



Articles

SQiD talks: A qualitative study about starting conversations with the single question in delirium (SQiD)

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Delirium Communications

Objectives

The Single Question in Delirium (SQiD) is a widely used delirium detection tool utilising discussion between clinicians and informants. This study aims to understand how the SQiD works in clinical settings.

Methods

Using qualitative methodology, with a grounded theory framework, informant interviews were analysed to understand better how the SQiD works in clinical contexts. Participants were the adult relatives, carers, or friends (informants) of inpatients in an oncology ward at an acute hospital in Sydney, Australia. The informant was an available person whom staff would ordinarily approach for collateral information. The SQiD was administered and recorded by nursing staff. The recording was transcribed verbatim, checked, and then thematically analysed independently by two researchers. Themes/subthemes were determined and discussed until consensus was reached, then reviewed with a third researcher. Patient demographics, including documented diagnosis of delirium, were extracted from their Electronic Medical Record.

Results

Of 29 interviews, 15 patients screened positive for delirium, six of whom had a documented diagnosis of delirium. Emergent themes included *recognition of “confusion”*, *operational factors*, and *the SQiD outcome*. The overarching themes were *clinician investment and interest in the process*, *communication techniques*, and *knowledge of delirium and other cognitive disorders*.

Conclusions

This study indicates that the SQiD’s usefulness might be enhanced by providing clinicians with specific education about delirium, and differentiation between delirium and other neurocognitive disorders. Moreover, education could be accompanied by measures to encourage clinicians to extend SQiD discussions, act on SQiD findings, and embed the SQiD in clinical practice through implementation strategies. Clinician investment was inconsistent and warrants further investigation.

INTRODUCTION

Delirium is a syndrome, characterised by a disturbance in attention and awareness that develops over a short period and fluctuates over time,¹ with altered arousal also an important factor.² Delirium has a high prevalence in hospitalised patients and a range of delirium screening tools have been developed to improve detection.^{3,4} Screening tools should be validated⁵ with psychometric properties preserved in clinical settings.⁶ The SQiD is a validated screening tool that has well established negative predictive value, specificity (89%) and sensitivity (44%),⁷ and has be-

come widely used and encouraged in routine clinical care.⁸ It has been popular with clinicians, for example in the United Kingdom, where one in three units demonstrated use.⁹

We hypothesise that the popularity of the SQiD may relate to its simplicity and face validity. The SQiD comprises a single question *Do you feel that [patient’s name] has been more confused lately?* asked of a carer/relative/friend (hereafter referred to as the *informant*) closely involved in the patient’s care, as part of routine clinical care.¹⁰ The SQiD was shown to be specific, moderately sensitive, and easy to integrate into routine care.⁷ The SQiD performed better

than other tools available at the time of its inception and has been suggested as an appropriate tool to guide whether clinical review is needed.¹¹

Although validated and used clinically,⁷ not much is known about how the SQiD works. Qualitative methods may help answer this question, as they enable in-depth exploration of a phenomenon.¹² The primary objective of the study is to derive themes that emerge in clinician-informant conversations prompted by the SQiD, to assist in determining in what way the SQiD screening tool for delirium may function.

METHODS

The study setting was the haematology/oncology ward at a large university-affiliated acute hospital in Sydney, Australia. A nursing in-service on delirium and screening tools, including the SQiD, was conducted on the ward. A brief outline of the SQiD talks study was provided, including the aim and consent processes. Nurses were provided with verbal and written instructions about obtaining assent from both the patient and informant to participate in the interview in the context of limited initial disclosure, followed by full consent (see below). Nurses were given a printed prompt for their use of the SQiD question *Do you feel that [patient's name] has been more confused lately?* and requested to ask the question of informants of inpatients. There was no additional formal training on its use. Nurses were neither coached nor discouraged from discussions with informants, and guided only with *just answer how you normally would if a relative/carer asks you questions*. Due to the binary nature of the SQiD answer and the iterative discussion process between clinician and informant, a non-negative response was considered SQiD positive.

Patients and their nominated informant were recruited to the study if they were adults able to communicate in English and provide informed consent. Patients and their informant were approached by nursing staff opportunistically when an informant was present at the bedside. As per the instructions provided to nursing staff, potential participants were invited to participate in a clinical communication study with nurses and advised about what this entailed (recording the conversation and accessing electronic medical records [EMR] for clinical details). Full details about the study were delayed until after the recording took place. Assent (agreement) to participate in the recording was essential. If assent to record was given, the nurse then audio-recorded the SQiD and subsequent conversation, in the patient's presence.

After the recording was made, the study purpose and rationale were explained to the patient and informant by a research team member, to enable them to provide informed consent to participate. If the patient assented to participate but was unable to provide informed consent, their 'person responsible' was approached to consent on their behalf. Limited delayed full disclosure of the nature of the study was necessary to mitigate bias in the patient and informant response, caused by education regarding delirium that would occur during full informed consent.⁷

Basic demographic data (age, sex), and documentation of delirium and/or dementia diagnoses in the patient's EMR were recorded.

For consenting participants, audio files were transcribed verbatim, checked, and de-identified. A record was made of whether the SQiD interview was positive or negative for delirium, and the SQiD outcome was compared to contemporaneous clinician documentation of delirium on the patient's EMR. No research standard was applied to determine true positives or negatives for delirium as this was not a validation study. Participants were planned to be recruited until data saturation (i.e., when no new themes emerged with analysis of further transcripts).¹³

Interview transcripts were analysed using thematic analysis (Braun and Clarke (2006), within a grounded theory framework (Glaser & Strauss, 1967) (Box 1), by two investigators (NH and AW).

RESULTS

CHARACTERISTICS OF PATIENTS AND THEIR INFORMANTS

Recruitment was from November 2022 to April 2023. Twenty-nine patients and their informants were recruited, the range in interview duration was 7-211 seconds (mean 66.1 seconds) (Table 1). A positive SQiD was observed in 15/29 interviews. Six of 29 had a diagnosis of delirium recorded in the EMR, while five of these six had a positive SQiD outcome. None of the patients had a recorded diagnosis of dementia. One patient had documentation of cognitive impairment. Twenty-eight participants were able to provide informed consent, one consent was provided by the 'person responsible'. No patient withdrew consent following enrolment.

THEMATIC ANALYSIS

Three themes emerged in the thematic analysis: *recognition of "confusion", operational factors, and the SQiD outcome*. Illustrative quotations for the themes and subthemes are provided in Table 2.

(I) RECOGNITION OF CONFUSION

This theme reflected both nursing staff and informant concepts of *confusion* (Table 2). Nursing staff varied in their elaboration of aspects of confusion after the SQiD prompt. Informants recognised confusion by symptoms associated with syndromic delirium, such as fluctuation in mental state, change in cognition and functional abilities, and hallucinations (Table 2). The opposite polarity (i.e., the patient was not confused) also emerged in some instances where there was actual clinical evidence of confusion. Some informants seemed to normalise confusion as an expected, age-related change.

(II) OPERATIONAL FACTORS

This theme reflected practical aspects of administering the SQiD. Patients and informants commented on the ease and

Box 1. Thematic analysis methodology

Data analysis

Grounded theory methodology was chosen to underpin the analysis for this study,¹⁴ whereby study concepts are developed iteratively as the analysis proceeds, rather than being chosen before the study commencing.¹² Accordingly, one investigator (NH) engaged minimally in the literature around the SQiD and other delirium screening tools, to ensure that the themes generated were deeply linked to the data itself, rather than based upon preconceptions from the literature.¹⁵

The interview transcripts were thematically analysed independently by two researchers (NH, AW), using the method of Braun and Clarke (2006). The interview transcripts were read twice, then analysed line-by-line and organised (coded) into themes and subthemes. As subsequent transcripts were analysed, an iterative process was used to re-examine data in light of evolving themes. Data were then mapped and organised into themes as analysis continued at a micro (each transcript) and macro (the whole dataset) level to ensure that they continued to represent the data accurately.^{12,16} The two coders then met to discuss, compare, and refine themes, until consensus was reached. All three investigators discussed the findings and interpretations, with further refinement of subthemes, themes, and overarching themes.¹⁶ Thus, there was an ongoing iterative cycle of data collection and analysis.¹²

Methodological rigor

Attree and Milton's quality appraisal checklist was used to guide the study methodology¹⁷ A reflexive approach was taken throughout the study, to ensure that the relationship between the researchers and patients/informants was considered.¹⁸ One author (NH) is a psychiatry trainee, the other two are delirium researchers, one an academic psychiatrist (AW), and the other an academic palliative care physician (MS). The lead researcher (NH) kept a journal noting her preconceptions and reflections as she conducted the analysis, and how these factors might influence data interpretation and analysis. Incorporation of differing clinical experiences and perspectives enriched data analysis. Prolonged engagement with the transcripts enhanced the trustworthiness of data (Lincoln and Guba, 1985).

Table 1. Demographic and clinical characteristics of patients and informants during study

	SQiD Positive (n=15)	SQiD Negative (n=14)
Mean age (range)	75.9 (65-92)	68.2 (50-86)
Patient sex (Female, n,%)	8, 53%	5, 36%
Pre-existing diagnosis of cognitive impairment in EMR (n, %)	1, 7%	0, 0%
Informant cohabitating with patient (n, %)	10, 67%	11, 79%
Average interview length (seconds) (range)	111.4 (63-211)	21.7 (7-65)
Delirium documented in Health Record (n, %)	5, 33%	1, 7%

brevity of the tool (Table 2). Another was the most appropriate informant choice, whereby informants suggested who among the patient's family/friends might be best placed to answer the SQiD.

The patient's presence during the SQiD conversation had various impacts. Sometimes the patient provided useful information, but on other occasions appeared to inhibit information gathering. Some informants appeared to be uncomfortable disclosing information in front of the patient, leading to normalising or minimising potential symptoms of delirium.

(III) THE SQiD OUTCOME

The interpretation of the SQiD outcome was not straightforward. There were occasions where an initial negative response to the SQiD became a positive result through further discussion with an inquisitive nurse. On other occasions, the SQiD result was unclear despite discussion (Table 2).

The outcome of informants raising concerns about possible delirium with treating teams was infrequently discussed. However, there was a range of responses from dismissal to action (Table 2).

Table 2. Illustrative quotes for the themes ‘recognition of confusion’, ‘operational factors’, and ‘SQiD outcome’

Theme	Sub-theme	Quote (I=informant, N=nurse, P=patient)
Recognition of “confusion” (i) By nurses	Orientation	N: “And like place, and time and...knows where she is?” (interview 8)
	Fluctuation	N: “Does it have any improvements at all? Or it’s just a steady decline, or...? Does she have bouts of, where she comes back to being...” (interview 22) N: “Oh okay, and in regards to the confusion and the two episodes, is it just for short periods, or is it just constant?” (interview 24)
	Duration/ onset	N: “Mmm. And do you think like that she is more like orientated and not confused when she’s in hospital, or is she the same as she is here at home as well?” (interview 22) N: “And how long do you think it’s been going on for?” (interview 17)
	Underlying cause	N: “Six months? Was there anything that kind of, you think, maybe like triggered it, or it just kind of happened one day, woke up and that just how she was, or...?” (interview 22) N: “Before...so is it after the fall, or when he came to the hospital?” (interview 29)
	Equating confusion as normal old age change	I: “Uhh, not really, no. It’s, uhh, like most people as they age, their memory isn’t like it used to be” N: “Yes, mmhmm” I: “And they’re not as quick as they used to be” N: “Mmhhh, that’s right” I: “You know, when I was forty I was red hot” N: “Yeah, very true” I: “Whereas nowadays...’what did you say dear?” (husband, interview 26)
Recognition of “confusion” (ii) By informants	Memory impairment	I: “She’s had that confusion, like she was sitting down there having breakfast, and not long after she’s ‘ah, wonder when I can have breakfast’, you know? So, she is getting confused.” (husband, interview 24) I: “When she was sicker, definitely. ...when a question was asked by nurses or doctors, I’d have to re-ask her, you know like the same question. So yeah, I feel like the sicker she was, the less that she, you know, she understood” (daughter, interview 5)
	Change in cognition	I: “I was just noticing that she took a lot longer to answer, and just not totally understanding the question” (niece, interview 3) I: “I could tell that she was, sort of, lapsing a little bit?” (son, interview 22)
	Functional change	I: “One time there, I was trying to get her into the shower, and she just couldn’t understand to put her step forward, to get into the shower... yet, two days later, she was able to get into the shower, and wash herself” (husband, interview 24)
	Perceptual disturbance	I: “Umm, just like seeing stuff, uhh seeing uhh random stuff, talking to himself a lot, umm, we never saw like those, those things...before” (grandson, interview 29) I: “Like, mmm, and he was convinced that the man that was here yesterday, he’d been here since we got here, but he went home yesterday, that he was in the bathroom, and I couldn’t convince him, that no, he’s not in the bathroom, he’s gone home” (wife, interview 17)
	Fluctuation	I: “If I based it on, umm, some calls that my dad has felt he needed to make to me, or which nurses have made to me when he’s been disoriented, then that’s seemed to be more in the... late afternoon” (daughter, interview 16)
	Underlying cause	I: “So we not sure whether it’s actually the fall or the drug, because it started on the same day” (grandson, interview 29) I: “No, no, no, not the chemo, not the chemo. He hasn’t had chemo for a while now. It’s one of the umm...antibiotics or one of the, umm...then the doctor came in this morning saying that it could be the fungal infection as well.” (grandson, interview 29)
	Recognition of ‘normalcy’	I: “No, I don’t think he’s been more confused lately...he’s just the same as he normally is” (friend, interview 10) I: “This is the aunt that I know” (niece, interview 3)

Theme	Sub-theme	Quote (I=informant, N=nurse, P=patient)
Operational factors (i) SQiD is easy/brief		I: "Oh is that it?! Oh I was expecting 20 questions!!" (friend, interview 10)
Operational factors (ii) Effect of patient presence	Inaccessible conversations in native language (separate conversations between informant and patient)	N: "Okay. So, do you feel that your mum has been more confused lately?" I: "No" N: "No?" [Patient and son speaking briefly in Mandarin in the background] I: "That's all?" N: "That's all" [Laughter] I: "Thank you" [Further conversation between patient and son in another language] N: "Nope, yup. Yup! That's it!" [laughter] Patient: "I'm normal!" (son, interview 15)
	Joining the SQiD discussion	I: "Ohh, umm. When I rang in last night he..." P: "Got confused" I: "...thought that he was at home, and that I was in hospital. Yeah, umm" P: "What bed were you in?" (wife, interview 17) I: "He's just the same as he normally is" P: "Yeah, that, that, that's how I feel too...I've always had a little problem with short term memory...but my long term memory's always been great." (friend, interview 10)
	Inhibiting information gathering	P: "Don't answer that one!" I: "Haha. I mean, it's hard to tell, but yes" P: "Don't answer that question" (wife, interview 17)
	Informant discomfort: normalising and minimising the patient's symptoms	I: "Very...a little bit grumpy, because he was going through a lot of pain and a lot of discomfort...so I would try not to talk too much [too]...which is a bit hard for me" (de facto partner, interview 27) I: "Yeah like if he's going to put something there, then he goes around...and then he says, 'where did I put it', but I mean it happens to me!" (wife, interview 25)
	Corroboration/endorsement	I: "Well, this morning my partner was telling me what he was dreaming, he had a bit of ummm, I don't know, what do you call it, hallucinations?" P: "I am. I am hallucinating, but I'm aware of it...totally aware, that I'm sort of like, dreaming while I'm awake" (de facto partner, interview 27)
Operational factors (iii) Choice of informant		I: "I can't answer that because I'm from the Gold Coast...Dad would probably be able to answer that" (son, interview 22)
Interpreting the SQiD outcome (i) Outcome itself	No becomes a yes	N: "So does (the patient) seem to be more confused lately?" I: "Like...confused? No, he's tired. And uhh forgetful, you know?" N: "Mmm, mmm" I: "But no, no confusion that he doesn't know where he is...or something like that. He's okay." N: "Yeah, right. Just, maybe more drowsy, would you say?" I: "Yeah" N: "Yeah? More sleepy? Yeah, you'd agree? And then, maybe forgetful?..." I: "Yeah like if he's going to put something there, then he goes around...and then he says, 'where did I put it'," (wife, interview 25)
	Unclear SQiD outcome	I: "we...it's hard to tell...see, she's been to hospital so many times, and she's had so many tests, and so much medication and...I do find that there might be some...forgetfulness" N: "Mmm" I: "I don't know whether that's confusion? Right, 'coz it's hard to say. There's forgetfulness, which, to me, is different from confusion" (daughter, interview 26)
The SQiD outcome (ii) Team's response to informant information	Team's dismissal of informant information	N: "Is it something that you're really concerned, or..." I: "Yeah I am really" N: "Did you, have you had a chance to raise it to the doctors?" I: "Yeah, we, I did" N: "And what did they say" I: "They didn't say much" (husband, interview 12) I: "Yes, we did, spoke to the team, but the team uhhh said that because she has

Theme	Sub-theme	Quote (I=informant, N=nurse, P=patient)
		been in ICU for about a week and then she get confused about the uhh, the info- ... the situation over there, that it's normal for the... ..the patient that been to ICU for a long time, for a long time, yeah." (husband, interview 8)
	Team takes informant information seriously	I: "But then, it happened again last week, and I rang up and spoke to [doctor's name], his assistant, and they said 'I'll talk to him', and then they said to bring her in." (husband, interview 24)

OVERARCHING THEMES

Three overarching themes emerged: *clinician investment/confidence*, *communication techniques*, and *knowledge of delirium and other cognitive disorders*.

Illustrative quotes are presented in [Table 3](#).

(I) CLINICIAN INVESTMENT/CONFIDENCE

Immersion in the SQiD transcripts revealed that some nurses were more engaged or confident in following on from the SQiD prompt compared with others. Following an initial negative response to the SQiD, nurses varied from immediately ending the discussion to asking follow-up questions. In some cases a negative response was revised to a positive result via an iterative discussion between informant and nurse.

(II) COMMUNICATION TECHNIQUES

A variety of communication techniques were used by nurses, influencing the richness of information gathered and outcome. These techniques included active listening, checking and encouragement to enhance engagement. This intersected with the nurse's curiosity and persistence that characterised some interviews, resulting in clarifying and sometimes even completely revising responses.

A nuanced interviewer tended to demonstrate a combination of open and closed questions, conveyed empathy and validation during the conversation, or used humour to defuse tension.

Some nurses followed up on the initial SQiD by paraphrasing it or exploring specific features of delirium, which elicited different or more detailed responses from the informant.

Nurse: *Yeah and it took her like longer to reply and like...*
 Informant: *Definitely*
 Nurse: *...and like a few times to clarify what the meaning was?*
 Informant: *Definitely, yeah*
 Nurse: *Was that the only thing that you noticed, or was there anything else, like any behaviour, or anything like that?"*(daughter, interview 5)

SQID conversations where the patient actively contributed to discussions were more challenging to interpret (see [Table 2](#)). In these instances, nursing staff used communication techniques to defuse defensiveness when it occurred, including humour, or appeared to collude with the patient to maintain rapport.⁷

(III) KNOWLEDGE OF DELIRIUM AND OTHER COGNITIVE DISORDERS

The nurse's knowledge of delirium was evident in follow-up questions asked. Often, probing questions centred on orientation, rather than the full range of symptoms comprising syndromic delirium (e.g. inattention, fluctuation).

Nurse: *Okay, that's good. So he's like oriented where he is...who you guys are?*

Although the SQiD conversation was focused on identifying recent changes in cognition, there were occasions where this may have been conflated with an underlying longer-term cognitive disorder, like dementia, which was not distinguished from syndromic delirium by the nurse.

DISCUSSION

Few publications utilise qualitative methods to better understand the functionality of delirium screening tools.^{19, 20} This study focused on the SQiD, and how it works as a delirium screening tool. Emergent themes of *recognition of "confusion"*, *operational factors*, and *the SQiD outcome* were identified. The results confirm previously hypothesised strengths of the SQiD, including ease of administration and brevity .

New insights were derived about what nurses and patients understand by the term *confusion*, with various symptoms and signs, some more specific to delirium than others.^{21,22} Interestingly, although inattention has long been in the diagnostic criteria for delirium, this was not specifically asked in any follow-up questions after the SQiD, and disorientation was overemphasised. It has been proposed that the term *confused* is colloquially understood.²³ However, the word *confusion* has been problematic in delirium research, due to a lack of consistency in definition, and as different specialities utilise different terms when referring to delirium, resulting in parallel bodies of literature. The use of the term *delirium* rather than *confusion* is encouraged and provides a more precise diagnosis,²⁴⁻²⁶ but may not be meaningful to informants without education.

The premise of the SQiD is that clinicians could lead the informant from a colloquial understanding of confusion, via nuanced questioning, towards an indication of delirium presence or absence.¹⁰ This is reliant on clinician understanding of the components of syndromic delirium. No tool can be both ultra-brief and operationally didactic in supporting delirium detection, therefore a combination of approaches, integrated with education may prove useful. A

Table 3. Illustrative quotes for the overarching themes

Overarching theme	Subtheme	Quotes (I=informant, N =nurse, P=patient)
Clinician investment/ confidence	Lack of investment	N: "Hello. Do you think (the patient) has been more confused lately?" I: "No" N: "Okay, perfect, thank you." (step-daughter, interview 11)
Communication techniques	Active listening	I: "Confused. Umm. No, not until she got to hospital" N: "Mmhmm" I: "And uhh, I think she was in a state of shock..." N: "Yeah" I: "When we arrived on Saturday night" N: "Mmhmm" (husband, interview 9) I: "What have I noticed?" N: "Mmm" I: "Uhh, she's forgetful" N: "Mmm" I: "Umm (pause), she doesn't know how to write. You know, there's a lot of things. Umm, she's got short term memory loss." N: "Mmhmm" I: "Okay. She doesn't remember who she saw yesterday." N: "Mmhmm" (son, interview 22)
	Checking	N: "So when she was initially confused, like, what was the behaviours that were happening? Or like, what were you noticing?" I: "I was just noticing that she took a lot longer to answer, and just not totally understanding the question." N: "Okay." I: "Yes." N: "And so you think that she's improved since she's come in?" (niece, interview 3)
	Combining open and closed questioning	N: "And how so, like what have you noticed?" I: "He respond a bit slow..." N: "And that's all?" I: "Yeah" N: "So just a bit delayed...in the response?" I: "Yes" N: "And has that been happening for long? Or have you noticed it, or is it just a recent thing that's happened?" I: "Yeah, recent, like, COVID thing" N: "Oh, so since he's had COVID?" I: "Yeah, yeah, yeah" N: "So from COVID then, it's been like that?" I: "Yeah, aha" N: "Do you think it's getting better, or it's staying the same?" (wife, interview 20)
	Empathy and validation	N: "It's not helpful for you, if you're feeling forgetful as well" (interview 25) N: "And you feel...okay, yeah?" P: "No problem, no problem" N: "Oh yeah? You're tip top?" (interview 25)
	Paraphrasing the SQID	N: "No? And he hasn't had any, like, bouts of confusion that you've noticed or...since coming into hospital, or since he's been here?" (interview 23) N: "Mmhmm. That's good. But no changes in, you know just, perception-wise, orientation?" (interview 27)
	Use of humour	N: "And what date it is as well?" I: "Uhh, yeah" N: "Cool!" I: [laughter] N: "Very with it!" I: "Yeah" [laughing] N: "Hurray!" [laughing] (daughter, interview 21)
	Collusion with informant/ patient	I: "I don't know whether that's confusion? Right, coz it's hard to say. There's forgetfulness, which, to me, is different from confusion" N: "That's right, yeah. Yeah, a little bit different, yeah. That's it!" (daughter, interview 26)

Overarching theme	Subtheme	Quotes (I=informant, N =nurse, P=patient)
		N: "Yeah, yeah. We're not very nice in hospital, we do a lot of things that keep you awake, it's not helpful is it?" (interview 25)
Knowledge of delirium and other cognitive disorders	Focus on orientation rather than full spectrum of delirium symptoms	N: "So, say like, short term memory, kind of little things, you know, maybe more forgetful but...he knows where he is and stuff like that?" (interview 25)
	Delirium not differentiated from other cognitive impairment	P: "Yeah, I've always had a little problem with short term memory" N: "Mmm, mmm" P: "But my long term memory's always been great" N: "Yeah, yeah." (interview 10) I: "Uhh, not really, no. It's, uhh, like most people as they age, their memory isn't like it used to be" N: "Yes, mmhmm" I: "And they're not as quick as they used to be" N: "Mmhmm, that's right" (husband, interview 26)

short tool like the SQiD may encourage participation and engage carers, whereas a more structured validated tool like the 4AT may assist clinician training.

It also emerged that judging the SQiD outcome can be difficult. While some nurses accepted a negative response to the SQiD at face value, others were more curious and went on to explore symptoms of delirium, sometimes eliciting a different, potentially more accurate result. The SQiD may engage curiosity and interest in detecting delirium in some clinicians, while others apply it with less engagement.

The overarching themes derived illustrate the challenges of embedding delirium screening in clinical practice, and opportunities for enhancing the efficacy of the SQiD by optimising the information gathered from informants. Clinician knowledge about delirium appears to be an important factor in achieving a useful SQiD. This study shows that clinician understanding of delirium cannot be assumed. Nurses with a more thorough understanding of the nature of delirium and its differentiation from other cognitive disorders, may be able to probe for delirium symptoms in a more targeted manner and identify longer-term cognitive impairment which may predispose to delirium.^{27,28}

Delirium management is an important consequence of detection.²⁹ However, informants only infrequently shared their observations of confusion with treating teams. When they did share their observations, information appeared to be dismissed rather than a lever for management. The need to link screening results with action has been previously identified,^{26,30} and is relevant to effective implementation of the SQiD. Approaches to trigger action include using a delirium monitoring tool after screening,³¹ adding a scoring system to screening that is linked to action,³⁰ and embedding workplace processes that ensure staff respond appropriately to a positive screening test.³²

Communication techniques emerged as important in helping or hindering the SQiD conversation. The use of validation, encouragement, paraphrasing, and humour, facilitated data gathering from informants, echoing the observations of others.^{33,34} The study identified the potential consequences of the patient listening and contributing to

the SQiD discussion, hitherto an unexplored factor in SQiD administration. Patients could endorse or elaborate informant responses, but also inhibit the SQiD conversation, through distraction, instigating separate conversations, or silencing the informant. These observations suggest there may be value in conducting SQiD conversations away from the bedside, or finding ways to support open discussion.

This overarching theme of communication was closely linked with investment in the SQiD tool. Curiosity and/or investment in engaging in discussion moved the interaction beyond the single question to activate effective delirium screening. This is in contrast with tools like the 4AT, which although giving the clinician less flexibility in administration, provide measurable observations and cognitive tests with patients themselves.³⁵ Knowledge of delirium is associated with increased interest and engagement with the syndrome and its detection.^{21,36} This study suggests potential value in providing delirium education to those administering the SQiD.

LIMITATIONS

Although no new themes emerged in the final interview, we may not have reached data saturation. As a pragmatic time-limited clinical study with minimal funding, we relied on staff who were undertaking the study additional to their regular clinical duties during a period of COVID-related staff shortages, leading to challenges in participant recruitment. Additionally, as analysis was based on transcripts only, important concurrent nonverbal communication may have been missed. Nursing staff administering the tool were not blinded to the study aims. This, along with recording the informant interview, may have affected participation and discussion in various ways, e.g., by encouraging an enhanced clinical interaction that was not reflective of usual practice.

CONCLUSION

This is the first qualitative study examining how the SQiD works in delirium screening. We gained insights into how

nurses and informants conceptualise confusion, operational aspects of the tool, and the nuances of interpreting the screening result. Overarching themes situated the tool within real-world clinical contexts, observing challenges of clinician investment and engagement in delirium screening, variable knowledge bases and communication skills. The findings suggest a need for further qualitative analysis of the SQiD in clinical settings, particularly how effectiveness may be improved by harnessing the function of the SQiD in leveraging communication between clinicians and families/carers to encourage clinician curiosity and interest in delirium detection.

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DISCLAIMER

The views canvassed in the following article reflect the beliefs of the three authors and not the institutions they represent.

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AUTHOR CONTRIBUTIONS

The authors confirm contribution to the paper as follows:

Conceptualisation: MS, AW; data curation: NH; formal analysis: NH, AW; funding acquisition: NH, AW; investigation: NH; methodology: NH, AW, MS; project administration: NH, AW; supervision: MS, AW; writing– original draft: NH, AW; writing – review and editing: NH, MS, AW.

ETHICS STATEMENT

Approval for this research was gained from the Concord Hospital Human Research Ethics Committee (protocol no. 2022/ETH01450).

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DECLARATION OF INTERESTS

MS was the original developer of the SQiD tool.

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