people valued privacy as well as having a safe and trusted environment in which they can feel comfortable discussing self-harm. The committee acknowledged it might not always be possible to have one area dedicated only to mental health assessments in EDs due to space constraints, but agreed the recommendation is still practical because staff can identify private spaces in the ED and designate them as places to provide assessments, even if they are multi-use.

The committee agreed that people who have self-harmed may feel neglected when asked to wait in isolated areas of the emergency department based on their experience and their knowledge that people who have self-harmed may require support during a time of potential distress. They agreed waiting areas for people who have self-harmed should be close to staff to minimise the risk of distress and enable staff to provide reassurance and clinical, therapeutic observation as needed.

The governance recommendations that care procedures should be clearly set out and agreed are also based on the HSIB report, which found that clarity regarding service pathways and good communication between teams can result in successful safeguarding, de-escalation of mental health crises, and prevent immediate repeat self-harm. The committee also agreed it is important that mechanical restraint is not used on people to prevent them from leaving the emergency department or from self-harming, because in their experience, this results in increased distress and a loss of autonomy and dignity for the person, potentially resulting in a loss of trust in services and an unwillingness to seek help in the future. The committee agreed further recommendations about restraint were out of scope of the guideline because they were not specific to people who have self-harmed, so they referred to the NICE guideline on violence and aggression for further recommendations about situations where restraint might be indicated.

The HSIB report also informed the recommendation that there should be agreed policies or procedures in place for people who wish to leave before treatment is complete, as the committee agreed this would ensure patients who leave who have ongoing safety concerns are identified so appropriate follow-up contact can be made.

There was no evidence identified in this review for the committee to define how frequent attendance at ED for self-harm would have to be to trigger a multidisciplinary review. However, the committee agreed that this recommendation was still important based on their knowledge that the individual circumstances of the patient, including whether the person is continuing to self-harm, should be assessed to evaluate whether a multidisciplinary review is

necessary. The committee agreed, based on their knowledge and experience, that procedures for identifying people who frequently self-harm would allow non-specialist staff in emergency departments to facilitate a multi-disciplinary review by mental health professionals when appropriate to ensure people are getting the right treatment and support.

Assessment and care in general hospital settings

The committee agreed that people who have self-harmed should be referred to, and have the opportunity to speak with, liaison mental health services in general hospitals, based on their knowledge that such services have demonstrated a positive influence on managing the care of patients who have self-harmed. The committee agreed such services should be age-appropriate to ensure individual factors relating to the age of the person and how this might interact with self-harm are taken into account during assessment. They also agreed that physical and mental health care should be delivered concurrently in both settings so neither is prioritised at the expense of the other. These recommendations are also based on evidence from the review on models of care (see Evidence Report T), which showed that specialist psychosocial assessment by mental health staff had an important benefit in terms of self-harm repetition over 12 months when compared to usual care. The committee also discussed the guideline on acute medical emergencies (NG94) which similarly recommends access to liaison psychiatry, and agreed that their guidance should align.

The recommendation regarding observation was based on the committee's experience that observation can be intimidating and unnecessary, especially when carried out by security guards. The committee agreed that observation should be discussed with patients to reduce distress and should not be used in every situation – instead, its use should be considered on a case-by-case basis to emphasise the importance of person-specific care. The committee agreed any observation should be carried out by healthcare staff who have clinical observation and de-escalation training to reduce distress and highlight the therapeutic aspect of clinical observation. For more information about clinical observation and the committee's discussion of its benefits, please refer to the review on supporting safety after self-harm (Evidence report N).

The committee agreed that children and young people who have self-harmed in hospitals have specific needs and should therefore have access to age-appropriate specialist care at all times. They agreed that children and young people might also be more dependent on family members and carers and therefore, as long as there are no safeguarding, consent or confidentiality concerns as set out in the relevant sections of the guideline, they should have daily access to their family members or carers to reduce distress and facilitate their involvement in the person's care and support. The committee also discussed the phenomenon of social contagion among adolescents who self-harm and agreed that, as childhood is a critical period in relation to self-harm, children and young people should have regular reviews to reduce rates of repeat self-harm and 'contagion'.

Assessment and care in social care

The committee agreed that collaborative working should always be encouraged as a principle of good care. They agreed that social care practitioners in particular should communicate with other professionals, including healthcare professionals where it was appropriate to do so, to facilitate transitions between healthcare and social care settings. They agreed that this would also prevent the person who has self-harmed having to repeat details of their episode of self-harm, which may in turn reduce distress and could improve service user satisfaction.

The committee agreed that in many circumstances, self-harm is identified by social care practitioners through a safeguarding concern. They agreed that when this occurs, social care practitioners should refer the person to local mental health services to ensure they start on a care pathway and receive appropriate care.

The committee discussed their experience that social care services can be withdrawn from people after an episode of self-harm, and agreed that care and support must continue to be provided to people after an episode of self-harm, based on their knowledge that withholding social care can imply therapeutic nihilism or strengthen a blame culture whereby people are punished for self-harming.

The committee also referred to the <u>NICE guidelines on domestic violence and abuse</u>, <u>lookedafter children and young people</u>, <u>child abuse and neglect</u>, and <u>child maltreatment</u>, and agreed these contained important recommendations about the provision of social care that should be signposted to.

Principles for assessment and care by professionals from other sectors

The committee wanted to acknowledge the lack of available evidence specifically relating to the provision of assessment, care and support to people who have self-harmed in criminal justice system (CJS) settings, as well as CJS-specific expertise on the committee. They agreed that the recommendations made were based on principles of good practise but could not be made more setting-specific based on the lack of available evidence and expertise. The committee recognised that CJS settings were diverse and varied so widely that the recommendations would therefore need to be tailored according to the setting and other relevant national guidance during implementation.

The committee agreed that often people who have self-harmed initially present to professionals from non-health and social care sectors, and agreed that similar principles regarding compassion, collaboration, cultural sensitivity, and preserving the dignity of the person who has self-harmed should be recommended, regardless of whether the professional has healthcare training. The committee also agreed that professionals from other sectors should address immediate physical health needs if necessary to prevent further potential injury to the person who has self-harmed, but refer to local policies for guidance on how to provide physical treatment or to healthcare services for further treatment and advice to ensure the care given to the person is appropriate. The committee agreed similar principles should be followed with regards to safeguarding issues. The committee also recommended this based on qualitative evidence from the review on information and support needs of parents and carers (see Evidence Report B), which showed that carers often urgently sought information from qualified healthcare professionals upon discovery of self-harm.

The committee agreed all non-specialist staff, including healthcare professionals and social care practitioners and other professionals, should establish a number of presenting factors to inform the person's assessment and care. Please see the relevant section above (under the sub-heading 'Principles for assessment and care by healthcare professionals and social care practitioners) for more information about the committee's discussion of this.

Assessment and care in schools and educational settings

The recommendations for assessment in education settings were based on the committee's knowledge that both non-specialist and specialist mental health staff can work with children and young people who have self-harmed. As a result, the committee agreed that all staff should be equipped with guidance for how to identify and respond to students who have self-harmed or have immediate safety concerns, regardless of the profession of the staff member. Qualitative evidence from the review on skills for specialist staff (see Evidence Report P) showed that school mental health staff wanted policies and procedures for how to respond to people who have self-harmed because they often felt as though they were unsupported by official procedures and were unsure whether they were acting in the best interest of the student. The committee agreed that policies in education settings would allow staff to feel more confident in responding to self-harm and ensure procedures were followed based on best practice, rather than leaving staff members to assess and respond to people

who have self-harmed without any formal understanding of how to do so. This could have the effect of reducing the distress of people who have self-harmed and improving the quality of their care.

The committee agreed based on their expertise that a designated lead would allow other members of staff to feel more supported when students presented with self-harm. They discussed the benefits of a lead staff member and agreed they would be able to oversee knowledge of other staff members and ensure they were equipped with the necessary tools and encouraged to respond to self-harm. This would ensure any guidance as set out in the recommendations would be visible and implemented across the educational setting.

The committee also agreed that all educational staff should have a responsibility to understand the guidance and the extent of their roles and responsibilities. They agreed this would allow non-specialist staff to know how and when to refer on to more specialist staff for support, and still be able to respond to the person who has self-harmed, to the best of their abilities.

The committee discussed the need for communication between educational staff and other mental health staff, and agreed that when a student has self-harmed, collaborating with mental health staff to provide care (especially those already involved in their care) would facilitate the person's access to services and put procedures in place to help prevent repeat self-harm, such as the creation of support plans which could help prevent repeat self-harm while in the educational setting.

The committee also discussed the impact that self-harm can have on the person's peers, including the potential for distress and the phenomenon of social contagion among adolescents who self-harm. The committee agreed, based on their knowledge that childhood is a critical period in relation to self-harm, the impact of self-harm on friends and peer groups should be considered by educational staff so that support can be provided as appropriate.

Assessment and care in the criminal justice system and other secure settings In order to draft recommendations for assessment in the criminal justice system, the committee referred to the NICE guideline on the mental health of adults in contact with the criminal justice system (NG66). The committee discussed the fact that people in secure settings have higher rates of self-harm and suicide, especially during periods such as the individual's arrival in custody and during anniversaries of personal events. The committee agreed based on this knowledge that staff should be aware of this fact so they can be prepared and equipped to assess people who self-harm. They also agreed that the high rates of self-harm in CJS settings can cause distress in staff, and therefore they should have access to support services for the sake of their own mental health and wellbeing.

The committee discussed the fact that people who have self-harmed in secure settings require on-site support so they can be provided with the care they require in order to address any medical and mental healthcare needs and to minimise distress immediately following self-harm. For this reason, the committee agreed all staff in CJS settings should know how to access any health services at the establishment. However, they acknowledged that some secure settings may not have the required facilities to provide this care, and that in these cases the person may need to be transferred to healthcare settings to preserve their access to necessary care. The committee agreed that staff in CJS settings should be aware of the arrangements in place and their responsibility to share relevant information, so they can facilitate appropriate care and support if a person self-harms.

The committee also agreed that the <u>NICE guideline on the mental health of adults in contact</u> with the criminal justice system (NG66) contained a lot of detail about assessment, especially in prisons. The committee therefore thought that health and social care staff who work in

these settings should have knowledge of the guidelines and follow them, while all CJS staff should follow local guidance on assessment, in order to ensure they are using best practice when working with people who have self-harmed.

The recommendation that people who have self-harmed in these settings should have a safe place to await treatment was based on the committee's knowledge that people can be placed in isolation following self-harm, or in locations where no safety considerations have been made to prevent access to means of self-harm. The committee agreed that isolation is a punitive measure that should never be used as it is linked to stigma surrounding self-harm, and that ensuring people are given a location where they can feel safe both mentally and physically after self-harm would reduce distress and reduce rates of repeat self-harm.

Cost effectiveness and resource use

The committee noted that no relevant published economic evaluations had been identified and no additional economic analysis had been undertaken on how assessment should be undertaken for people who have self-harmed in non-mental health specialist settings. When drafting the recommendations, they noted how using specific models of assessments to predict future repetition of self-harm in non-mental health care contexts might have an impact on resource use of care services and result in unnecessary treatment costs for many people who self-harmed. Thus, the committee agreed to recommend principles of assessment rather than specific assessment models to improve management and biopsychosocial assessment of people who self-harmed by non-specialist staff, either involved in non-health and social care settings (such as educational settings and criminal justice) or involved in health and social care settings (such as primary care, ambulance and paramedics, non-mental health emergency care, social care and community pharmacy). The committee noted the likely benefits resulting from the recommendations, such as a reduction in the potential for distress after self-harm and improvement of the person's satisfaction and engagement with services. The committee advised that the majority of recommendations made were based on existing best practice with some additional considerations that should have a minimal effect on costs, depending on how services currently assess people who have self-harmed. The recommendation according to which people who have self-harmed should have access to age-appropriate liaison psychiatry in emergency department and general hospital settings should have a minimal cost resource impact as it should reflect current practice, given that this is currently recommended in the NICE guideline on emergency and acute medical care (NG94). Therefore, considering the expected benefits and the minor cost implications, the committee expressed the opinion that the recommendations ensured efficient use of resources.

Recommendations supported by this evidence review

This evidence review supports recommendations 1.7.1-1.7.27 and 1.8.1-1.8.12 and research recommendation 2 on effective approaches to assessment in non-specialist settings including primary care, the criminal justice system and immigration service. Other evidence supporting these recommendations can be found in the evidence reviews on models of care (evidence report T) and supporting safety after self-harm (evidence report N).

References - included studies

Effectiveness

No studies were identified that met the inclusion criteria.

Economic

No studies were identified that met the inclusion criteria.

Appendices

Appendix A Review protocols

Review protocol for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

Table 2: Review protocol

Field	Content
PROSPERO registration number	CRD42020215425
Review title	Assessment – non-specialist settings
Review question	How should assessment for people who have self-harmed be undertaken in non-specialist settings, such as primary care social care community pharmacy ambulances emergency departments (by non-specialist staff) schools, colleges and universities the criminal justice system and immigration removal centres acute general hospitals?
Objective	To identify how assessment should be undertaken in non-specialist settings.
Searches	The following databases will be searched: Cochrane Central Register of Controlled Trials (CENTRAL) Cochrane Database of Systematic Reviews (CDSR) Database of Abstracts of Reviews of Effects (DARE) Embase Emcare International Health Technology Assessment (IHTA) database MEDLINE & MEDLINE In-Process PsycINFO
	Searches will be restricted by:

Field	Content
	 Qualitative/patient issues study filter English language studies Human studies Date: 2000 onwards as the current service context is different from pre-2000.
	Other searches: Inclusion lists of systematic reviews
	The full search strategies will be published in the final review.
Condition or domain being	All people who have self-harmed, including those with a mental health problem, neurodevelopmental disorder or a learning disability.
studied	'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	 All people who have self-harmed, including those with a mental health problem, neurodevelopmental disorder or a learning disability, who have presented to a non-specialist settings Exclusion: People displaying repetitive stereotypical self-injurious behaviour, for example head-banging in people with a significant learning disability People who have self-harmed who have presented to specialist settings
Intervention	Model of assessment A, e.g., assessment including principles of active listening, therapeutic assessment, comprehensive biopsychosocial assessment, assessment performed by different professions [e.g., nurses], culturally sensitive assessment
Comparator/Reference standard/Confounding factors	Model of assessment B, e.g., assessment not including principles of active listening, triage assessment, assessment performed by different professions [e.g., doctors], uniform assessment (i.e., not taking culture into account)
Types of study to be included	 Systematic review of randomised controlled trials (RCTs) or non-randomised comparative prospective and retrospective cohort studies RCTs Non-randomised comparative prospective cohort studies with N≥100 per treatment arm Non-randomised comparative retrospective cohort studies with N≥100 per treatment arm Conference abstracts will not be included.
	Control of the state of the first position of the state o

Field	Content
	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: Language: Non-English Publication status: Abstract only Studies published in languages other than English will not be considered due to time and resource constraints with translation.
Context	Settings: Inclusion: Primary, secondary and tertiary healthcare settings (including pre-hospital care, accident and emergency departments, community pharmacies, inpatient care, and transitions between departments and services) Home, residential and community settings, such as supported accommodation Supported care settings Education and childcare settings Criminal justice system Immigration removal centres. Exclusion: Community mental health services Inpatient mental health services
Primary outcomes (critical outcomes)	Critical: Self-harm repetition (for example, self-poisoning or self-cutting) Service user satisfaction (dignity, compassion and respect) Suicide
Secondary outcomes (important outcomes)	Important: Quality of life Initiation of safeguarding procedures Distress Engagement with after-care

Field	Content
Data extraction (selection and	All references identified by the searches and from other sources will be uploaded into EPPI and de-duplicated.
coding)	Titles and abstracts of the retrieved citations will be screened to identify studies that potentially meet the inclusion criteria outlined in the review protocol.
	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.
	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.
	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: ROBIS tool for systematic reviews
<u> </u>	 Cochrane RoB tool v.2 for RCTs and quasi-RCTs Cochrane ROBINS-I tool for non-randomised (clinical) controlled trials and cohort studies
	The quality assessment will be performed by one reviewer and this will be quality assessed by a senior reviewer.
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 (if data allows) will be stratified by: Age group: ≥65 years, 18-64 years, 16-17 years, <16 Setting: primary care; social care; community pharmacy; ambulances; emergency departments; schools, colleges and universities; the criminal justice system and immigration removal centres; acute general hospitals First episode of self-harm v not first episode of self-harm
Type and method of review	Intervention

Field	Content		
Language	English		
Country	England		
Anticipated or actual start date	02/10/2020		
Anticipated completion date	26/01/2022		
Stage of review at time of this	Review stage	Started	Completed
submission	Preliminary searches		
	Piloting of the study selection process		
	Formal screening of search results against eligibility criteria		
	Data extraction		
	Risk of bias (quality) assessment		
	Data analysis		
Named contact	5a. Named contact: National Guideline Alliance		
	5b Named contact e-mail:		
	selfharm@nice.org.uk		
	5e Organisational affiliation of the review:		
	National Institute for Health and Care Excellence (NICE) and National Guideline Alliance	ce	
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 guideline any potential conflicts of interest in line with NICE's code of practice for declaring and of	es (including the evidence review team	

Field	Content
	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=215425
Dissemination plans	NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as:
	notifying registered stakeholders of publication
	publicising the guideline through NICE's newsletter and alerts
	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, health care
Details of existing review of	None
same topic by same authors	
Current review status	Ongoing
Additional information	Not applicable
Details of final publication	www.nice.org.uk

CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; GRADE: Grading of Recommendations Assessment, Development and Evaluation; 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 Bias In Non-randomized Studies - of Interventions

Appendix B Literature search strategies

Literature search strategies for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

Database(s): MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily – OVID interface Date of last search: 7th October 2020

#	Searches
1	self mutilation/ or self-injurious behavior/ or suicidal ideation/ or suicide, attempted/ or suicide, completed/ or suicide/
2	(self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or self immolat* or self immolat* or selfinflict* or self inflict* or auto mutilat* or automutilat*).tw.
3	or/1-2
4	needs assessment/ or *outcome assessment, health care/ or nursing assessment/ or personality assessment/ or *process assessment, health care/ or risk assessment/
5	((psychologic* or mental health or psychiatric or psychometric* or psychosocial* or psychosocial* or therapeutic) adj2 (assess* or evaluation*)).ti,ab.
6	((biopsychosocial or bio psychosocial) adj2 (assess* or evaluation* or index or instrument* or interview* or inventor* or item* or measure*1 or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)).ti,ab.
7	(assess* adj5 (clinician* or counsel?or* or doctor* or gp or lecturer* or neuropsychiatrist* or neuropsychologist* or neurospecialist* or nurs* or paramedic* or pharmacist* or police* or practitioner* or professional* or psychiatrist* or psychologist* or psychotherapist* or specialist* or staff* or teacher* or therapist* or warden* or worker*)).ti,ab.
8	(assess* adj5 (a&e or (acute adj3 (care or medicine)) or admission* or ambulance* or center* or centre* or cmhs or college* or communit* or criminal justice or department* or emergenc* or general practice or home*1 or hospital* or (intensive adj3 (care or medicine*)) or jail* or justice system* or penitentiar* or pharmacy or pharmacies or primary care or prison* or school* or setting* or (social adj2 (care or service* or setting* or ward*)) or universit* or ward*)).ti,ab.
9	(clinical adj1 (assess* or evaluat*)).ti,ab.
10	(assess* adj7 (african* or arabic* or asian* or bame or bangladeshi or black or bme or caribbean or chinese or cultur* or ethnic* or ethno* or indian* or multicultur* or multi cultur* or pakistani or race or racial)).ti,ab.
11	((self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or overdose* or self immolat* or self immolat* or selfinflict* or self inflict* or auto mutilat* or automutilat*) adj3 (assess* or evaluation*)).ti,ab. or ((self harm* or selfharm* or selfinjur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or overdose* or self immolat* or self immolat* or selfinflict* or self inflict* or automutilat* or automutilat*) and assess*).ti.

#	Searches
12	(assessment* adj3 (index or instrument* or interview* or inventor* or item* or measure*1 or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)).ti,ab.
13	or/4-12
14	3 and 13
15	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.
16	14 not 15
17	limit 16 to english language
18	limit 17 to yr="2000 -current"

Database(s): Embase and Emcare – OVID interface Date of last search: 7th October 2020

#	Searches
1	automutilation/ or exp suicidal behavior/
2	(self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or self immolat* or self immolat* or selfinflict* or self inflict* or auto mutilat* or automutilat*).tw.
3	or/1-2
4	needs assessment/ or *outcome assessment/ or nursing assessment/ or personality assessment/ or risk assessment/
5	((psychologic* or mental health or psychiatric or psychometric* or psychosocial* or psychosocial* or therapeutic) adj2 (assess* or evaluation*)).ti,ab.
6	((biopsychosocial or bio psychosocial) adj2 (assess* or evaluation* or index or instrument* or interview* or inventor* or item* or measure*1 or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)).ti,ab.
7	(assess* adj5 (clinician* or counsel?or* or doctor* or gp or lecturer* or neuropsychiatrist* or neuropsychologist* or neurospecialist* or nurs* or paramedic* or pharmacist* or police* or practitioner* or professional* or psychiatrist* or psychologist* or psychotherapist* or specialist* or staff* or teacher* or therapist* or warden* or worker*)).ti,ab.
8	(assess* adj5 (a&e or (acute adj3 (care or medicine)) or admission* or ambulance* or center* or centre* or cmhs or college* or communit* or criminal justice or department* or emergenc* or general practice or home*1 or hospital* or (intensive adj3 (care or medicine*)) or jail* or justice system* or penitentiar* or pharmacy or pharmacies or primary care or prison* or school* or setting* or (social adj2 (care or service* or setting* or ward*)) or universit* or ward*)).ti,ab.
9	(clinical adj1 (assess* or evaluat*)).ti,ab.
10	(assess* adj7 (african* or arabic* or asian* or bame or bangladeshi or black or bme or caribbean or chinese or cultur* or ethnic* or ethno* or indian* or multicultur* or multi cultur* or pakistani or race or racial)).ti,ab.

#	Searches
11	((self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or overdose* or self immolat* or self immolat* or selfinflict* or auto mutilat* or automutilat*) adj3 (assess* or evaluation*)).ti,ab. or ((self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or (self adj2 cut*) or overdose* or self immolat* or self immolat* or selfinflict* or self inflict* or automutilat*) and assess*).ti.
12	(assessment* adj3 (index or instrument* or interview* or inventor* or item* or measure*1 or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)).ti,ab.
13	or/4-12
14	3 and 13
15	(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.
16	14 not 15
17	limit 16 to english language
18	limit 17 to yr="2000 -current"

Database(s): PsycINFO – OVID interface Date of last search: 7th October 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	(self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or self immolat* or self immolat* or selfinflict* or self inflict* or auto mutilat* or automutilat*).tw.
3	or/1-2
4	needs assessment/ or risk assessment/
5	((psychologic* or mental health or psychiatric or psychometric* or psychosocial* or psychosocial* or therapeutic) adj2 (assess* or evaluation*)).ti,ab.
6	((biopsychosocial or bio psychosocial) adj2 (assess* or evaluation* or index or instrument* or interview* or inventor* or item* or measure*1 or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)).ti,ab.
7	(assess* adj5 (clinician* or counsel?or* or doctor* or gp or lecturer* or neuropsychiatrist* or neuropsychologist* or neurospecialist* or nurs* or paramedic* or pharmacist* or police* or practitioner* or professional* or psychiatrist* or psychologist* or psychotherapist* or specialist* or staff* or teacher* or therapist* or warden* or worker*)).ti,ab.
8	(assess* adj5 (a&e or (acute adj3 (care or medicine)) or admission* or ambulance* or center* or centre* or cmhs or college* or communit* or criminal justice or department* or emergenc* or general practice or home*1 or hospital* or (intensive adj3 (care or medicine*)) or jail* or justice system* or penitentiar* or pharmacy or

#	Searches
	pharmacies or primary care or prison* or school* or setting* or (social adj2 (care or service* or setting* or ward*)) or universit* or ward*)).ti,ab.
9	(clinical adj1 (assess* or evaluat*)).ti,ab.
10	(assess* adj7 (african* or arabic* or asian* or bame or bangladeshi or black or bme or caribbean or chinese or cultur* or ethnic* or ethno* or indian* or multicultur* or multi cultur* or pakistani or race or racial)).ti,ab.
11	((self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or selfpoison* or (self adj2 cut*) or overdose* or self immolat* or self immolat* or selfinflict* or auto mutilat* or automutilat*) adj3 (assess* or evaluation*)).ti,ab. or ((self harm* or selfharm* or self injur* or selfinjur* or self mutilat* or selfmutilat* or suicid* or self destruct* or selfdestruct* or self poison* or (self adj2 cut*) or overdose* or self immolat* or self immolat* or selfinflict* or self inflict* or automutilat*) and assess*).ti.
12	(assessment* adj3 (index or instrument* or interview* or inventor* or item* or measure*1 or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)).ti,ab.
13	or/4-12
14	3 and 13
15	limit 14 to english language
16	limit 15 to yr="2000 -current"

Database(s): Cochrane Library - Wiley interface

Cochrane Database of Systematic Reviews, Issue 10 of 12, October 2020; Cochrane Central Register of Controlled Trials, Issue 10 of 12, October 2020

Date of last search: 7th October 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: [needs assessment] this term only
11	MeSH descriptor: [outcome assessment, health care] this term only
12	MeSH descriptor: [nursing assessment] this term only
13	MeSH descriptor: [personality assessment] this term only/
14	MeSH descriptor: [process assessment, health care] this term only
15	MeSH descriptor: [risk assessment] this term only

#	Searches
16	((psychologic* or "mental health" or psychiatric or psychometric* or psychosocial* or "psycho social*" or therapeutic) near/2 (assess* or evaluation*)):ti,ab.
17	((biopsychosocial or "bio psychosocial") near/2 (assess* or evaluation* or index or instrument* or interview* or inventor* or item* or measure* or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)):ti,ab.
18	(assess* near/5 (clinician* or counsel?or* or doctor* or gp or lecturer* or neuropsychiatrist* or neuropsychologist* or neurospecialist* or nurs* or paramedic* or pharmacist* or police* or practitioner* or professional* or psychiatrist* or psychologist* or psychotherapist* or specialist* or staff* or teacher* or therapist* or warden* or worker*)):ti,ab.
19	(assess* near/5 (a&e or (acute near/3 (care or medicine)) or admission* or ambulance* or center* or centre* or cmhs or college* or communit* or criminal justice or department* or emergenc* or !general practice" or home* or hospital* or (intensive near/3 (care or medicine*)) or jail* or "justice system*" or penitentiar* or pharmacy or pharmacies or "primary care" or prison* or school* or setting* or (social near/2 (care or service* or setting* or ward*)) or universit* or ward*)):ti,ab.
20	(clinical near/1 (assess* or evaluat*)):ti,ab.
21	(assess* near/7 (african* or arabic* or asian* or bame or bangladeshi or black or bme or caribbean or chinese or cultur* or ethnic* or ethno* or indian* or multicultur* or "multi cultur*" or pakistani or race or racial)):ti,ab.
22	(("self harm*" or selfharm* or "self injur*" or selfinjur* or self mutilat* or selfmutilat* or suicid* or "self destruct*" or selfdestruct* or "self poison*" or selfpoison* or (self near/2 cut*) or overdose* or "self immolat*" or "self immolat*" or selfinflict* or "self inflict*" or "auto mutilat*" or automutilat*) near/3 (assess* or evaluation*)):ti,ab. or ((self harm* or selfharm* or "self injur*" or selfinjur* or "self mutilat*" or selfmutilat* or suicid* or "self destruct*" or selfdestruct* or "self poison*" or selfpoison* or (self near/2 cut*) or overdose* or "self immolat*" or "self immolat*" or "self inflict*" or "auto mutilat*" or automutilat*) and assess*):ti.
23	(assessment* near/3 (index or instrument* or interview* or inventor* or item* or measure* or questionnaire* or rate* or rating or scale* or score* or screen* or subscale* or survey* or test* or tool*)):ti,ab.
24	{OR #10-#23}
25	(#9 and #24) with Cochrane Library publication date Between Jan 2000 and Oct 2020

Database(s): CDSR and HTA – CRD interface Date of last search: 7th October 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

#	Searches
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/
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

#	Searches
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.
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

#	Searches
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
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: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

Please note that the current search was undertaken with the search for review question F (How should assessment for people who have self-harmed be undertaken in specialist settings?). Note the PRISMA flow chart reflects review question F; no studies were identified for inclusion for review question E. The list of excluded studies in Appendix J includes both the 67 excluded studies and the 4 studies noted in the PRISMA as included (which only met eligibility criteria for review question F).

Records screened in 1st sift
Screening on title and abstract
n = 8436

Records screened in 2nd sift
Screening on title and abstract
n = 8436

Records screened in 3nd sift
Screening on title and abstract
n = 8436

Records screened in 3nd sift
Screening on title and abstract
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 71

Records screened in 3nd sift
Screening on full text
n = 8365

Figure 1: Study selection flow chart

Appendix D Evidence tables

Evidence tables for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

No studies were identified that met the inclusion criteria.

Appendix E Forest plots

Forest plots for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

No studies were identified that met the inclusion criteria.

Appendix F Modified GRADE tables

Modified GRADE tables for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

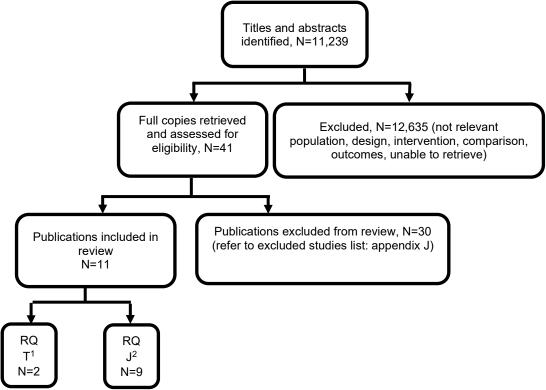
No studies were identified that met the inclusion criteria.

Appendix G Economic evidence study selection

Study selection for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

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



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: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

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

Appendix I Economic model

Economic model for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

No economic analysis was conducted for this review question.

Appendix J Excluded studies

Excluded studies for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

Excluded effectiveness studies

Table 3: Excluded studies and reasons for their exclusion

Study	Code [Reason]
(2016) Assessing Suicide Risk in the Emergency Department. Journal of Psychosocial Nursing & Mental Health Services 54: 18-18	- Narrative review
(2016) New Tablet-Based Suicide Risk Assessment Tool Replicates Psychiatrists' Expertise. Journal of Psychosocial Nursing & Mental Health Services 54: 58-58	- Narrative review
Abarca, C., Gheza, C., Coda, C. et al. (2018) Literature review to identify standardized scales for assessing adult suicide risk in the primary health care setting. Medwave 18: e7246	- Systematic review Included studies checked for relevance
Adrian, Molly (2018) 1.3 The Collaborative Assessment and Management of Suicidality: Application and Adaptations With Youth. Journal of the American Academy of Child & Adolescent Psychiatry 57: S2-S2	- Published as abstract only
Ali, A. and Hassiotis, A. (2006) Deliberate self harm and assessing suicidal risk. British Journal of Hospital Medicine 67: M212-M213	- Narrative review
Anonymous (2011) Suicide assessment team in the ED. Hospital Peer Review 36: 30-1	- Narrative review
Antai-Otong, D. (2016) What Every ED Nurse Should Know About Suicide Risk Assessment. Journal of Emergency Nursing 42: 31-6	- Narrative review
Arias, S. A., Zhang, Z., Hillerns, C. et al. (2014) Using structured telephone follow-up assessments to improve suicide-related adverse event detection. Suicide & Life-Threatening Behavior 44: 537-47	- Comparison not in PICO Comparison of different methods of detection of adverse events during treatment as usual
Betz, M. E., Kautzman, M., Segal, D. L. et al. (2018) Frequency of lethal means assessment among emergency department patients with a positive suicide risk screen. Psychiatry Research 260: 30-35	- Comparison not in PICO Compares patients with / without assessment
Bland, Phillip (2018) Assessing suicide and self- harm risk in adolescents. Practitioner 262: 10-10	- Analyses not in PICO No mention of assessment

Study	Code [Reason]
Carter, T., Walker, G. M., Aubeeluck, A. et al. (2019) Assessment tools of immediate risk of self-harm and suicide in children and young people: A scoping review. Journal of Child Health Care 23: 178-199	- Comparison not in PICO Scoping review of assessment tools for use in self harm, but not of studies comparing assessment methods
Chu, C., Van Orden, K. A., Ribeiro, J. D. et al. (2017) Does the timing of suicide risk assessments influence ratings of risk severity?. Professional psychology: research & practice 48: 107-114	- Population not in PICO Mixed population [33.1% had a history of suicide attempt(s), 16.6% had a history of self-harm]; results not presented separately for target population
Clibbens, N. (2019) Primary care suicide screening: the importance of comprehensive clinical assessment. Evidence based nursing. 05	- Narrative review
Cochrane-Brink, K. A.; Lofchy, J. S.; Sakinofsky, I. (2000) Clinical rating scales in suicide risk assessment. General Hospital Psychiatry 22: 445-51	- Study conducted pre-2000
Costanza, A., Amerio, A., Radomska, M. et al. (2020) Suicidality Assessment of the Elderly With Physical Illness in the Emergency Department. Frontiers in Psychiatry 11 (no pagination)	- Narrative review
Crowder, R., Van der Putt, R., Ashby, C. A. et al. (2004) Deliberate self-harm patients who discharge themselves from the general hospital without adequate psychosocial assessment. Crisis: Journal of Crisis Intervention & Suicide 25: 183-6	- Intervention not in PICO Study does not compare two models of assessment
Cwik, M. F.; O'Keefe, V. M.; Haroz, E. E. (2020) Suicide in the pediatric population: screening, risk assessment and treatment. International Review of Psychiatry 32: 254-264	- Narrative review
Davoren, M., Byrne, O., O'Connell, P. et al. (2015) Factors affecting length of stay in forensic hospital setting: need for therapeutic security and course of admission. BMC Psychiatry 15: 301	- Population not in PICO Population did not include people who have self- harmed
de Chenu, Linda (2011) Working with Suicidal Individuals: A Guide to Providing Understanding Assessment and Support. British Journal of Social Work 41: 1615-1616	- Narrative review
DeVylder, J. E., Ryan, T. C., Cwik, M. et al. (2019) Assessment of Selective and Universal Screening for Suicide Risk in a Pediatric Emergency Department. JAMA Network Open 2: e1914070	- Population not in PICO Population not people who have self-harmed. People with behavioural or psychiatric or medical presenting problems without self-harm assessed for future risk

Study	Code [Reason]
Ellis, Thomas E. (2011) Preventing patient suicide: clinical assessment and management. Journal of Psychiatric Practice 17: 447-448	- Narrative review
Ellis, Thomas E., Rufino, Katrina A., Allen, Jon G. et al. (2015) Impact of a suicide-specific intervention within inpatient psychiatric care: The Collaborative Assessment and Management of Suicidality. Suicide and Life-Threatening Behavior 45: 556-566	- Population not in PICO Population did not include people who have self- harmed
Franks, M., Cramer, R. J., Cunningham, C. A. et al. (2020) Psychometric assessment of two suicide screeners when used under routine conditions in military outpatient treatment programs. Psychological services. 02	- Population not in PICO Active-duty military personnel in mental health or substance abuse treatment at a military hospital. Unclear how many had self-harmed
Frierson, R. L. (2007) The suicidal patient: risk assessment, management, and documentation. Psychiatric Times 24: 29-32	- Narrative review
Gerson, Ruth and Feuer, Vera (2018) Innovations in Emergency Assessment and Management of Suicide Risk. Journal of the American Academy of Child & Adolescent Psychiatry 57: S32-S32	- Published as abstract only
Greydanus, Donald E. and Pratt, Helen D. (2015) Predicting, Assessing, and Treating Self-Harm in Adolescents. Psychiatric Times 32: 1-5	- Narrative review
Harris, K. M. and Goh, M. T. T. (2016) Is suicide assessment harmful to participants? Findings from a randomized controlled trial. International Journal of Mental Health Nursing	- Population not in PICO Population not people who have self-harmed (Singapore residents ≥18 years of age, adequate English language skills, and not currently in psychiatric treatment)
Hawton, K. (2003) Psychiatric assessment and management of deliberate self-poisoning patients. Medicine (13573039) 31: 16-7]	- Narrative review
Huth-Bocks, A. C., Kerr, D. C. R., Ivey, A. Z. et al. (2007) Assessment of psychiatrically hospitalized suicidal adolescents: self-report instruments as predictors of suicidal thoughts and behavior. Journal of the American Academy of Child & Adolescent Psychiatry 46: 387-395	- Population not in PICO 54% had previous suicide attempt, but unclear about other self-harm. Results not reported separately for target population
Johnson, L. L., O'Connor, S. S., Kaminer, B. et al. (2018) Evaluation of Structured Assessment and Mediating Factors of Suicide-Focused Group Therapy for Veterans Recently Discharged from Inpatient Psychiatry. Archives of Suicide Research: 1-19	- Setting not in PICO Setting was specialist setting – Included in evidence review on assessment in specialist settings
Johnson, L. L., O'Connor, S. S., Kaminer, B. et al. (2019) Evaluation of Structured Assessment	- Duplicate

Study	Code [Reason]
and Mediating Factors of Suicide-Focused Group Therapy for Veterans Recently Discharged from Inpatient Psychiatry. Archives of Suicide Research 23: 15-33	
Joiner, T. E. and Ribeiro, J. D. (2011) Assessment and management of suicidal behavior in children and adolescents. Pediatric Annals 40: 319-324	- Narrative review
Kapusta, Nestor D. (2012) Non-suicidal Self- injury and Suicide Risk Assessment, quo vadis DSM-V?. Suicidology Online 3: 1-3	- Narrative review
Kishi, Y. and Kathol, R. G. (2002) Assessment of patients who attempt suicide. Primary Care Companion to the Journal of Clinical Psychiatry 4: 132-136	- Narrative review
Kollmann, B., Darwiesh, T., Tuscher, O. et al. (2020) The Importance of Assessing Mental Health Issues and Preventing Suicidality in Studies on Healthy Participants. American Journal of Bioethics 20: 75-77	- Population not in PICO Participants had not self-harmed
Large, M. M. (2010) No evidence for improvement in the accuracy of suicide risk assessment. Journal of Nervous and Mental Disease 198: 604	- Letter to editor
Large, M. and Ryan, C. (2014) Suicide risk assessment: Myth and reality. International Journal of Clinical Practice 68: 679-681	- Narrative review
Large, Matthew Michael (2016) What Every ED Nurse Should Know About Suicide Risk Assessment. JEN: Journal of Emergency Nursing 42: 199-200	- Letter to editor
Lindh, A. U., Beckman, K., Carlborg, A. et al. (2020) Predicting suicide: A comparison between clinical suicide risk assessment and the Suicide Intent Scale. Journal of Affective Disorders 263: 445-449	- Comparison not in PICO All participants received both assessment tools. (Analysis was on suicide within 12 months of index assessment and included only participants that had both a clinical risk assessment and suicide intent scale risk score. The focus of the analysis was the accuracy of each in the prediction of suicide risk)
Maheshwari, R. and Joshi, P. (2012) Assessment, referral, and treatment of suicidal adolescents. Pediatric Annals 41: 516-521	- Narrative review
Marfe, E. (2003) Assessing risk following deliberate self harm. Paediatric Nursing 15: 32-4	- Non-comparative study

Study	Code [Reason]
Martin, G. and Brown, S. (2020) Psychiatric assessment of self-poisoning. Medicine (United Kingdom) 48: 173-175	- Narrative review
McAllister, M. (2011) Assessment following self-harm: Nurses provide comparable risk assessment to psychiatrists but are less likely to admit for in-hospital treatment. Evidence-Based Nursing 14: 83-84	- Narrative review
Molero, P., Grunebaum, M. F., Galfalvy, H. C. et al. (2014) Past suicide attempts in depressed inpatients: clinical versus research assessment. Archives of Suicide Research 18: 50-7	- Population not in PICO Mixed population [18-24/50 participants reported prior suicide attempt; no information about self- harm]; results not presented separately for target population
Mott, J. (2011) Suicide assessment in the school setting. NASN school nurse 26: 102-8	- Narrative review
Murphy, Andrea L., Gardner, David M., Chen, Timothy F. et al. (2015) Community pharmacists and the assessment and management of suicide risk. Canadian Pharmacists Journal 148: 171-175	- Narrative review
Oquendo, M. A. and Bernanke, J. A. (2017) Suicide risk assessment: tools and challenges. World Psychiatry 16: 28-29	- Narrative review
Ospina-Pinillos, L., Davenport, T., Iorfino, F. et al. (2018) Using New and Innovative Technologies to Assess Clinical Stage in Early Intervention Youth Mental Health Services: Evaluation Study. Journal of Medical Internet Research 20: e259	- Population not in PICO Mixed population [35/72 participants reported self-harm]; results not presented separately for target population
Ougrin, D.; Ng, A. V.; Low, J. (2008) Therapeutic assessment based on cognitive - Analytic therapy for young people presenting with self-harm: Pilot study. Psychiatric Bulletin 32: 423-426	- Setting not in PICO Setting was specialist setting – Included in evidence review on assessment in specialist settings
Ougrin, D., Zundel, T., Ng, A. et al. (2011) Trial of Therapeutic Assessment in London: randomised controlled trial of Therapeutic Assessment versus standard psychosocial assessment in adolescents presenting with self-harm. Archives of Disease in Childhood 96: 148-53	- Setting not in PICO Setting was specialist setting – Included in evidence review on assessment in specialist settings
Ougrin, D., Boege, I., Stahl, D. et al. (2013) Randomised controlled trial of therapeutic assessment versus usual assessment in adolescents with self-harm: 2-year follow-up. Archives of Disease in Childhood 98: 772-6	- Setting not in PICO Setting was specialist setting – Included in evidence review on assessment in specialist settings

Study	Code [Reason]
Phillips, J. (2004) Risk assessment and management of suicide and self-harm: within a forensic learning disability setting. Learning Disability Practice 7: 12-18	- Narrative review
Pistorello, J., Jobes, D. A., Gallop, R. et al. (2020) A Randomized Controlled Trial of the Collaborative Assessment and Management of Suicidality (CAMS) Versus Treatment as Usual (TAU) for Suicidal College Students. Archives of Suicide Research	- Intervention not in PICO 'Collaborative Assessment and Management of Suicidality' versus 'treatment as usual'
Pitman, A., Tsiachristas, A., Casey, D. et al. (2020) Comparing short-term risk of repeat self-harm after psychosocial assessment of patients who self-harm by psychiatrists or psychiatric nurses in a general hospital: Cohort study. Journal of affective disorders 272: 158-165	- Setting not in PICO Setting was specialist setting – Included in evidence review on assessment in specialist settings
Randall, J. R.; Colman, I.; Rowe, B. H. (2011) A systematic review of psychometric assessment of self-harm risk in the emergency department. Journal of Affective Disorders 134: 348-55	- Systematic review Included studies checked for relevance
Randall, J. R., Sareen, J., Chateau, D. et al. (2019) Predicting Future Suicide: Clinician Opinion versus a Standardized Assessment Tool. Suicide & Life-Threatening Behavior 49: 941-951	- Population not in PICO Consecutive adult referrals to psychiatric services with no exclusion criteria. Unclear how many had self-harmed
Rao, S., Broadbear, J. H., Thompson, K. et al. (2017) Evaluation of a novel risk assessment method for self-harm associated with Borderline Personality Disorder. Australasian Psychiatry 25: 460-465	- Population not in PICO Population was not people who had self- harmed. Physician assessment of case vignettes describing a fictional patient
Reid, J. M., Storch, E. A., Murphy, T. K. et al. (2010) Development and psychometric evaluation of the treatment-emergent activation and suicidality assessment profile. Child & Youth Care Forum 39: 113-124	- Population not in PICO Children who exhibited one of the following psychiatric disorders: OCD; major depression; generalized anxiety disorder; social phobia; or separation anxiety disorder. Unclear how many had self-harmed
Reshetukha, T. R., Alavi, N., Prost, E. et al. (2018) Improving suicide risk assessment in the emergency department through physician education and a suicide risk assessment prompt. General Hospital Psychiatry 52: 34-40	- Comparison not in PICO No comparison of assessment methods
Ronquillo, L., Minassian, A., Vilke, G. M. et al. (2012) Literature-based recommendations for suicide assessment in the emergency department: a review. Journal of Emergency Medicine 43: 836-42	- Narrative review Case reports and narrative literature review. Does not compare assessment methods or models
Rudd, Kimberly Butterfly, Breen, Robert, Srinivasan, Shilpa et al. (2019) SUICIDE IN	- Published as abstract only

Study	Code [Reason]
LATE-LIFE: COLLABORATIVE APPROACHES FOR ASSESSMENT, PREVENTION, AND TREATMENT: Session 202. American Journal of Geriatric Psychiatry 27: S13-S14	
Russell, J. and Mitchell, J. R. (2000) The assessment of a "nurse led" deliberate selfharm service. Health Bulletin 58: 221-3	- Non-comparative study
Simon, Robert I. (2011) Improving Suicide Risk Assessment. Psychiatric Times 28: 16-21	- Narrative review
Smith, E. M. (2018) Suicide risk assessment and prevention. Nursing Management 49: 22-30	- Narrative review
Stewart, S. Evelyn; Manion, I. G.; Davidson, S. (2002) Emergency management of the adolescent suicide attempter: A review of the literature. Journal of Adolescent Health 30: 312-325	- Study conducted pre-2000
Targum, S. D.; Friedman, F.; Pacheco, M. N. (2014) Assessment of suicidal behavior in the emergency department. Innovations in Clinical Neuroscience 11: 194-200	- Narrative review
Valente, S. M. (2010) Assessing patients for suicide risk. Nursing 40: 36-40; quiz 40	- Narrative review
Waern, M.; Dombrovski, A. Y.; Szanto, K. (2011) Is the proposed DSM-V Suicide Assessment Dimension suitable for seniors?. International Psychogeriatrics 23: 671-672	- Letter to editor
Ward-Ciesielski, E. F. and Wilks, C. R. (2020) Conducting Research with Individuals at Risk for Suicide: Protocol for Assessment and Risk Management. Suicide & life-threatening behavior 50: 461-471	- Population not in PICO Suicidal adults using or not using alcohol to regulate emotions. Do not appear to have self- harmed
Weston, S. N. (2003) Comparison of the assessment by doctors and nurses of deliberate self-harm. Psychiatric Bulletin 27: 57-60	- Outcomes not in PICO Outcomes are clinician referral decisions
Witt, K., Spittal, M. J., Carter, G. et al. (2017) Effectiveness of online and mobile telephone applications ('apps') for the self-management of suicidal ideation and self-harm: a systematic review and meta-analysis. BMC Psychiatry 17: 297	- Intervention not in PICO Interventions for self-harm were not related to assessment but management of self-harm

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 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 selfpoisoning 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 costeffectiveness 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	Not relevant to any of the review questions in the guideline - this study estimated the cost- effectiveness of suicide screening followed by	

Study	Reason for Exclusion
Intervention for Suicide Prevention: A Cost- Effectiveness Analysis of the ED-SAFE Interventions, Psychiatric services (Washington, D.C.), appips201800445, 2019	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
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	Study design – no comparative cost analysis

Study	Reason for Exclusion
period, Journal of Plastic, Reconstructive and	ACCOUNT OF EXCLUSION
Aesthetic Surgery, 67, e109-e110, 2014	
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
Ostertag, L., Golay, P., Dorogi, Y., Brovelli, S., Cromec, I., Edan, A., Barbe, R., Saillant, S., Michaud, L., Self-harm in French-speaking Switzerland: A socio-economic analysis (7316), Swiss Archives of Neurology, Psychiatry and Psychotherapy, 70 (Supplement 8), 48S, 2019	Conference abstract
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 of risk assessment scales versus clinical assessment for adults attending an emergency department following self-harm
Richardson JS, Mark TL, McKeon R. The return on investment of postdischarge follow-up calls for suicidal ideation or deliberate self-harm. Psychiatr Serv. 2014;65(8):1012-1019.	Not enough data reporting on cost-effectiveness findings
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,	Study design – no comparative cost analysis

Study	Reason for Exclusion
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	Transcent of Exolation
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
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 webbased self-help, Journal of medical Internet research, 14, e141, 2012	Not self-harm

Appendix K Research recommendations

Research recommendations for review question: How should assessment for people who have self-harmed be undertaken in non-specialist settings?

Research question

What are the most effective approaches to assessment in non-specialist settings?

Why this is important

Following self-harm, a person will often first present to a non-specialist specialist setting such as a primary care. A rapid assessment of the person's mental and physical care needs is needed to quickly establish the best course of action, accommodate those needs and prevent risk of any further harm to the person. There is little evidence, however, of who should carry out assessment and how this should be done.

Table 5: Research recommendation rationale

Why is this needed Importance to 'patients' or the population The patient experience of the assessment is important and a good assessment is more likely to facilitate an accurate account of mental distress and suicidal thoughts, which in turn enables more effective and individualised care and safety planning. The assessment should be a brief therapeutic intervention in itself. Relevance to NICE guidance The lack of evidence regarding this topic currently restricts NICE guidance from making recommendations about the use of assessment with people who have self-harmed. The outcome of this research would allow such recommendations to be developed and become part of NICE guidance. Relevance to the NHS The findings from this research will contribute to service development to ensure patients receive i) the most effective assessment within the non-specialist setting and ii) the resulting care pathway is tailored to individual needs. Self-harm is a risk factor for suicide and reducing the rates of suicide is a national priority as is the prioritising of mental health and wellbeing nationally.	Research question	What are the most effective approaches to assessment in non-
Importance to 'patients' or the population The patient experience of the assessment is important and a good assessment is more likely to facilitate an accurate account of mental distress and suicidal thoughts, which in turn enables more effective and individualised care and safety planning. The assessment should be a brief therapeutic intervention in itself. Relevance to NICE guidance The lack of evidence regarding this topic currently restricts NICE guidance from making recommendations about the use of assessment with people who have self-harmed. The outcome of this research would allow such recommendations to be developed and become part of NICE guidance. Relevance to the NHS The findings from this research will contribute to service development to ensure patients receive i) the most effective assessment within the non-specialist setting and ii) the resulting care pathway is tailored to individual needs. Self-harm is a risk factor for suicide and reducing the rates of suicide is a national priority as is the prioritising of mental health and wellbeing		specialist settings?
assessment is more likely to facilitate an accurate account of mental distress and suicidal thoughts, which in turn enables more effective and individualised care and safety planning. The assessment should be a brief therapeutic intervention in itself. Relevance to NICE guidance The lack of evidence regarding this topic currently restricts NICE guidance from making recommendations about the use of assessment with people who have self-harmed. The outcome of this research would allow such recommendations to be developed and become part of NICE guidance. Relevance to the NHS The findings from this research will contribute to service development to ensure patients receive i) the most effective assessment within the non-specialist setting and ii) the resulting care pathway is tailored to individual needs. National priorities Self-harm is a risk factor for suicide and reducing the rates of suicide is a national priority as is the prioritising of mental health and wellbeing	Why is this needed	
guidance from making recommendations about the use of assessment with people who have self-harmed. The outcome of this research would allow such recommendations to be developed and become part of NICE guidance. Relevance to the NHS The findings from this research will contribute to service development to ensure patients receive i) the most effective assessment within the non-specialist setting and ii) the resulting care pathway is tailored to individual needs. National priorities Self-harm is a risk factor for suicide and reducing the rates of suicide is a national priority as is the prioritising of mental health and wellbeing		assessment is more likely to facilitate an accurate account of mental distress and suicidal thoughts, which in turn enables more effective and individualised care and safety planning.
to ensure patients receive i) the most effective assessment within the non-specialist setting and ii) the resulting care pathway is tailored to individual needs. National priorities Self-harm is a risk factor for suicide and reducing the rates of suicide is a national priority as is the prioritising of mental health and wellbeing		guidance from making recommendations about the use of assessment with people who have self-harmed. The outcome of this research would allow such recommendations to be developed and become part
is a national priority as is the prioritising of mental health and wellbeing	Relevance to the NHS	to ensure patients receive i) the most effective assessment within the non-specialist setting and ii) the resulting care pathway is tailored to
The Healthcare Safety Information Branch (HSIB) report 'Investigation into the provision of mental health care to patients presenting at the emergency department' (2018), found that clarity regarding service pathways and good communication between teams can result in successful safeguarding, de-escalation of mental health crises, and prevent immediate repeat self-harm or suicide.	National priorities	is a national priority as is the prioritising of mental health and wellbeing nationally. The Healthcare Safety Information Branch (HSIB) report 'Investigation into the provision of mental health care to patients presenting at the emergency department' (2018), found that clarity regarding service pathways and good communication between teams can result in successful safeguarding, de-escalation of mental health crises, and
Current evidence base The evidence in specialist settings indicates that having some psychosocial assessments is more effective than no assessment. Evidence is lacking in non-specialist settings. There is also uncertainty about the effective components of assessment or about integrating therapeutic interventions into the assessment.	Current evidence base	psychosocial assessments is more effective than no assessment. Evidence is lacking in non-specialist settings. There is also uncertainty about the effective components of assessment or about integrating
Equality No issues noted.	Equality	No issues noted.
Feasibility This research project should be feasible.	Feasibility	This research project should be feasible.
Other comments None	Other comments	None

Table 6: Research recommendation modified PICO table

Criterion	Explanation
Population	People who have self-harmed and present within a non-specialist settings such as: social care community pharmacy ambulances emergency departments (by non-specialist staff) schools, colleges and universities acute general hospitals primary care the criminal justice system the immigration service
Intervention	Standardised approaches to assessment (with associated training and supervision) for example: Integrating safety planning with assessment Integrating specific therapeutic interventions with assessment
Comparators	Assessment as usual
Outcomes	 Repetition of self-harm in 12 months Time from presentation to intervention Service utilization for example: admission to hospital, emergency department visits Quality of life Patient satisfaction Engagement with services Acceptability of the intervention to professional delivering it
Study design	Intervention would need to be developed (with training) before any controlled trial. Design will need to include an economic evaluation.
Timeframe	18 months – 2 years
Additional information	None