

MANCHESTER
1824

The University of Manchester



HQIP

Healthcare Quality
Improvement Partnership

The assessment of clinical risk in mental health services

National Confidential Inquiry into
Suicide and Safety in Mental Health

October 2018

Please cite this report as:

The assessment of clinical risk in mental health services. National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH). Manchester: The University of Manchester, 2018.

Contributors

Louis Appleby, FRCPsych.....Director
Nav Kapur, FRCPsych*Head of Suicide Research
Jenny Shaw, FRCPsychHead of Homicide Research
Pauline Turnbull, PhD*Project Manager
Cathryn Rodway, MA*Programme Manager/Research Associate
Isabelle M Hunt, PhD*Research Fellow
Jane Graney, MSc*Research Nurse
Myrsini Gianatsi, MSc*Research Assistant
Jessica Raphael, MScResearch Assistant

* Lead contributors.

Service user representatives Sarah Markham and Sue Sibbald.

Contact us

National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH), Centre for Mental Health and Safety, Jean McFarlane Building, The University of Manchester, Oxford Road, Manchester, M13 9PL

E-mail: ncish@manchester.ac.uk

Visit us on our website: www.manchester.ac.uk/ncish



Follow us on Twitter: @NCISH_UK

The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. HQIP's aim is to promote quality improvement, and it hosts the contract to manage and develop the Clinical Outcome Review Programmes, one of which is the Mental Health Clinical Outcome Review Programme, funded by NHS England, NHS Wales, the Health and Social Care Division of the Scottish Government, the Northern Ireland Department of Health, and the States of Jersey and Guernsey. The programmes, which encompass confidential enquiries, are designed to help assess the quality of healthcare, and stimulate improvement in safety and effectiveness by systematically enabling clinicians, managers and policy makers to learn from adverse events and other relevant data. More details can be found at: www.hqip.org.uk/clinical-outcome-review-programmes/

Copyright All rights reserved. © [2018] Healthcare Quality Improvement Partnership (HQIP). No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any other means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission, in writing, of the copyright holders.

The interpretation and conclusions contained in this report are those of the authors alone. The study was approved by the Mental Health Clinical Outcome Review Programme Independent Advisory Group.

REPORT SUMMARY

What is risk assessment?

Risk assessment combines consideration of psychological and social factors as part of a comprehensive review¹ to capture patient care needs, and to assess their risk of harm to themselves or others. Assessments often aim to categorise patients as at high, medium or low risk.

Checklists or risk tools are sometimes used for risk assessment but research suggests they are poor at predicting suicide.

Why did we carry out the study?

Despite risk assessment being a central component of current practice in mental health, there has been no recent national study of the use of risk assessment tools across mental health services. There is also very little information on the views of clinicians, patients and carers about how helpful these tools are.

What did we do?

We asked for details of the main risk assessment tools currently used in all 85 mental health trusts and health boards in the UK. We recorded information on the tools such as structure, content, and symptom profile.

We asked clinicians, patients and carers to share their experiences of tools by participating in an online survey.

We used data from the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) to randomly identify clinicians who were responsible for the care of a sample of 'low risk' patients. These were

patients who had died by suicide in 2015 and were viewed as being at low or no immediate risk of suicide at their last service contact. The clinicians were invited to participate in an interview about their experiences of assessing risk and safety.

What were the main findings?

- There was little consistency in the length, content or use of risk tools, although there was greater consistency in some places than others.
- Most tools were checklists. They sought to predict future behaviour. Scores on the tool also determined management decisions. This is contrary to national guidelines for self-harm assessment.
- Clinicians reported that tools could be a helpful adjunct to management but raised issues around lack of training in risk assessment processes, risk management, and practical issues around user friendliness and accessibility of information.
- Patients and carers emphasised the need for carer involvement, staff being able to ask about suicide, and clarity about what to do in a crisis.

CLINICAL MESSAGES

1. Risk assessment tools should not be seen as a way of predicting future suicidal behaviour.
2. Risk is not a number, and risk assessment is not a checklist. Tools, if they are used (for example as a prompt or a measure of change), need to be simple, accessible, and should be considered part of a wider assessment process. Treatment decisions should not be determined by a score.
3. There is a growing consensus that risk tools and scales have little place on their own in the prevention of suicide. This study suggests ways in which clinical risk assessment processes might be improved. The emphasis should be on building relationships; and gathering good quality information on (i) the current situation, (ii) past history, and (iii) social factors to inform a collaborative approach to management. Staff should be comfortable asking patients about suicidal thoughts.
4. Risk assessment processes are an intrinsic part of mental health care but need to be consistent across mental health services. Staff should be trained in how to assess, formulate, and manage risk. On-going supervision should be available to support consistency of approach. There is little place for locally developed tools.
5. Families and carers should have as much involvement as possible in the assessment process, including the opportunity to express their views on potential risk. The management plan should be collaboratively developed. Communication with primary care may also be helpful.
6. The management of risk should be personal and individualised, but it is one part of a whole system approach that should aim to strengthen the standards of care for everyone, ensuring that supervision, delegation and onward referral are all managed safely.

BACKGROUND

Suicide accounts for an estimated 1.4% of all deaths worldwide². In the UK, approximately 6,000 people die by suicide per year, although suicide rates are falling³.

Research suggests that many people who die by suicide have a mental illness at the time of death and over a quarter are in touch with specialist services. In a recent report we showed that in one year there were 1,538 deaths by suicide in individuals who had been in contact with mental health services in the previous 12 months⁴. This may be an important opportunity for prevention as many patients had factors associated with high risk of suicide (e.g. self-harm, substance misuse, economic problems) but the majority (88%) were judged to be at low or no immediate risk of suicide by clinicians at their final service contact⁴.

What is risk assessment?

The assessment of clinical risk in mental healthcare is challenging but provides an opportunity to engage with patients, and their carers and families in order to promote the patient's safety, recovery and wellbeing⁵. A good risk assessment will combine consideration of psychological (e.g. current mental health) and social factors (e.g. relationship problems, employment status) as part of a comprehensive review of the patient¹ to capture their care needs and assess their risk of harm to themselves or other people.

The Department of Health's Best Practice in Managing Risk⁶ defines risk as relating to the likelihood, imminence and severity of a negative event occurring (i.e. violence, self-

harm, self-neglect). In mental health services risk assessment has traditionally focused on prediction⁷⁻⁸. Patients may be categorised into low, medium or high risk of a particular outcome. Checklists of characteristics or risk scales are sometimes used to estimate the likelihood of harm occurring. However, research suggests that categorising risk in such a way is unhelpful in guiding the treatment and management of a patient⁹⁻¹⁰, and has poor predictive value¹¹⁻¹⁴. Our previous research has suggested that risk is often individual and risk management should be personalised¹⁵⁻¹⁶.

What do guidelines recommend?

National Institute for Health and Care Excellence (NICE) guidelines on the long-term management of self-harm state that risk assessment tools and scales should not be used to predict future suicide or repetition of self-harm, or to determine who should or should not be offered treatment. The guidelines suggest they might be used as prompts or measures of change¹⁷. A study by Quinlivan and colleagues¹³ showed that the predictive ability of risk scales varied widely. A later review suggested the pooled positive predictive value for suicide was 5%: for every 100 people rated at high risk, five would go on to die by suicide¹⁸. More importantly, risk scales would miss suicide deaths in the large 'low risk' group¹⁸.

NICE guidance also recommends risk assessment should take place as part of a comprehensive assessment of the patient's needs, taking into account previous suicidal behaviour, psychological and social factors, coexisting adversity (e.g. substance misuse), and access to medications¹⁷.

Examining the quality of risk assessment

The National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) has previously examined the quality of clinical risk assessment and management prior to suicide and has found evidence of a 'low risk paradox'. Specifically we found the immediate risk of suicide at the final service contact was judged by clinicians to be low or not present for the majority of patients who died by suicide⁴. Furthermore, the overall quality of risk assessment and management

was considered by clinical raters to be unsatisfactory in 36% of cases¹⁶.

Despite risk assessment being a central component of current practice in mental health, there has been no recent national study of the use of risk assessment tools across mental health services. There is also very little information on the views of clinicians, patients and carers about how helpful these tools are.

Aims of the study

The overall aim of the study was to examine different perspectives on the use of clinical risk assessment tools and to identify any areas for improvement. Specifically we wanted to:

- determine which risk assessment tools are currently being used in mental health services
- explore the views of clinicians, patients and carers on risk assessment tools and how their use might be improved
- identify how these tools are being used prior to suicide, especially in people rated as at low or no risk of suicide at their final contact with a mental health professional.

METHOD

Study design and data sources

The study used a mixed-methods design combining quantitative and qualitative data collection methods and analysis. There were three components of data collection, as described below.

1. Survey of tools used in mental health services

We identified all mental health trusts and health boards (referred to as services in the remainder of the report) in the United Kingdom: England (59), Scotland (14), Wales (7) and Northern Ireland (5), and contacted each medical director (or other nominated individual) requesting details of the main risk assessment tools currently used in their service. We also requested any supporting guidance, policies and training provided to staff within each organisation.

All 85 organisations providing specialist mental health services in the UK responded and provided details of the main risk assessment tools in use. In total, we received 156 tools – 85 were used service-wide, 71 were adapted for use with specific patient groups (i.e. old age, child and adolescent). In addition 49 guidance/policies and 10 training packs were obtained. For clarity and to avoid double-counting, we restricted our analysis to the main service-wide tools (n=85). Two-step screening processes were considered as one tool for the purposes of the analysis.

Information on the tools was recorded via a data extraction proforma onto a standardised database for aggregate analysis. Data were collected on the tool's structure (layout,

number of pages), content (the categorisation of risk, options to record text, tick boxes), and symptom profile (demographic, social and psychological factors).

2. Online survey

An online survey was launched on 7th September 2017 and closed on 6th March 2018. We wanted to understand the assessment of clinical risk in mental health services from different perspectives. The survey was used to record clinicians', patients' and carers' experiences of risk and safety assessment. Their views on the use of risk assessment tools and how they might be improved to benefit overall patient safety were also recorded.

Clinicians, patients and carers were directed to different sections of the online survey (see below).

Responses to the survey were provided anonymously to encourage candid answers. The survey was advertised via the NCISH website, Facebook and Twitter.

Clinicians

Clinicians were asked:

- about the details of risk assessment tools they used within their service
- if the tools had been validated
- whether they had received any training in their use
- what they viewed as essential elements of a risk assessment
- how the tools were used in a clinical setting (i.e. checklist, narrative/text, to inform management).

Patients and carers

Patients and carers were asked about whether safety and treatment needs had been discussed at meetings and how involved they felt in the planning and management of identified risks.

For patients, we wanted to know whether they:

- felt listened to and understood when they were assessed
- were aware of any tools or checklists being used to plan or discuss their safety
- felt supported in keeping safe when feeling vulnerable
- understood and were involved in the risk assessment process.

- died by suicide in 2015 (the most recent complete year of NCISH data);
- viewed as being at low or no immediate risk of suicide at their last service contact;
- the last contact was within the three months prior to their death (to minimise recall bias).

We selected this 'low risk' sample to better understand the low risk paradox, (that is, immediate suicide risk was judged by clinicians as low or not present in the majority of patients who died by suicide). These were the cases in which opportunities for improvement might be most readily identified.

There were 636 patient suicide deaths that met the inclusion criteria. A total of 136 clinicians who were responsible for the care of these patients prior to their death were randomly selected across three rounds of sampling for potential interview.

Oversampling was employed to take into account clinicians who no longer worked for the service or who felt unable to participate for other reasons, e.g. time limitations. The goal was to identify and interview a minimum of 20 clinicians. In total, 22 clinicians were interviewed. After 22 interviews, no new information was being obtained (data saturation had been reached).

The clinicians were invited to participate in a semi structured telephone interview. The interviews aimed to establish whether a clinical risk assessment tool had been used and, if so, how, and to collect general views and experiences on risk assessment tools and scales. The interviewees included

3. Interviews with clinicians

Clinicians were randomly selected from the NCISH database to be interviewed about their experience of assessing risk and safety. The NCISH database is a national consecutive case series of all patients who die by suicide within a year of contact with specialist mental health services. Clinical data are collected via a questionnaire sent to the clinician responsible for the care of the patient prior to their death.

A full description of the NCISH method of data collection is provided on our website and in previous national reports⁴. From the NCISH database, a sample of patient suicides meeting the following inclusion criteria was selected:

consultant psychiatrists, and a variety of other professions including mental health nurses, social workers, clinical risk managers, and psychologists. All four UK nations were represented.

Statistical analysis

Information obtained on risk assessment tools are presented as numbers and percentages. The denominator in all estimates is the number of valid cases.

All proportions are provided as valid percentages. If an item of information was not known for a case (i.e. data were missing) the case was removed from the analysis of that item. Information was extracted from the main tool used across services in an organisation (n=85).

We did not receive supporting guidance, policies and training provided to staff from all services and it was unclear for tools provided without guidance, whether guidance was available but had been omitted. Data on items included in guidance were therefore incomplete and not considered robust enough for inclusion in the analysis. Data were analysed using Stata 15¹⁹.

Qualitative analysis

Thematic analysis was used to examine the responses from the online survey and the interviews. Key themes were identified from clinicians', patients' and carers' responses to the survey and we explored whether these differed between the 3 groups.

Themes were identified by one researcher (JG) and validated by another member of the research team (IH). Where there were uncertainties or disagreements about common themes, agreement was reached

following discussion. NVivo software was used to manage, organise and analyse the data²⁰.

Office for National Statistics (ONS) guidance on disclosure control was followed to protect confidentiality within death statistics, and cell counts under 3, including zero, have therefore been suppressed. This rule applies to all data in this report.

Definitions

Suicide deaths were defined as those that received a conclusion of suicide or undetermined intent (open) at coroner's inquest, as is conventional in suicide research²¹. See the appendix for a full list of the International Classification of Diseases, Tenth Revision (ICD-10)²² cause of death codes included in the study (pages 23-24).

Ethical approval

Approvals were received from the University of Manchester Research Governance and Ethics; National Research Ethics Service (NRES) Committee North West (26/06/2017); Health Research Authority Confidential Advisory Group (HRA-CAG) (06/09/2017); Public Benefit and Privacy Panel for Health and Social Care (PBPP) (06/09/2017); and Research Management and Governance approvals from individual NHS Trusts and Health Boards in Wales, Scotland and Northern Ireland. Local capability and capacity review was not required for participating NHS organisations in England.

RESULTS

Risk tools used in mental health services

All 85 NHS mental health organisations in the UK gave details of the main clinical risk assessment tools used in their service. In five services staff had the option to use risk scales (i.e. SAD PERSONS, PATHOS, Beck hopelessness scale and the Columbia suicide severity rating scale (C-SSRS)) in conjunction with the main tool.

The assessments were largely multiple tick boxes in a checklist style (n=72, 85%) but others were formulation based tools with minimal prompts promoting clinical judgement (n=13, 15%) (see the appendix, pages 23-24, for a definition).

Although the use of tick boxes was comparatively common, all of the 85 tools examined also included the option for clinicians to record identified risks with a narrative. The majority (n=60, 70%) of tools

were locally developed to a greater or lesser extent.

Figure 1 shows the main tools used across the UK. In 33 services (39%) the tools were entirely locally devised (a further 27 (31% used local adaptations of recognised tools). Seventeen (20%) services used a built-in risk summary embedded within the electronic patient record system Rio.

All seven Local Health Boards in Wales used the Wales Applied Risk Research Network (WARRN), a tool developed by the National Leadership and Innovation Agency for Healthcare in Wales (now the NHS Wales Shared Services Partnership).

All five trusts in Northern Ireland used a two-step process, initially completing a 'standardised risk screening tool' for all patients, prior to applying a 'comprehensive clinical risk assessment and management tool' where required²³.

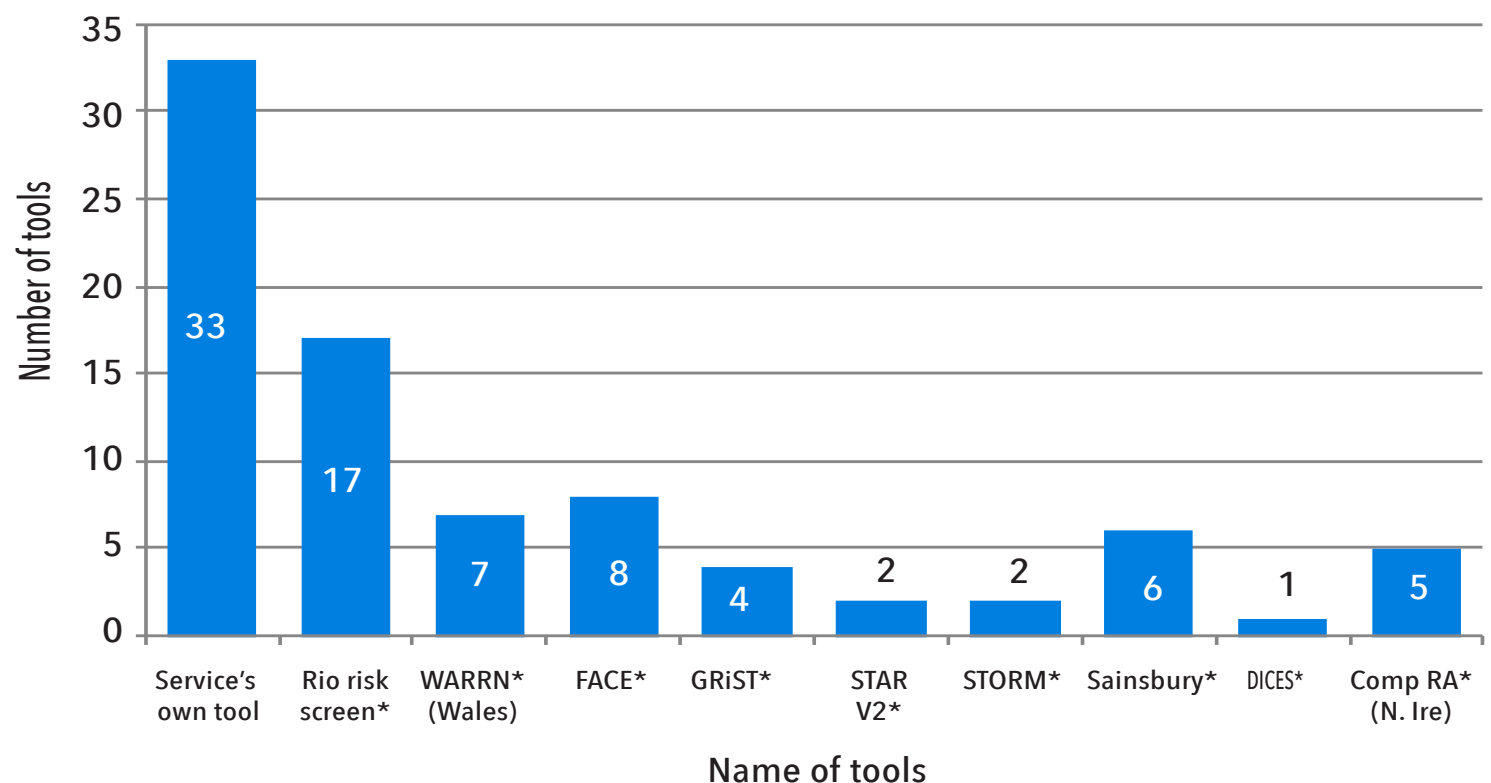


Figure 1: Tools used by mental health services in the UK

*see appendix on pages 23-24 for full descriptions

How do mental health services use tools?

The key features of risk assessment tools used in mental health services are shown in Table 1. The tools themselves varied in length. Forty nine (58%) tools were accompanied by supporting guidance, ranging from a single page 'aide memoir', used by 23 (27%) services, to a 102 page policy. In 29 (34%) services the 'five Ps model' (facilitating the understanding of a case, its context and the way in which factors interact)²⁴ was used to underpin risk assessment and formulation (see the appendix, pages 23-24, for a definition).

Table 1: Key features of risk assessment tools used in mental health services

Feature	Number	(%)
Median number of pages in the tool (range)	5 (1-20)	
Median number of pages in the guidance (range)	11 (1-102)	
Treatment thresholds for different levels of risk	75	(89%)
Developed locally	60	(71%)
Score/outcome determines management	80	(94%)
Predictive instrument	81	(95%)
Categorisation system used:		
High/medium/low	48	(56%)
Red/amber/green	6	(7%)
Numeric (1-10)	13	(15%)

Most tools encouraged staff to make predictions of future behaviours and stratify risk, for example, into high, medium, and low

or numeric risk categories. Overall, 80 (94%) tools used risk categorisation to inform care.

Content of tools

Tables 2 and 3 show the demographic and psychosocial characteristics, and suicide-related thoughts and behaviours included in risk assessment tools. Collection of these data in the tools varied from a sequence of tick boxes, general prompts in a text box, to an unstructured narrative.

Table 2: Demographic, social and clinical items included in risk assessment tools

Feature	Number	(%)
Family history of suicide	54	(64%)
Recent and lifetime contact with mental health services	52	(61%)
History of abuse	53	(62%)
Current victim of abuse	26	(31%)
Physical illness	57	(67%)
Living alone	34	(43%)
Homelessness	36	(42%)
Employment status	40	(47%)
Recent life events	39	(46%)
Domestic problems	31	(36%)
Stress tolerance*	24	(28%)
Psychosocial stressor	26	(31%)
Family social network	47	(55%)
Substance misuse		
Lifetime use	76	(90%)
Recent use	60	(71%)
Protective factors	52	(61%)

*see appendix, pages 23-24, for full description

Table 3: Items related to suicidal thoughts and behaviour included in tools

	Number	(%)
Self-harm	75	(88%)
Suicidal ideation	56	(66%)
Suicidal intent	40	(47%)
Suicide plan	49	(58%)
Concealed suicidality	14	(16%)
Past suicide attempt	56	(66%)
Precipitating event	35	(41%)
Access to means	27	(32%)
Intolerable distress	22	(26%)

Areas of risk

All of the 85 service-wide tools were designed to document key areas of risk, as shown in Box 1

Box 1: Key assessments of risk within tools

- Risk to self
- Risk to others
- Risks from others/exploitation/vulnerability
- Self-neglect
- Social circumstances/personal factors
- Substance misuse (including alcohol and drugs)
- Safeguarding child and adult

Fifty-three (62%) tools included sections encouraging the clinician to incorporate input from the patient and/or their carer(s) or family, but only 16 (19%) mentioned consultation with the GP.

Safety planning and changing risk

Ten (12%) organisations had introduced safety planning (see appendix for a definition) into the risk assessment process.

One organisation had developed a safety plan app for smart phones and other devices.

Seventy-six (89%) of the tools reviewed encouraged clinicians to reflect on the fluidity of risk by prompting them to consider the types of risk factors shown in Box 2.

Box 2: Types of suicide risk factors considered in risk assessment tools

Dynamic

Factors are present at some point but may fluctuate in duration and intensity, e.g. hopelessness, substance misuse.

Stable

Factors tend not to change, e.g. personal factors, current diagnosis.

Static

Long-term factors likely to endure for many years, or that do not change, e.g. demographic factors, history of self-harm.

Future

Factors that can be anticipated and may result from changing circumstances, e.g. future stress, access to means.

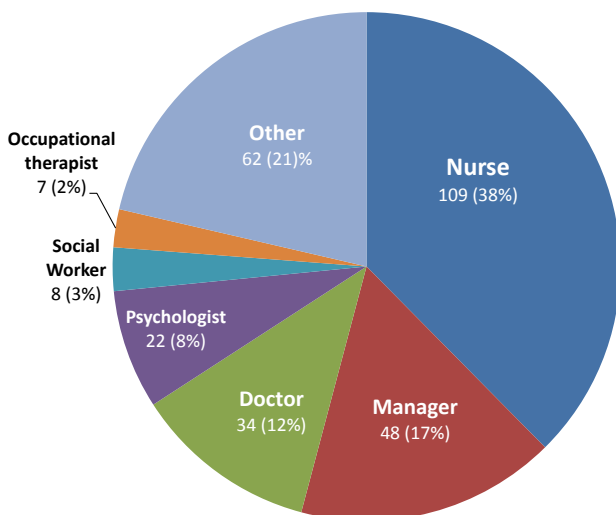
Online survey

a. Clinicians views

290 clinicians participated in the survey; the biggest single group was nurses (n=109, 38%; Figure 2). 262 (90%) clinicians reported using a risk assessment tool in their service, 47 (37%) used more than one.

82 (71%) clinicians said they had received training in the use of the risk assessment tool(s), and 51, (42%) reported that the tool they were using had been validated.

Figure 2: Number of clinicians who responded to the survey



Analysis of the survey text responses revealed a number of themes about the current use of tools, and suggestions for improvement.

Documenting risk

From the text responses, clinicians reported using risk assessment tools as a means of documenting clinical information and communicating it within and between services.

Tools were often also used to detail past and present patient needs in order to inform management plans. Many clinicians felt the tools could be a helpful adjunct to their clinical judgment, i.e. useful as an 'aide memoir' to prompt consideration of a patient's wider social factors. They stated that the tool was not used as a script to replace candid conversation; instead the tool should be used in conjunction with other sources of information.

Predictive ability

Around a third of nurses (n=15, 32%) and managers (n=11, 38%), but none of the doctors, thought tools had predictive value, compared to around two thirds of psychologists (n=20, 70%).

"I believe risk assessments assist information gathering but are not 'predictive'".
[Nurse]

Essential functions of risk assessment

We asked clinicians what they thought were the essential functions of a risk assessment. Box 3 shows the common responses.

"Risk assessment tools are only as effective as the individual carrying them out. They can create a false sense of safety."
[Doctor]

Box 3: Clinicians' views on the essential elements of a risk assessment tool

- To enable candid conversations allowing the development of a trusting relationship.
- To explore identified risks to help inform a management plan to reduce distress.
- To explore current distress and personal triggers of risk through knowledge of historical factors.
- To review and consider diagnosis, psychological incidents and social factors.
- To support the patient's recovery.
- To allow collaboration with patients and their family/carers for ongoing safety management.
- To help keep assessments relevant with up-to-date information.

Box 4: Clinicians' views on challenges with risk assessment tools

- Compared to full clinical case records, it is not easy to find relevant information.
- Tools can be lengthy and time consuming to complete.
- Tables and tick boxes are not always read by staff.
- Information may not always be accessible if updated incorrectly.
- Difficult to input information and track back, leading to details being lost.
- The use of tools may prevent staff from using experience and clinical judgement and provide false reassurance.

Box 5: Clinicians' views on improving risk assessment tools

- Improve consistency, make tools shorter, clearer and easier to complete.
- Make tools accessible to patients and carers, with explanations of specialist vocabulary.
- Remove scoring/rating systems.
- Provide sufficient training on the risk assessment process using case vignettes which are relevant to all staff.
- Promote staff confidence through ongoing training and supervision on how to record information and manage identified risks.
- Staff training on understanding risk and not just tool completion.

Challenges with tools and suggestions for improvement

Several recurring themes were identified that were relatively critical of risk assessment tools. These are summarised in Box 4.

The main suggestions for improvements to risk assessment tools were to make them easier to complete and for better training for staff in what (and how) information should be recorded. Box 5 shows the suggested key areas for improvements.

b. Patients' views

Perceptions of risk assessment

Forty-two patients completed the survey. Nine (35%) patients reported being aware of having a checklist or risk assessment tool being administered during meetings with their care team(s). Fourteen (53%) felt they were listened to during the meeting and 19(73%) told us they were given the opportunity to discuss their own safety (Figure 3).

Twenty (77%) patients reported they were not offered the option of having a carer or family member/friend present during their assessment. Nine (35%) patients told us there was a lack of information given during the meeting on what to do or who to contact in a crisis.

Challenges with assessment and suggestions for improvement

A number of themes emerged. Some patients were critical of the assessment process and felt there was inconsistency between teams. Some reported that

their views had been disregarded by clinicians and that the assessments felt impersonal. Patients also highlighted a lack of consideration for how risk and safety fluctuated.

Their suggestions for how the risk assessment process could be improved are shown in Box 6.

Box 6: Patients' suggestions to improve risk assessment tools

- A personalised approach, not based on the completion of a checklist.
- Assessment by staff who are well-trained, have an understanding of managing distress, and who value the answers given.
- A focus on suicidal thoughts, i.e. encourage staff to confidently tackle difficult questions.
- Involve carers/families, including sharing crisis/safety plans with them.
- Provide information on local support options/helplines and 24-hour services, not just national numbers.

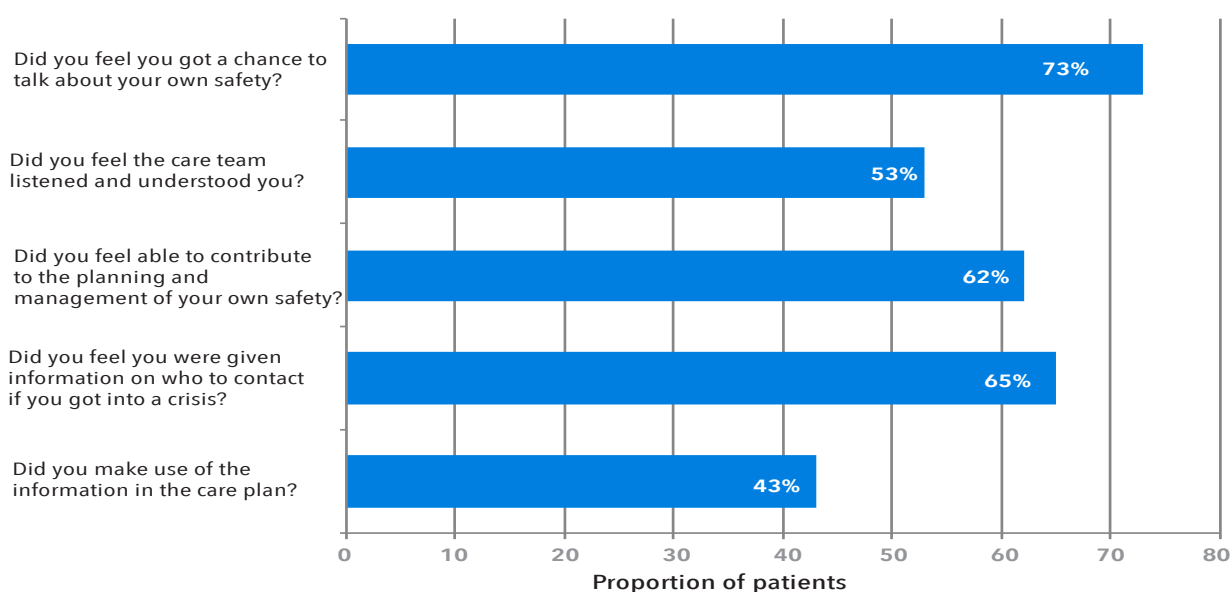


Figure 3: Patient's experience of risk assessment tools

c. Carers' views

Perceptions of risk assessment

Twenty-six carers completed the online survey.

Nine (45%) carers reported being present at an assessment where a patient's safety was discussed. However, carers expressed frustration and disappointment at their lack of involvement in the process, despite having raised concerns. Only nine (45%) felt their views were acknowledged. Over half (n=11, 55%) felt they were not given the chance to express their views on potential risk factors (Figure 4).

Challenges with assessments and suggestions for improvement

Carers did not feel they were given adequate information of where to go and what to do in a crisis. Carers reported a lack of communication and consultation, a lack of involvement in safety planning processes, and limited reassessment of plans.

Carers' suggestions on how risk assessments could be improved were often based on better consultation and support from clinicians during periods of crisis (Box 7).

Carers emphasised that care plans be discussed with carers and family members, and they welcomed plans that were devised collaboratively and which considered the family context.

Box 7: Carers' suggestions for improving risk assessment and safety planning

- To have an understanding and knowledge of the care plan.
- To be given information and advice on what to expect, and how to manage situations at home, before and during a crisis.
- To be offered training to develop the skills and knowledge to support the patient, including in a crisis.
- To not be left feeling alone and unsupported.
- Better and more consistent information sharing with the family (where consent has been given by the patient).
- To discuss high risk behaviours with family and carers.

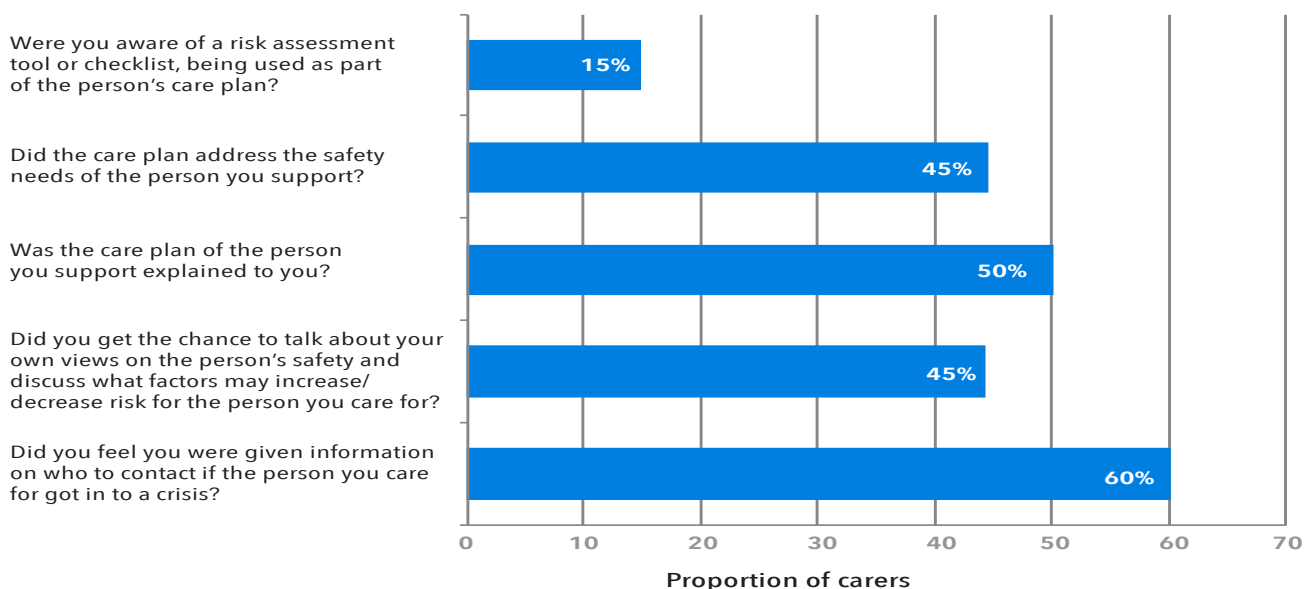


Figure 4: Carers experience of risk assessment tools

Clinician interviews

In total, 22 clinicians were interviewed about the assessment of clinical risk in mental health services. The interviewees included consultant psychiatrists (n=13), mental health nurses (n=3), managers (n=3), social workers and psychologists. All four UK nations were represented.

All the clinicians we spoke to were aware of the tools used within their organisation, how they were used and where they were located within the notes (whether paper or electronic).

What makes a good risk assessment?

Clinicians told us the tools were a useful resource providing they were kept up to date and completed well. The risk summary section of the tool was viewed as a useful way of communicating any identified areas of concern to other professionals and measures to prevent negative outcomes.

Clinicians told us an important element of risk assessment was the quality of the information gathered, building a rapport and how the assessment flowed. In particular, they mentioned good quality information should be gathered on: the patient's (i) current situation, (ii) past history, and (iii) social factors.

"An assessment flows the way you direct it but also the way the patient takes you. If they say something alarming, check that out, it may not fit into a box" [Clinician]

Risk formulation

Clinicians carried out risk formulation - the process of summarising the assessment and identifying the risks and triggers and how these interacted – and felt it was essential to risk management.

"Practitioners need to learn how to assess, pull information together and summarise (formulate) where are we now? What do we do today?" [Clinician]

Updating tools

There was a consensus that risk assessments should be updated when there were any changes in care or the patient's circumstances, i.e. following an incident of self-harm or hospitalisation, and as the organisation agreed as standard. Clinicians reported that expected time frames for updating risk assessment documentation within mental health services varied from team to team, ranging from 4-12 months.

General principles

The clinicians told us risk assessment was not viewed as a one-off process, but an ongoing review after each interaction. It was mentioned that the risk assessment process needed to be personalised to take into account the dynamic nature of life situations and how individuals managed them.

"The dynamic nature of risk cannot always be predicted and managed" [Clinician]

The clinicians we interviewed noted the importance of gathering a thorough history of previous incidents, and having an awareness of triggers for distress, e.g. significant anniversaries. They told us a good risk history should include details of the incident and its consequences as well as the likelihood of the incident being repeated. However some also highlighted the difficulty of predicting suicide.

“Checklists take away fluid conversation. Individuals don’t fit into a box” [Clinician]

Training

Clinicians felt that better training on risk formulation would give staff the confidence and understanding about how to document the most meaningful information.

They reported risk assessment training was received as part of professional training, but was often not refreshed or updated.

“We can’t predict human behaviour. Likelihood is an opinion, a professional judgement” [Clinician]

“Your job is not to predict who will die; your job is to engage with the problem the patient is presenting to you in a way that is helpful” [Clinician]

“Training keeps risk at the forefront, it keeps it fresh” [Clinician]

Issues with risk assessment

The interviewees identified similar problems with risk assessments to those found in the online survey, typically:

- administrative burden
- impersonal set of tick boxes
- poor quality information
- not updated regularly

“The best tools are useless if they are blank”
[Clinician]

SUMMARY OF FINDINGS

Characteristics of clinical risk tools

We collected data from all NHS mental health services in the UK. There was little consistency in the use of risk tools, although greater consistency within Wales and Northern Ireland. Tools varied widely in length, format, content, and the extent to which they had been adapted for local use.

For around 40% of tools there was no accompanying local guidance and fewer than one in five suggested liaising with primary care when assessing the patient. Most tools were in checklist format. Many sought to predict future behaviour and scores on the tool also determined management decisions. This is contrary to national guidance for self-harm assessment.

Views on clinical risk assessment

Clinicians reported that tools could be useful (for example to act as a prompt or to communicate with fellow professionals) and might be helpful as part of a wider process of formulation where different risks were considered together to determine the patient's management plan. Others suggested that the tools could provide false reassurance. Clinicians reported issues around lack of training in risk assessment processes, risk management, and practical issues around user friendliness and accessibility of information.

Patients and their carers emphasised the need for carer involvement, staff being able to ask about suicide, and clarity about what to do in a crisis. Potential drawbacks of tools included inconsistency in their use or making the assessment process impersonal

WHAT THIS STUDY CAN'T TELL US

- Although all services provided copies of risk assessment tools, the findings from the online survey and interviews are based on small numbers and selected groups, and should be interpreted with caution. They may not represent the views of all staff, patients and carers.
 - The design of the study cannot allow us to draw direct causal links between the general gaps we identified in the risk assessment process and individual patient suicide.
 - We did not look in detail at the modification of tools used in specific services, for example those providing care and treatment for young people.
- The findings may not reflect ongoing improvements being made by services to their risk assessment tools and processes.
 - The study cannot tell us about the quality of clinical risk assessment across services as a whole.
 - We did not investigate how patient capacity to make treatment decisions might impact on the assessment of risk. We did not explore how new approaches to clinical risk assessment could better support autonomy, patient choice and engagement. These are potentially valuable areas for future research.

CLINICAL MESSAGES

1. Risk assessment tools should not be seen as a way of predicting future suicidal behaviour.
2. Risk is not a number, and risk assessment is not a checklist. Tools, if they are used (for example as a prompt or a measure of change), need to be simple, accessible, and should be considered part of a wider assessment process. Treatment decisions should not be determined by a score.
3. There is a growing consensus that risk tools and scales have little place on their own in the prevention of suicide. This study suggests ways in which clinical risk assessment processes might be improved. The emphasis should be on building relationships; and gathering good quality information on (i) the current situation, (ii) past history, and (iii) social factors to inform a collaborative approach to management. Staff should be comfortable asking patients about suicidal thoughts.
4. Risk assessment processes are an intrinsic part of mental health care but need to be consistent across mental health services. Staff should be trained in how to assess, formulate, and manage risk. On-going supervision should be available to support consistency of approach. There is little place for locally developed tools.
5. Families and carers should have as much involvement as possible in the assessment process, including the opportunity to express their views on potential risk. The management plan should be collaboratively developed. Communication with primary care may also be helpful.
6. The management of risk should be personal and individualised, but it is one part of a whole system approach that should aim to strengthen the standards of care for everyone, ensuring that supervision, delegation and onward referral are all managed safely.

REFERENCES

1. Hunter C, Chantler K, Kapur N, Cooper J. Service user perspectives on psychosocial assessment following self-harm and its impact on further help-seeking: A qualitative study. *Journal of Affective Disorders*, 2013; 145: 315–23.
2. World Health Organisation (WHO). *Preventing suicide: a global imperative*. Geneva: World Health Organisation, 2014.
3. Office for National Statistics (ONS) Suicide in the United Kingdom, 2016 Registrations. *Statistical Bulletin* 2017: 1-19.
4. The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. *Annual report: England, Northern Ireland, Scotland and Wales*. Manchester: University of Manchester, 2017. <https://sites.manchester.ac.uk/ncish/reports/annual-report-2017-england-northern-ireland-scotland-and-wales/>
5. Worthington A, Rooney P, Hannan R. *The Triangle of Care, Carers Included: A guide to best practice in mental health care in England*. London: Carers Trust, 2013.
6. Department of Health, National Risk Management Programme. *Best practice in managing risk: principles and evidence for best practice in the assessment and management of risk to self and others in mental health services*. London: Department of Health, 2007. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/478595/best-practice-managing-risk-cover-webtagged.pdf
7. Monahan J, Brodsky S L, Shan S A. *Predicting violent behaviour: An assessment of clinical techniques*. Beverly Hills, CA: Sage, 1981.
8. Monahan J. Violence prediction: The past twenty years and the next twenty years. *Criminal Justice and Behaviour*, 1996; 23, 107–20.
9. Large M, Ryan C, Carter G, Kapur N. Can we usefully stratify patients according to suicide risk? *British Medical Journal* 2017; 359 : j4627.
10. Oates A, *Learning from suicide-related claims. A thematic review of NHS Resolution data*. NHS Resolution 2018 https://resolution.nhs.uk/wp-content/uploads/2018/09/Learning-from-suicide-related-claims_A_thematic-review-of-NHS-Resolution-data-pdf
11. Chan M, Bhatti H, Meader N, Stockton S, Evans J, O'Connor R, Kapur N, Kendall T. Predicting suicide following self-harm: A systematic review of risk factors and risk scales. *The British Journal of Psychiatry* 2016; 209(4): 277-83.
12. Quinlivan L, Cooper J, Steeg S, Davies L, Hawton K, Gunnell D, Kapur N. Scales for predicting risk following self-harm: an observational study in 32 hospitals in England. 2014 *BMJ Open* 2014; 4: e004732.
13. Quinlivan L, Cooper J, Davies L, Hawton K, Gunnell D, Kapur N (2016) Which are the most useful scales for predicting repeat self-harm? A systematic review evaluating risk scales using measures of diagnostic accuracy. *BMJ Open* 2016; 6: e00929.
14. Steeg S, Quinlivan L, Nowland R, Carroll R, Casey D, Clements C, Cooper J, Davies L, Knipe D, Ness J, O'Connor R C, Hawton K, Gunnell D, Kapur N. Accuracy of risk scales for predicting repeat self-harm and suicide: a multicentre, population-level cohort study using routine clinical data. *BMC Psychiatry*, 2018 18, 113.
15. The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness *Making Mental Health Care Safer: Annual Report and 20-year review*. Manchester: University of Manchester, 2016. <http://documents.manchester.ac.uk/display.aspx?DocID=37580>
16. Rahman MS, Gupta S, While D, Windfuhr K, Shaw J, Kapur N, Appleby L. *Quality of risk assessment prior to suicide and homicide: A pilot study*. Manchester: University of Manchester, 2013. <http://documents.manchester.ac.uk/display.aspx?DocID=37580>
17. National Institute for Health and Care Excellence (NICE). *Self-harm in over 8s: long-term management. Clinical guideline*. London: NICE, 2011. <https://www.nice.org.uk/guidance/cg133/resources/selfharm-in-over-8s-longterm-management-pdf-35109508689349>
18. Carter G, Milner A, McGill K, Pirkis J, Kapur N, Spittal M. Predicting suicidal behaviours using clinical instruments: systematic review and meta-analysis of positive predictive values for risk scales. *The British Journal of Psychiatry*, 2017; 210: 387-95.

19. StataCorp . 2017. *Stata Statistical Software: Release 15*. College Station, TX: StataCorp LP.
20. NVivo qualitative data analysis software; QSR International Pty Ltd. Version 11. 2015.
21. Linsley KR, Schapira K, Kelly TP. Open verdict v. suicide - importance to research. *British Journal of Psychiatry*, 2001; 178: 465-8.
22. World Health Organisation (WHO). *International classification of diseases and related health problems 10th revision (ICD- 10)*. Geneva: World Health Organisation, 2010.
23. The Regulation and Quality Improvement Authority (RQIA). *Review of assessment and management of risk in adult mental health services in health and social care (HSC) trusts in Northern Ireland* June 2015. <http://rqia.org.uk/RQIA/files/47/47608b6b-42a0-4a75-a36a-35ef23790f34.pdf> Belfast: RQIA 2015
24. Weerasekera P. *Multi-perspective case formulation. A step toward treatment integration*. Malabar, Florida: Krieger Publishing Company, 1996.
25. Morgan S. *Clinical Risk Management: A Clinical Tool and Practitioner manual*. The Sainsbury Centre for Mental Health, 2000.
26. Stanley B, Brown G, Brenner L, Galfalvy H, Currier G, Knox K, Chaudhury S, Bush A, Green K. Comparison of the safety planning intervention with follow-up vs usual care of suicidal patients treated in the emergency department: *JAMA Psychiatry*, 2018. Doi:10.1001/jamapsyhiatry.2018.1776

APPENDIX

Definitions

Tool	Details
Comp RA (N.Ire)	Risk screening tool and the comprehensive risk assessment and management tool Northern Ireland's two-step risk assessment and management process.
DICES system	Describe the risk; Identify the options; Choose your preferred option(s); Explain your choice; Share your thinking.
Functional Analysis of Care Environments (FACE)	Supports the assessment risk domains and encourages patient and carer collaboration.
Galatean Risk Screening Tool (GRiST)	Provides a 'structured and systematic' approach to risk assessment.
Rio risk summary	A risk summary embedded within one of the electronic patient record systems.
Sainsbury Clinical Risk Assessment Tool	A clinical tool and practitioner manual developed by the Sainsbury Centre for Mental Health ²⁵ .
Skills-based training on risk management (STORM)	Assessment focused on identifying the problem and developing solutions.
Standard Tool for the Assessment of Risk; Version 2 (STAR V2)	Established risk assessment tool using a combination of tick boxes and text boxes.
Welsh Assembly Risk Research Network (WARRN)	A formulation-based assessment, allowing patients and clinicians to work together. Used by all 7 Local Health Boards in Wales.

APPENDIX

Definition

5Ps model	<ul style="list-style-type: none"> • Problem: nature of the risk. • Predisposing factors: historical factors, i.e. trauma, early attachment, life adversity, past relationships, social developments. • Precipitating factors: recent triggers, issues, i.e. acute life events, events that have meaning, sudden changes, past reminders. • Perpetuating factors: factors that keep the problem going, i.e. beliefs and interpretations, relationships, psychosocial stressors, self-care. • Protective factors: evidence of resilience, engagement, interpersonal qualities, and social support.
Capacity	<p>People are considered to lack capacity if they have an impairment which causes them to be unable to make a specific decision. The person should be able to understand, retain and weigh the information provided and communicate their decision. The possible causes of incapacity are wide-ranging and include dementia, acute confusion, depression, psychotic illness, distress or emotional disturbance.</p>
Formulation-based tools	<p>These use a systematic process of gathering and linking information. A summary describing the links between the different factors, outcomes, and needs in order to inform management.</p>
ICD-10 codes for suicide	<p>Deaths coded with the following ICD-10²² cause of death codes were included in the study: X60-X84; Y10-Y34 (excluding Y33.9); Y87. This is in line with ONS procedures for identifying deaths by suicide. Deaths receiving a narrative conclusion at coroner inquest were also included if ONS procedures for identifying suicide deaths applied one of the above ICD-10 codes.</p>
Risk formulation	<p>The process of summarising the assessment, identifying the risks and triggers, and how these interact together. Risk formulation (i) identifies 'why' someone engages in problematic behaviour not just 'if' they will engage in it, and (ii) encourages a shift away from simply identifying risk factors to thinking about how key variables interact and connect in the expression of risk.</p>
Safety plan	<p>A document designed for clinicians and patients to work together to devise coping strategies, problem solve and provide details of where to go when in distress. The patient is encouraged to keep a copy to refer to. There is little randomised trial evidence of their efficacy, although results from a recent cohort study have found them to be potentially useful²⁶.</p>
Stress tolerance	<p>The ability to manage life events that may impact negatively on a person's mental wellbeing.</p>

Independent Advisory Group

Name	Affiliation
Ben Thomas (Chair)	Department of Health, England
Ainsley Bladon	Mental Health and Vulnerable Groups Division, Welsh Government
Richard Bunn	Shannon Clinic Regional Forensic Unit, Belfast Health and Social Care Trust, Northern Ireland
Carolyn Chew-Graham	Keele University
Caroline Dollery	East of England Strategic Clinical Network for Mental Health Neurology and Learning Disability
Frances Healey	NHS Improvement
Tasneem Hoosain	Healthcare Quality Improvement Programme (HQIP)
Ann John	Public Health Wales
Tim Kendall	NHS England
Karine Macritchie	South London and Maudsley NHS Foundation Trust
Sarah Markham	Lay member
Ian McMaster	Department of Health, Northern Ireland
John Mitchell	Mental Health and Protection of Rights Division, Scottish Government
Sian Rees	University of Oxford Health Experiences Institute, Department of Primary Care Health Sciences
Tina Strack	Healthcare Quality Improvement Programme (HQIP)

MANCHESTER
1824

The University of Manchester



HQIP

Healthcare Quality
Improvement Partnership