GRiST handbook

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Contents

1 Definition of terms

Sequential interface: The GRiST web interface where the risks are laid out in order and information is added by scrolling down the page. This is the one most practitioners know and use.

Dynamic interface: The "mind-map" interface where information can be added easily in any order by selecting a branch of the mind map, which takes you to those questions associated with that part of the risk knowledge. This is the one used for conducting assessments along with the service user and for self-assessments. It is also suitable for use by practitioners in the same way as the sequential interface.

Generic information: Information influencing more than one risk such as emotions, social context, and adverse life events.

Risk-specific information: Information specific to a risk such as previous episodes and current intention.

2 Providing scores for items with a zero to ten scale

Research shows people are able to make meaningful distinctions along a scale of 11 numbers, such as the 0 to 10 scale used in GRiST. However, with such a fine-graded measure, the exact number provided is not important and time should not be wasted agonising over whether it should be a 4 or a 5, for example. Research also shows that for these types of judgement, it is better to go with your instincts than spending a lot of intellectual effort thinking about all the reasons why it might be one rather than the other. Analysis of our database of assessments demonstrates that when all the patient information is put together, the risk judgements provided are highly reliable and thus not dependent on excessive precision of the values given for scale data.

2.1 How to think about scale judgements: the Galatean approach

People remember exceptional rather than typical examples. Everyone has heard of Roger Federer because he is an exceptional tennis player and people will know more about him than the usual grand-slam tennis tournament player. The same idea applies to GRiST: people have a clear understanding of the exceptional behaviour that suggests the highest value on the scale. Take anger, for example: think of someone who has been incandescent and then compare the person in front of you with that highest point on the scale. If the person you are assessing is about half way between somebody who is not angry and your conceptualisation of maximum anger, then give the score a 5 . . . and don't worry if it might be a 6 or a 4 because you are in the right general area.

2.2 Rules of thumb for answering scale questions

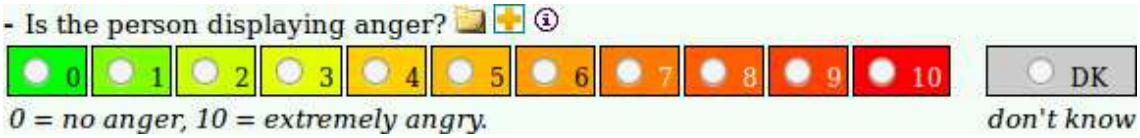

Figure 1: *Scale answer for anger.*

1. Use the descriptors at each end of the scale for a clear definition of how to interpret the maximum and minimum values (see Figure 1).

2. Consider the person you are assessing and get a feel for where he or she comes between the two scale ends.
3. Give the value that feels right and do not spend long thinking about it because it will not improve on the accuracy of your intuitive judgement. Remember:
   (a) there is no right answer;
   (b) the 11-point scale (0 to 10) provides room for error compared to, say, a three-point scale such as low, medium, high and you don't need to worry about the precision of your answer.
4. if a particular behaviour or circumstance is not a problem, then don't waste time trying to assess it further:
   (a) put a zero;
   (b) the item is clearly not an issue and thus not relevant to your concerns;
   (c) don't waste time on issues that will have no impact on the eventual risks or their management.
5. Concentrate on the factors that influence risks or their management.

3 Comments and actions

For every question, there is the opportunity to provide a piece of text that gives additional useful information related to a quantitative answer such as dates, scale judgements, etc. See the folder icon next to the question in Figure 1. The idea is that it will clarify or add to the quantitative answer. Similarly, each question has an action box where some intervention or management of the particular risk item should be recorded; this is the box with a cross in it in Figure 1.

Please note: there is no necessity to provide a comment or action for every question.

GRiST was designed to reduce the amount of free text to a minimum. It is far quicker to give a quantitative answer for a specific risk item than it is to write out the item and its answer in free text within a more general answer box, as many assessment tools require. The *only* reason for adding a text comment to a GRiST answer is if it adds something to the understanding of risk or its management.

3.1 Rules for comments

1. Comments are for providing information relating to the particular risk item.
   (a) Only provide a comment if it adds to the understanding of that risk item and does not simply repeat what the quantitative answer communicates.
   (b) Focus comments on the specific item to which they are attached and don't provide lots of additional information related to different items.
      i. Attach the additional information to their related specific items.
      ii. Trust the GRiST structure of questions to have a more appropriate place for the additional items. If you don't know where the question is, then *use the search box on the right of the questions*.

2. Comments should be brief and to the point: a single short sentence is usually enough or, even better, a key phrase that communicates the issue.

   (a) Think "mind map" where each branch of a mind map has a key word or phrase explaining the meaning of that branch.

   (b) Too much text wastes time both for the assessor (writing it) and anyone reading the report.

   (c) Too much text obscures the important point about the comment and unnecessarily bloats the report, making it harder to see the quantitative answers and their risk inputs as a whole.

   (d) Examples for a comment attached to the date of the most recent suicide attempt:

      i. *BAD* "The person made an attempt on his life a year ago": this is obvious from the date answer itself.

      ii. *GOOD* "This is the anniversary of when his mother died": it says something useful about that particular date that relates to the heightened risk.

      iii. *EVEN BETTER* "anniversary of mother's death"

3. We have now provided functionality for easily copying comments into the summary boxes for individual risks and will soon be doing the same for the risk formulation.

3.2 Rules for management plans

Actions or management plans are text boxes with a cross on the icon as shown in Figure 1). Their rules are similar to the ones for comments.

1. Action boxes are for providing management advice, specifically related to the particular risk item.

   (a) Always put something in the action box if it is something that will help manage the risk issue.

   (b) Only put something in the action box if it relates to that specific item.

      i. Trust the GRiST structure of questions to have a more appropriate place for any related items.

      ii. If you think of a management action that is not related to the particular item, put it in the general management tab that scrolls down along the side of the questions (see Figure 2). You can cut and paste it later into a more suitable place when you reach that place. In other words, you can use the management tab as a temporary "memo" pad because you can see what is in it at any time.

2. Examples for a management action attached to the date of most recent suicide attempt:

   (a) *BAD* "This anniversary raises the risk": this is a comment about the risk and not about how it should be managed.

   (b) *GOOD* "Make sure he is not alone on or around this date.": it provides advice on how to lower the risk and is directly related to the particular risk item. The management plan may later add something more specific about who should be contacted for this but at least the idea is recorded at the right point and when it was thought about.

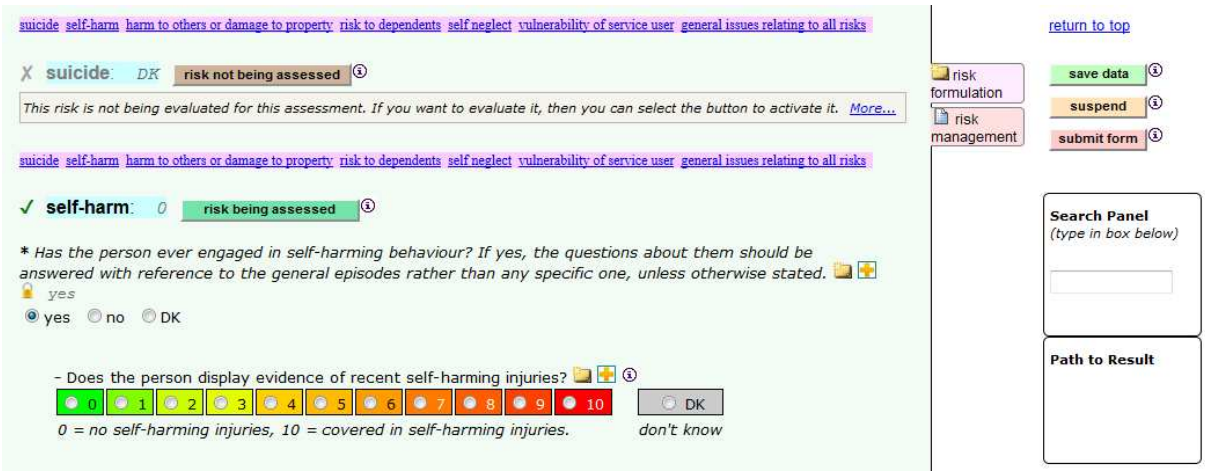

Figure 2: *Part of the sequential risk-assessment GRiST where the suicide risk has been turned off for this particular assessment but not self-harm, which thus shows the questions. Note the risk formulation tab, risk management tab, and search box on the right of the questions, all of which automatically scroll down with the questions.*

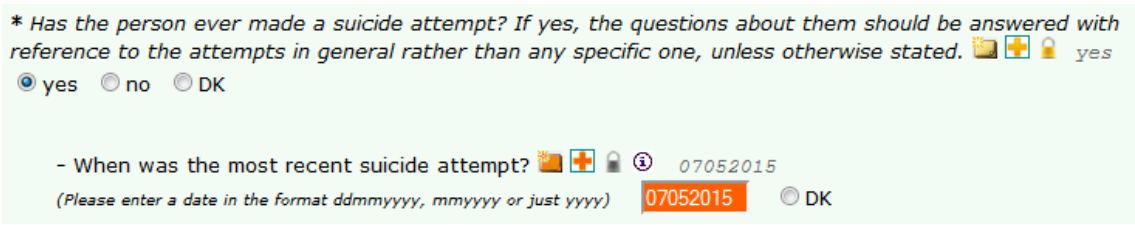

Figure 3: *Two questions about history of suicide demonstrating the role of the padlocks. The first question about whether a person has a history of suicide attempts is given a gold padlock because once the answer is "yes", it is fixed: it can't change unless it was incorrectly given. However, the date of the most recent attempt* can *change, although not usually very often, and so is given a silver padlock.*

3.3 Issues relating to both comments and management plans

1. Whether or not a comment or management plan is carried forward from a previous assessment to the current assessment depends on the type of question that is being asked. This type is marked out by whether or not they have a "padlock" and the colour of the padlock, as shown by Figure 3.

   (a) Historic data that will only change if they are wrong or added for the first time are given a gold padlock (e.g. previous suicide attempts); their answer will be carried forward to the current assessment and the report will show the most recent comment/action if a new one was not added in the current assessment.

   (b) Data that do not change very often are given a silver padlock (e.g. when is the most recent suicide attempt); their answer will be treated the same as for the gold padlock data.

   (c) Data with no padlock can change on a daily basis and so their answers are not carried forward. The report will only show a comment or action if it was provided for the current assessment.

   (d) These behaviours of comments and actions in the report are to make it easier for prolonging the "lives" of comments that are still current. There is no point typing them out again or

copying and pasting exactly the same one back into a question's comment if the answer hasn't changed and therefore the comment is still relevant.

2. If a question with a padlock (one where answers don't change or not very often) does need to have its answer changed, you must ensure the comment is also updated so that it remains relevant to the new answer. The old comment will be carried forward into the report if no new comment is added, which may be fine if it still applies but care should be taken to ensure this is the case. Similarly, you might need to update a comment even if the answer has not changed.

3. In general, when you add a new comment to a padlock item that already has a comment, the new one will replace the existing comment and the old one will not be seen in the subsequent report.

   (a) If there is anything in the old comment that is still important to the current assessment, then copy it over and include it with the new comment information.

   (b) Note that there is a comment diary that can show the whole history of comments for the interested party, but the historic ones are not all included in the individual risk reports. The comment diary can be found on the same page where the reports are accessed.

4 The general process of assessing and managing risks

In our model of health decision making [1–3] there are three main stages:

Stage 1 diagnosing or assessing the levels of risk in each category (suicide, self harm, harm to others, etc): the risk judgements.

Stage 2 considering the potential outcomes if nothing is done, which is the context for the risk formulation.

Stage 3 deciding on interventions to address the potential outcomes: the safety management plan.

Each stage shares information with the other stages and interventions will lead to exploration of additional issues in an iterative cycle.

1. The data collection will begin with evaluating the levels of risks applying to the service user but the cyclical or "iterative" relationship between the three stages means formulation and management issues will soon be considered.

   (a) It is neither sensible nor possible to treat them as distinct and separate stages.

2. GRiST makes it easy to tackle all three stages in parallel by having action boxes next to the assessment data where the plan for each risk and for the patient overall can be constructed as the assessment progresses.

Bearing this in mind, it is instructive to look at each stage to understand what is involved and how they connect to each other. The important thing to remember is that the information provided at each stage must be relevant to that stage. For example:

- The date of the most recent suicide episode is relevant to the risk evaluation but not to how it is managed.

- The purpose of the comment beneath each individual risk judgement is to identify the variables that are most influencing the level of risk. So don't put data in here that is more about managing the risk; it should go in the management box and eventually into the overall safety plan.

The aim is to bring out the pertinent data for understanding the stage and thus be able to see more easily how they link in the holistic process of assessing and managing the risks. Sometimes, of course, an issue can have a role in more than one stage and this is fine. For example:

- Presence of risk triggers raise the level of risk and also need to be managed as a matter of urgency, which means they will turn up in the risk formulation as well as the individual risk-summary box.

5 Risk judgements and safety plans

GRiST helps assess and manage many risks and the judgement for each one is influenced both by information specific to that risk, such as the last risk episode, and "generic" information that influences all the risks, such as feelings and emotions. The risk judgement can be given at any time but, in the sequential interface, it comes after the risk-specific data because these are usually the most relevant to the level of risk. The generic data are relevant to all risks and individual risk judgements may need to be reviewed after generic data have been collected. However, these data are usually more important for identifying causes of the risk behaviours and how to manage them.

5.1 Providing the risk-judgement score

1. Always give a risk judgement.

   (a) A report with risk data but no judgement is very difficult to interpret by others and may compromise the service-user's care.

2. The risk judgement is in the context of the normal level of risks applying to the person's general population. Nobody is risk free but the idea behind the zero for a risk judgement is that it is no different to what one would expect from people in general.

   (a) Note that the normal levels of risk are population dependent. For example, children display normal levels of risks that are different to adults. It is understood that they need certain types of care and this should be taken to be the standard: not letting toddlers cross roads on their own is self-evident and does not need flagging up as a particular risk of vulnerability.

   (b) In contrast, adults who are consistently under the influence of drink and drugs may also need careful monitoring on roads, but this is abnormal and *should* be flagged as a vulnerability.

3. The risk judgement should apply to the service-user's current circumstances.

   (a) The same person will have different risks if they are in 24-hour care as opposed to living at home.

   (b) If the person's circumstances change, then a risk assessment *must* be repeated and it should be done with respect to the new circumstances. This will always be the case on discharge, for example, whereupon the risk assessment should be in the context of where the person will be after discharge.

4. Trust your expertise and experience: the GRiST database shows that people make consistent and reliable judgements that accord with each other.

5. Don't agonise over the exact risk number to provide.

   (a) If you have obtained the relevant risk data from the assessment, your experience will intuitively pick out the most important issues and bring to mind the general level of risk.

   (b) The exact number is not as important as getting the risk in the right general area. Although research shows that people can make meaningful distinctions between numbers along a 0 to 10 scale for judgements, the management of risk is based on the numbers falling into a broader range of values such as 7 to 10 for high-risk people. The precise judgement number just helps see whereabouts in the range a person might be. This is better than stressing over two categories that have a big jump between them, such as labels like high and medium risk that many tools use.

   (c) Spending too long thinking about the risk number can actually make the judgement worse. Go with the figure that has come to mind after all data have been collected because this will be tapping into your intuitive expertise. Of course, you may have occasion to amend it later if, for example, you remember something you might have missed.

   (d) Generally, the judgement will become clear as you go through the assessment and collect the relevant information.

5.2 Providing a risk summary for each risk

The GRiST report is a clear and concise display of information that relates to the service user's risks and how to manage them. However, it does not distinguish those elements that have influenced the risk level from those that are underlying causes needing to be managed but are not themselves direct influences on the judgement.

- The risk may be high because the person made a suicide attempt in the last week and this recency is obviously a cause of concern. But it is a historic factor and so nothing to do with the risk management.

- In contrast, a person may be depressed due to an adverse event in his or her childhood. The adverse event is not the immediate cause of the assessor's level of risk but is something that is important for subsequently managing it.

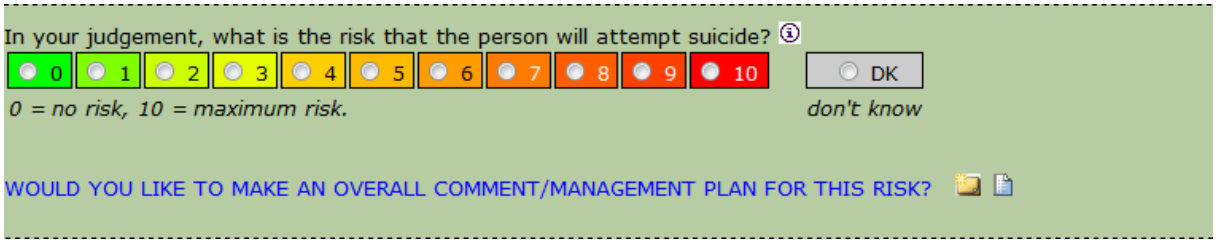

Figure 4: *Risk judgement scale for suicide with respectively the overall risk comment and the risk management plan text boxes after the question.*

Figure 4 shows that each risk has a box for overall coments about the risk and a specific management plan for that risk. The comment is where the risk judgement is explained. Use this risk summary box to bring out the key factors influencing risk and safety.

1. The risk report shows the risk inputs from each individual item of information but not their relative importance: some clearly influence the risk judgement more than others.
2. The idea for the *risk summary* box is to summarise those elements that have most influenced the risk judgement: to bring out the main risk picture.
3. The summary brings attention to the *key issues* that have raised the risk and should *not* simply repeat the information already in the risk report.
4. A paragraph should be enough to do this, with no more than three or four sentences and maybe less. Even better, simply state the risk items that have caused you most concern about the risk.
5. Concentrate *only on why you gave the particular risk level not how you will manage it* because this should be in the management plan for the risk.
6. If there are no issues raising risk then there is no need to write much in the summary box. You can spend more time on the management plan instead.

5.3 Managing the risk

Risk assessment and management go hand-in-hand. As you assess people, you will automatically think about what needs to be done to manage the emerging risks. Hence GRiST provides management boxes against each question. When the risk item has been answered, if it triggers an idea about how to manage the associated risk, the idea should be recorded in the management box for that item *but only if it is specific to that item*. Otherwise, make a note of it for attaching to a more appropriate item later. You could even drop it temporarily into the management tab that is always present on the side of the assessment (see Figure 2); then you can move it to the more appropriate question when you get there.

Trust the GRiST structure because it will have the right place for a comment or action if it does not fit with the current item.

There is an easy way to copy actions from risk-specific items into the risk-management plan where the risk judgement is made. This is facilitated by the copy tab function next to the risk management box as shown by Figure 5.

1. Below the risk judgement is a question: “WOULD YOU LIKE TO MAKE AN OVERALL COMMENT / MANAGEMENT PLAN FOR THIS RISK?” Next to it are two icons, one for the overall risk comment and the other for the specific risk plan, as shown in Figure 4.
2. Select the risk-plan icon and you will see a tab with a blue header and “current actions” written in white, as shown in Figure 5.
3. When you select the tab, it opens up a scrollable box that shows the label of the risk item in blue and the comment associated with it beneath. Figure 5 illustrates the tab for the suicide-specific plan.
4. Any actions you placed against items specifically about this risk will show below the header with the label of the risk item and the comment you gave it.

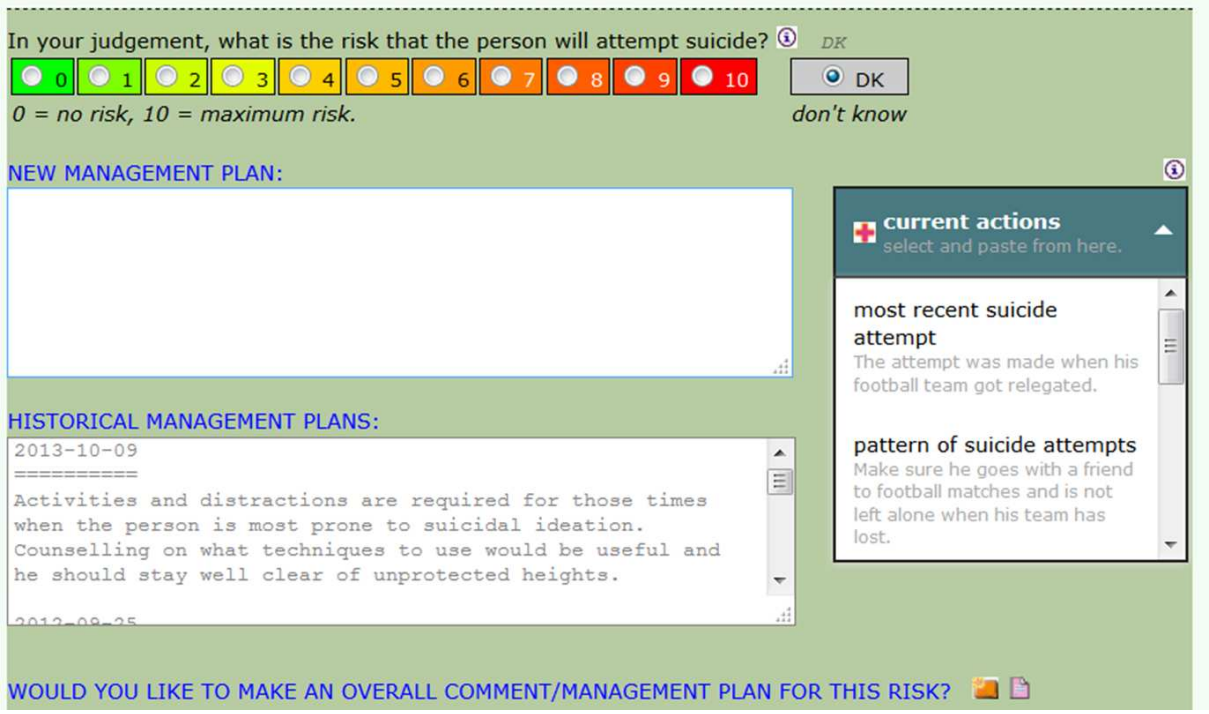

Figure 5: *Tab for copying management comments into the risk plan for suicide.*

5. When you put the cursor over an item it becomes shaded to show that it can be selected.
6. If you select any of these labels and comments, the comment will be copied into the management box.
7. The item heading (label) then goes the same colour as the comment to show that you have already copied it, although it can still be copied again, as shown in Figure 6.
8. Whenever you make a selection, the comment is placed at the end of whatever is already in the risk plan.
9. When you have selected all the comments you want for the risk plan, you can edit them to provide the final version.
10. The drop-down management tab saves you having to remember and then rewrite actions entered earlier.

When comments and plans have been completed for all assessed risks, each one will have a judgement of the level of risk, the reasons for that level, and how to manage the specific risk issues to reduce the risks, both in the short term and the longer term. The next step is to pull all the risks together for the service user and link them to an overall management plan. This collation and linking process is the purpose of the *risk formulation*. It provides the bridge between individual risks and how to manage the problems as a whole.

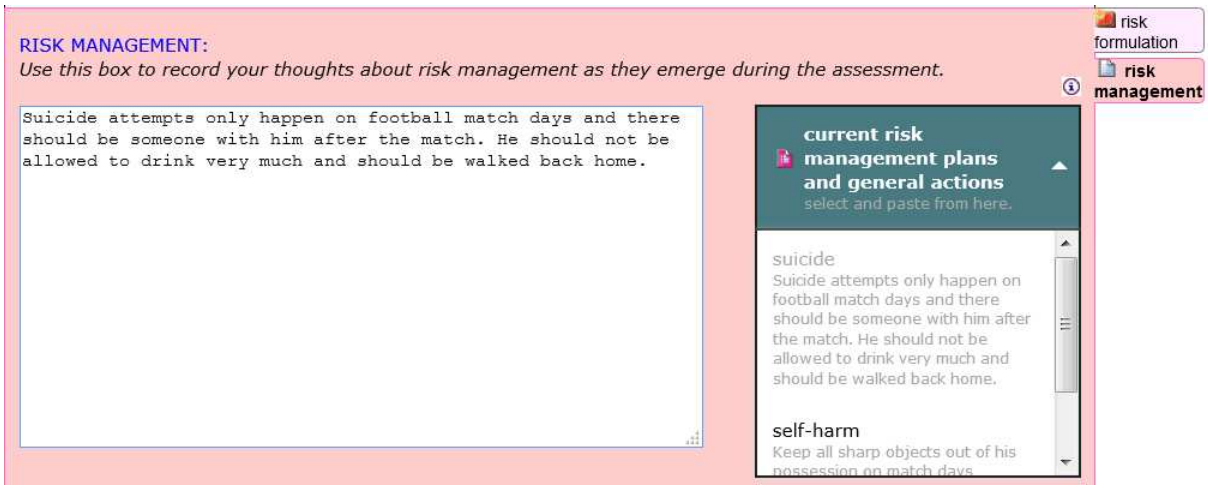

Figure 6: *Tab after one of the action comments has been copied, showing the heading greyed out.*

6 Risk formulation

Risk formulations organise the overall picture of a person's risks into a format that makes it easier to see how they need to be addressed. In essence, it sits between the risk assessment and the management plan by distinguishing symptoms from causes and identifying the timescale of addressing issues: some must be immediately tackled to reduce the risks now and others are longer term, for reducing risks on a more permanent basis.

It makes sense to collate information across all risks within a structure that exposes what raises the likelihood of potential outcomes but clarifies those elements that can be managed from those that cannot. For example, a person's history may raise the probability of a future risk episode but the history cannot be changed. On the other hand, people's current intention also raises the risk but it *can* be changed. However, it is not the cause of the risk but a symptom; although it is a major focus of a management plan, it is that part of the plan for reducing the *immediate* risk.

Another section of the plan should be looking at the longer-term causes that need addressing if the person is not to revert back to an acute risk state by, for example, resurrecting current intention. These longer term causes include emotions, depression, mental illness, and so on that may have their roots in history but need to be alleviated if the risk patterns are not to repeat. They include issues that can escalate risks in the future, such as known triggers returning.

- The purpose of the risk formulation is to connect the symptoms of risks, their causes, and the timescales of managing them.
- The risk formulation should make it easier to ensure the management plan tackles the most urgent immediate problems as well as the longer term reasons for those problems.
- These longer-term problems *must* be addressed if the person is to avoid a repetition of raised risks on discharge from the particular care episode.

6.1 The sections of a risk formulation

We are encapsulating the risk formulation using a 5 Ps model that help separate the symptoms and causes. The result is an easier structure for delivering the appropriate management plan. These 5 Ps are

as follows:

1. The Problem.
   (a) This is the overall information profile of the service user that has been collected during the assessment.
   (b) For GRiST, it is represented by the reports that clearly relate the patient profile to the levels of risks.
   (c) It is the task of *risk formulation* to show how the problem encapsulates the overall risk issues for the service user.
      i. It achieves this by organising them within the remaining '4 Ps'.
      ii. The logical order is to prioritise interventions for reducing risks in the immediate term (the precipitating factors), then addressing the prevailing circumstances for the service user (the perpetuating factors), and finally addressing the long-term causes (the predisposing factors).
2. Precipitating factors.
   (a) These are the most urgent issues that need to be tackled immediately to reduce the risks.
   (b) They tend to be the symptoms of risk behaviours, such as current intention, that must be addressed first.
3. Perpetuating factors.
   (a) These are the more contextual issues in a person's life that often provide the enviroment allowing risks to develop.
   (b) Perpetuating factors are important for determining what management plans will work in the context of these perpetuating factors.
   (c) They identify medium-term problems that must be addressed if the person is not to replicate the same risky responses and behaviours when returning to his or her life circumstances existing prior to the care episode.
   (d) Perpetuating factors in GRiST include, for example, the person's relationships, accommodation, substance misuse, mental illness, etc.
4. Predisposing factors.
   (a) These are the historic factors that cannot themselves be changed but that help inform the most appropriate plans for addressing those issues that *can* be changed, such as the person's responses to them.
   (b) For example, people's adverse life events, such as being abused as a child, affect the way they manage stressful circumstances in the present. Addressing the root causes of a person's behaviour will help change the way they react in future and better equip them for life. They will be less likely to adopt risk behaviours as a response to difficult life situations.
5. Protective factors.
   (a) It is useful to understand these factors because they can mitigate the effect of other factors that raise risks.

(b) They are helpful for understanding the actual risk levels themselves but also in managing other factors by reducing their impact.

(c) Part of rehabilitation is building up these protective factors.

7 Risk management

Risk management goes hand in hand with risk assessment and GRiST makes it extremely easy to do them together.

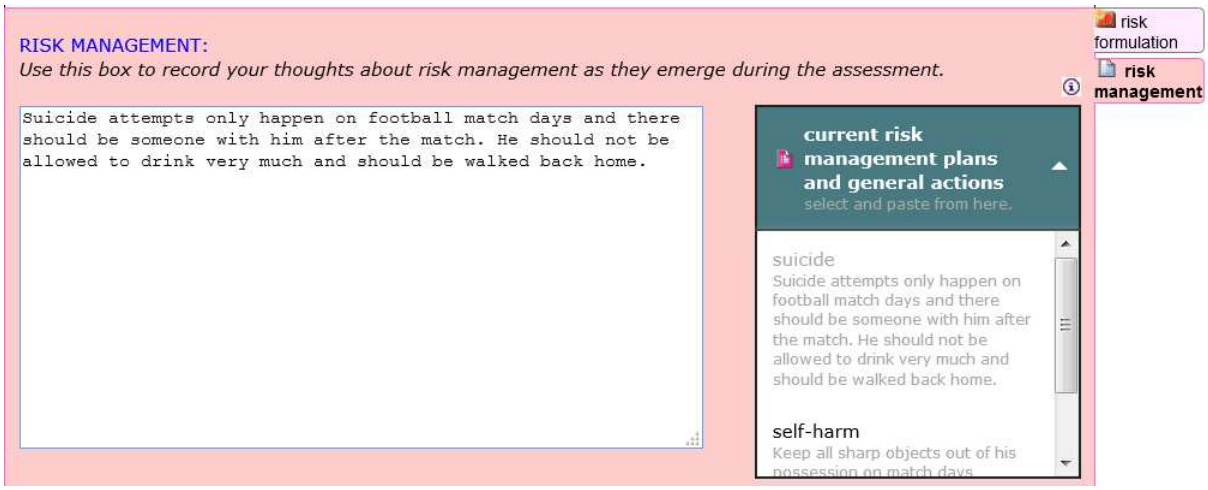

Figure 7: *Tab after one of the risk plans has been copied, showing the heading greyed out.*

1. As you answer the risk questions, if any interventions, actions, or management decisions come to mind that are specifically related to the question, put them into the associated management box.

2. If you think of something that is more general or probably should go somewhere else, drop it into the management tab that scrolls down with you. Then you can cut and paste it back into the more appropriate location or edit it as part of the overall management plan at the end.

3. When you have evaluated each risk and provided an overall risk formulation, it is time to produce the risk plan for the complete assessment. This is done using the "management" tab that scrolls down with the assessment underneath the risk-formulation tab (Figure 2).

4. If you select the management tab, a drop-down box with the header "current risk management plans and general actions" appears. Any specific risk management plans and actions for generic questions are contained within the drop-down box and can be copied across to the overall management plan in the same way as specific actions were copied into individual risk plans. Figure 7 shows how the suicide risk plan looks when copied into the overall assessment management plan.

8 Risk and safety management along the care pathway

Varying levels and foci of risk and safety management are required for different assessment contexts. For example, a primary-care assessment will have different requirements for a seconday-care one and

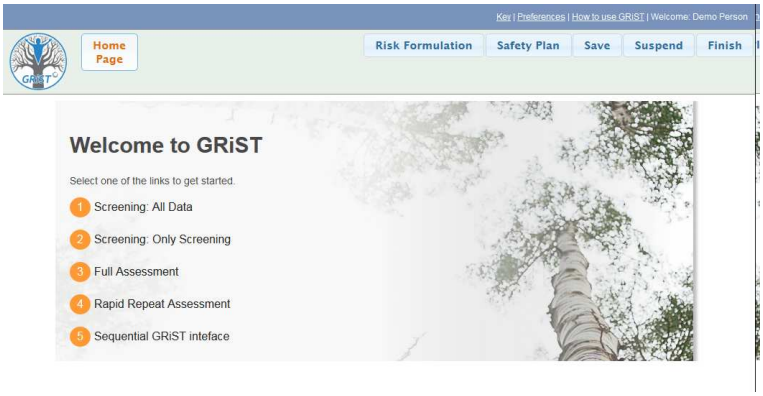

Figure 8: *The home page for the dynamic, mind-map version of GRiST. The numbered options are the different types of assessment that can be chosen. Option 5, the sequential GRiST interface, is equivalent to the original GRiST version, with the risk-specific questions separated from the general issues underlying all risks.*

repeat assessments will be different to the very first one. GRiST supports care along the continuum by providing a number of versions.

8.1 Screening

1. The screening version makes it easy to review all risks without answering many questions if a person is low risk.
2. There is only one initial question for each risk and additional ones only become visible if the assessor has any concerns about the risk.
3. All GRiST questions are visible but the screening ones that need to be answered are in bold, with the **Screening:** label in front to clearly mark them.

8.2 Full assessment

1. After screening, it may be that a person has been referred for a full assessment.
2. All questions can be answered, with an increased emphasis on managing the mental-health issues underlying the risks as they emerge.

8.3 Repeat assessments

1. Some service users may have problems that require many risk and safety assessments.
2. It is highly unlikely that every risk will need to be reassessed at the same time: some risks may be more of a problem than others and need more frequent reviews.
3. When a GRiST assessment is repeated, GRiST provides a button next to each risk that allows the assessor to switch it off.
4. Figure 2 shows the situation where suicide risk has been switched off but not self-harm.

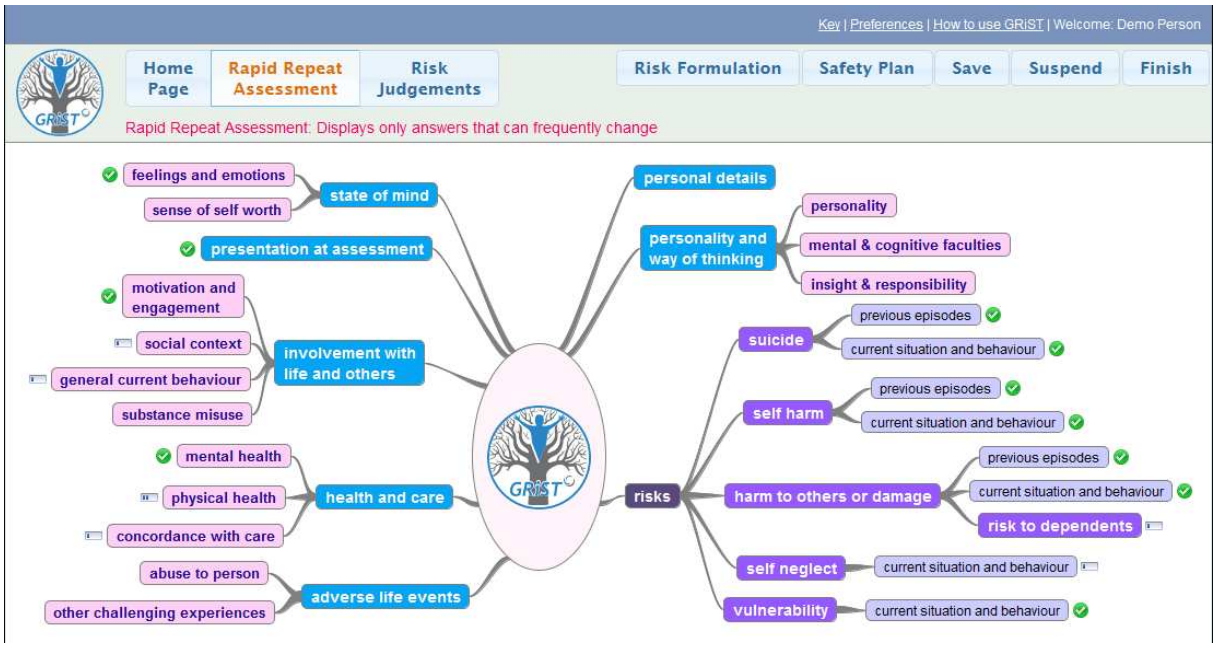

Figure 9: *The mind-map screen for the dynamic version of GRiST. Each branch of the mind map can be selected and it takes you to the screen showing only questions associated with that branch. The particular mode is for rapid-repeat assessments so the small "progress bars" show those branches with rapid-repeat questions. Ticks next to branches mean all the questions have been answered for those branches.*

5. If a risk is switched off, all the information about the risk that was entered when it was last assessed, including the risk judgement, will be carried forward into the report for the current assessment but with a date next to it saying when it was last assessed.

6. It is up to you and/or your organisation to decide how often a risk needs to be reassessed. We would use the following guide:

   (a) If there are any concerns about a risk then always reassess it.

   (b) If it is obvious that the repeat assessment is only needed for a particular risk, then turn the other risks off.

   (c) Keep an eye on when each risk was last assessed and make sure you repeat it within an appropriate time period. This is a matter for your clinical judgement or the protocol set by your organisation.

8.4 Rapid repeat assessments

Rapid repeat assessments can be done for the whole set of risks where only the data that change on a daily basis are collected. (These are the ones in GRiST that do not have a gold or silver padlock next to them). You need to use a different interface for GRiST that we call the *mind-map* or *dynamic* interface.

1. If you access GRiST via our own website, you will see two ways of launching GRiST, one for the original version (Sequential GRiST) and one for the mind-map version (Dynamic GRiST).

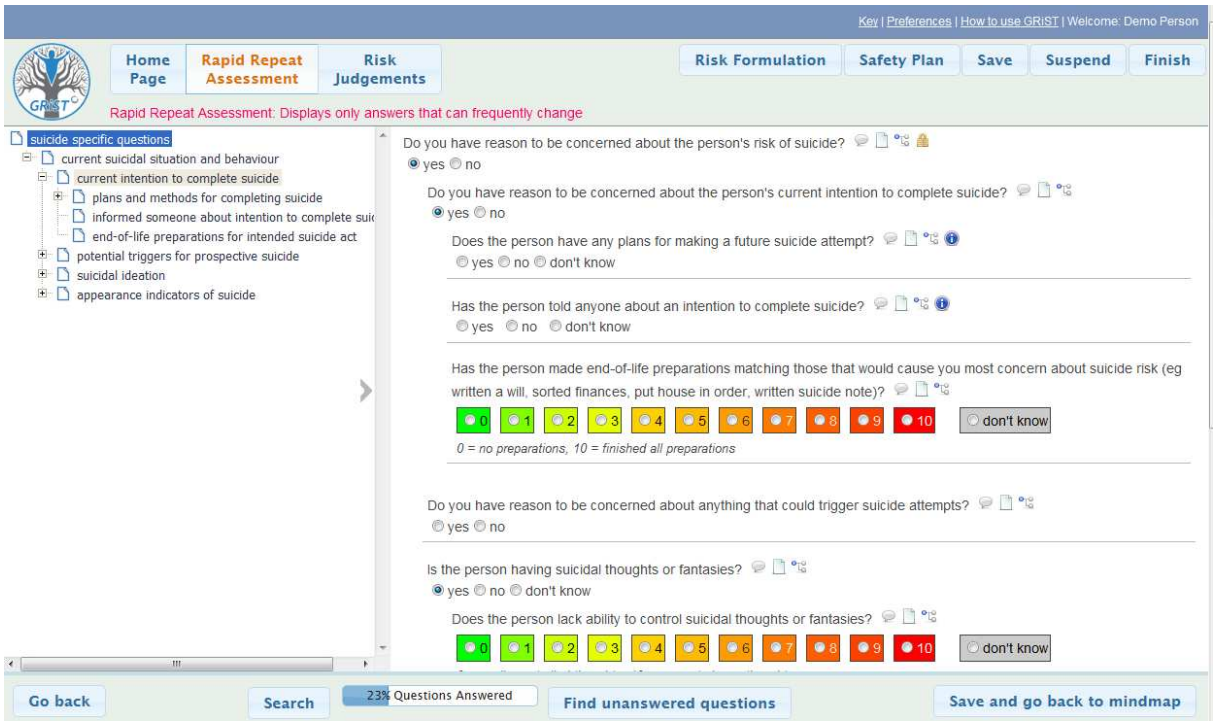

Figure 10: *Data-collection screen for the dynamic GRiST version. The questions are in the right-hand panel and the selected branch of the mind map is the knowledge "subtree" in the left-hand panel. Any part of the left-hand panel tree can be selected and then only those questions associated with it will show in the right-hand panel.*

2. If you are linking to GRiST via your organisation's own patient record system, there should also be two buttons with the appropriate labels visible

Figure 8 shows the screen you will see when it first starts.

1. Select the *Rapid Repeat Assessment* option (Number 4).
2. This will take you to the mind-map overview of the risk issues, shown by Figure 9.
3. Mind-map branches without rapid-repeat questions do not have an icon next to them, such as *personality*.
   (a) If you select these nodes, a message will come up saying there are no questions to answer.
   (b) All the questions relating to the particular mind-map branch have a gold or silver padlock.
4. Branches with questions to answer will have an icon next to them.
   (a) A tick icon means all the questions have been answered.
   (b) A small "progress bar" means there are rapid-repeat questions inside the branch that still need answering.
   (c) If you select the branch, it will take you to a data-collection screen where you enter the data exactly as you would do for the original GRiST interface.

(d) Figure 10 shows the screen that appears if you select the suicide current situation branch. The "tree" on the left-hand side shows the knowledge structure for this part of suicide risk and the right-hand side shows the questions associated with the knowledge structure, but only for those that can frequently change and therefore do not have a padlock icon.

9 The dynamic version of GRiST

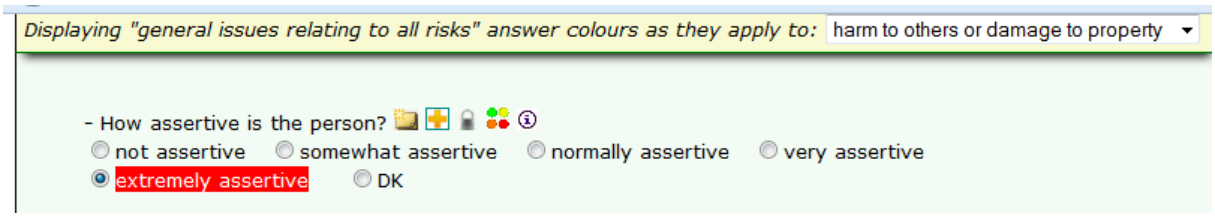

Figure 11: The assertiveness question in the sequential GRiST with the four coloured dots in a square icon that means its answers have different influences for different risks. The drop-down box selects the risk context.

The dynamic version of GRiST is the one that best represents the knowledge structures and reasoning processes used in assessing and managing risks. If you select a risk branch on the mind map (see Figure 9) such as suicide, it will display all the questions influencing suicide risk, including the general ones applicable to all of them. It allows the assessor to explore the more general questions in each risk context rather than independently, as is done for the sequential model.

1. A few questions, such as assertiveness, have different influences on different risks.
2. They are marked by an icon with a square of coloured dots, as shown in Figure 11.
3. Figure 11 is for the sequential GRiST interface and the drop-down box allows the assessor to choose the risk context. The default is for suicide risk but the assessor has chosen harm to others, which has changed the colour of the answer to red because extreme assertiveness has more influence on harm to others than it does on suicide risk.
4. In the dynamic "mind-map" interface to GRiST, there is no need for this icon because each risk can be explored with all of the general questions underneath and any variation in risk influence will be automatically displayed.

Full instructions for using the dynamic version of GRiST can be accessed from within the tool itself.

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[1] A. Adams, C. D. Buckingham, A. Lindenmeyer, J. B. McKinlay, C. Link, L. D. Marceau, and S. Arber. The influence of patient and doctor gender on diagnosing coronary heart disease. *Sociology of Health and Illness*, 30(1):1–18, 2008.

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