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Use of acute psychiatric hospitalisation: a study of the factors influencing decisions to arrange acute admission to inpatient mental health facilities

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ABSTRACT

Background: Human decision-making involves a complex interplay of intra- and inter-personal factors. The decisions clinicians make in practice are subject to a wide range of influences. Admission to a psychiatric hospital is a major clinical intervention, but the decision-making processes about admissions remain unclear.

Aims: To delineate the range of factors influencing clinicians' decisions to arrange acute psychiatric admissions.

Methods: We undertook six focus groups with teams centrally involved in decisions to admit patients to hospital (crisis resolution home treatment teams, liaison psychiatry, approved mental health practitioners and consultant psychiatrists). The data were analysed using qualitative thematic analysis.

Results: Our data show a complex range of factors influencing decision making that were categorised as those related to: (i) Clinical or Risk factors; (ii) Threat or fear factors influencing Clinicians; (iii) Interpersonal dynamics between staff and patients; (iv) Contextual factors.

Conclusions: Decisions to arrange acute admission to hospital are not just a result of the appraisal of clinical and risk-related information. Emotional, interpersonal and contextual factors are also critical in decision-making. Delineating the breadth of factors that bear on clinical decision-making can inform approaches to (i) clinical-decision-making research, (ii) the training and supervision of clinicians, and (iii) service delivery models.

Keywords: mental health; admission; inpatient; healthcare services; psychiatric care

INTRODUCTION

The extensive empirically based literature evaluating the effectiveness of mental health interventions tends to focus on discrete 'treatments' for specific clinical conditions (e.g. suicidal ideation) which may include psychological or pharmacological interventions (e.g. Munder et al 2019; Bighelli et al 2018; Cipriani et al 2018; Tiihonen et al 2017). However, the reality of mental health provision is that these well-defined and researched macro-interventions sit within a wider spectrum of activities, such as assessments, follow-up contacts, referrals, transfers of care and admissions (Ellis et al, 2017). The macro-interventions aim to have an influence at broad levels such as national or institutional levels to review the linkages within several levels of a service or system. These activities for acute admission can influence outcomes by controlling access to discrete interventions (e.g. inpatient treatment), influencing patients' perceptions of the services, and serving as a means to offer micro-interventions (such as advice, education and instillation of hope) (Unich et al, 2011). Despite the potential for these wider activities to impact on outcomes, they have not been subject to the same level of academic scrutiny as those elements of care more conventionally defined as treatment. Of the less studied interventions, acute admission to hospital is one of the most significant in terms of patient experience, micro-therapeutic opportunities, and resource utilisation (de Jong et al, 2017; Jefferies-Sewell et al, 2015; Unich et al, 2011; Goerge et al 2002).

The limited literature that exists identifies crisis stabilisation, potential for harm and mental state acuity as key reasons for emergency admission (e.g. Joint Commissioning Panel for Mental Health, 2013; Scharfstein et al., 2009; Zeigenbein et al., 2006; de Jong et al, 2017; Jefferies-Sewell et al, 2015). The ways these decisions are made in practice are not well understood and clinical experience points to significant variability. This variability may, in part, arise due to the presence of clinician-based cognitive biases that have been demonstrated empirically in clinical decision-making by psychiatrists (Bhugra et al, 2011). However, deeper understanding of the actual decision-making processes and the factors that influence these processes remains limited. Predicting, managing and responding to pressures on the inpatient resource require greater clarity about the factors at play in real life decision-making at the point of acute admission. Furthermore, the development and

application of technological support for decision-making relies on a thorough appreciation of how in-the-moment complex decisions are made (Islam et al., 2015).

Studies of decision-making in mental health settings have tended to concentrate on disorder-based and patient-based factors (e.g. Riecher et al. 1991; Rabinowitz et al. 1994; Goldberg et al. 2007). There have been some studies examining specific aspects of clinical decision-making such as shared-decision making (Puschner et al., 2016; Slade 2017), the accuracy of decision-making (Miller et al., 2015), the role of human factors (Heiden et al., 2017) and the influence of the way risk is framed (Jefferies-Sewell et al, 2015). Nevertheless, there has been limited empirical analysis of how decisions are made in practice. One published study has specifically examined decision-making by mental health crisis team clinicians (Lombardo et al. 2019). However, a review of the literature did not identify any study that has specifically examined the wide range of factors influencing mental health practitioners' decision-making in relation to acute hospital admissions. Gaining a more in-depth understanding of these factors will inform approaches to clinical training and supervision of clinicians. Furthermore, service delivery models should take account of the way decisions are made in practice.

The objective of this study was to identify both clinical and non-clinical factors that clinicians consider when making decisions to admit patients to acute psychiatric units.

METHOD

Participants

The study was conducted in a large UK based NHS provider of community and hospital-based mental health services in the North West area of England. From a review of the service models and policies, four clinician-group types directly involved in decisions to acutely admit patients were identified. The Crisis Resolution Home Treatment Team (CRHTT) clinicians have a role to support patients who require urgent mental health support. They are involved in the care of many patients who are considered for admission to hospital and the clinicians in this team are involved in decisions to admit. The Liaison Psychiatry team clinicians provide a service to patients

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in a general medical hospital who have unaddressed mental health problems. A large part of this team's workload is made up of assessing patients who have presented to the emergency department having engaged in suicidal behaviour and/or expressed suicidal urges. Assessments are often undertaken to determine how best to manage outstanding risks and the clinicians must routinely consider whether admission to a psychiatric facility is necessary. The members of the first two groups were mental health nurses. The third group of clinicians, Approved Mental Health Practitioners (AMPH) have a statutory role in relation to patients who are assessed for compulsory admission to a psychiatric hospital. Within the legislative framework for the area in which this study was undertaken (Mental Health Act 1983, amended 2007 for England and Wales), compulsory admission is dependent on an application made by an AMHP. Members of this third group were all mental health social workers. The fourth group, Consultant Psychiatrists, are regularly involved in decisions about admission to hospital. This may arise because they have an ongoing role in the care of the patient, they work with others teams (including the first and second groups mentioned above), or they become involved in an on-call capacity. All participants had been qualified and practising more than two years.

Design

This study employed a qualitative approach using focus groups to explore the experiences of clinical staff making decisions for admitting mental health patients to hospital. Staff were invited to participate in focus group discussions. Six focus groups were conducted. The first was with the primary 'gatekeepers' for the inpatient services, the CRHTT. Their remit was to assess and treat patients presenting with mental health problems in acute crisis from a specified catchment. The second group comprised Liaison Psychiatrists who were based in an acute hospital and responded to referrals from the hospital emergency department and inpatient wards. The third group was defined by the members having a specific non-medical role in the assessment and decision-making where legally mandated admission was considered necessary, the AMPH. The final group, Consultant Psychiatrists, become involved if there are particular complexities or involuntary detention is being formally considered.

Procedure

SB introduced the study to the four eligible staff groups across the Trust. To reduce disruption to participants' clinical commitments, where possible focus groups were conducted at the end of a scheduled weekly review meetings.

The focus group facilitators comprised a clinician (SB), a clinical academic (RN), a service user representative (CO), a research manager (PE) and a university academic (PS). Semi-structured focus group schedules were designed with questions to facilitate the discussion about admission decisions. During the focus groups, participants were asked in general terms to talk about how they made decisions in relation to the acute admissions of patients to hospital. Groups were encouraged to talk in more detail about the range of reasons for their decisions. At the beginning of the focus groups, written informed consent was obtained from all participants. The focus groups lasted approximately one hour. Focus Groups were recorded using a digital audio recorder and transcribed verbatim.

Patient and public involvement and engagement (PPIE)

CO, who had experience of being admitted to hospital, was involved from the inception of the study and contributed to the development and refinement of recruitment strategies, analysis of data, and dissemination plan and was leading on a further study exploring the views of other patients who had been admitted to inpatient wards.

Data analysis (Figure 1.)

The analysis of all transcripts was conducted and discussed by five members of the research team (SB, RN, CO, PE and PS), each with different disciplinary backgrounds. The data were analysed following the principles of qualitative thematic analysis (Braun and Clarke, 2006). The iterative coding process enabled the continual revision of themes until the final classifications of major themes were agreed by the team. The coding frame reflected our a priori interest in the theoretical concepts of transition and symbolic resources, and was also developed inductively from the entire data set. The

frame helped categorise data in terms of the cultural (e.g. staff values), social (e.g. interpersonal relationships, organisational practices), and psychological (e.g. self-understandings as participants) aspects of decision-making (e.g. codes included 'learning from past experiences', 'trusting professionals', 'reflecting upon oneself'). During repeated rounds frequent comparisons were made across codes and the interview data to develop, review, and refine themes (Braun and Clarke, 2006) on the basis of the complementarity, convergence, and dissonance of ideas across data sources (Farmer et al, 2006). All findings were then critically tested within the research group. Any disagreements were resolved by discussion.

Ethical consideration

Ethical approval was obtained from the Trust's R&D Department and University of Liverpool Ethics Research Committee prior to study commencement (Reference number: 2161). All participants were informed about the study via an invitation email that provided details of the study, a participant information sheet and the consent form.

RESULTS

Thirty-eight participants took part in focus groups between 26 June and 27 July 2017. Table 1 shows the breakdown of participants in each focus group.

Table 1: Participants who took part in each of the six focus group discussions

Focus Group	Clinical Group	N=38
1	CRHTT* (1)	7
2	CRHTT (2)	6
3	CRHTT (3)	5
4	Consultant Psychiatrists	6
5	AMPH**	10
6	Liaison psychiatry team	4

* Crisis Resolution Home Treatment Teams[1] ** Approved Mental Health Professionals[2]

Four inter-related themes were conceptualised as reflecting the corpus of this material (Table 2). The themes illustrated a more complex range of factors. The first theme *Clinical or Risk factors* theme encompasses issues that would be expected to influence decision-making such as acuity of patient clinical history, associated risks such as substance misuse and the viability of alternatives to admission. The second theme *Threat or fear factors influencing Clinicians* highlights the anticipation of negative evaluation of the clinician's practice in the event of a possible future serious untoward incident. The third theme *Interpersonal dynamics between staff and patients* is related to the nature of the dynamic between the people involved in the decision that needs to be made. The fourth theme *Contextual factors* identifies the circumstances of the context and assessment and other service issues such as resource availability. Each of these themes is developed below.

Table Two: Overview of themes and subthemes

Theme	Subtheme
1. Clinical and risk factors	*Acuity of clinical history* *Substance misuse* *Alternatives to admission*
2. Threat/fear factors	*'Worse case' scenario* *Repercussions following decisions*
3. Interpersonal dynamics	*Patient-clinician dynamic* *Professional-clinician dynamic*
4. Contextual factors	*The influence of resource availability* *Pressure and lack of support for lone workers*

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[1] Crisis Resolution Home Treatment Teams undertake urgent assessments of patients in acute crisis and provide signposting to appropriate services and/or short-term support.

[2] Approved Mental Health Professionals are authorised to carry out certain duties which are critical to assessments and admissions of patients under the Mental Health Act.

Clinical and risk factors

An emergent theme included those factors that would ordinarily be considered the basis of the decision to admit. These included the nature of the presenting clinical issues (e.g. '*clinical presentation,*' FG2; '*how they're presenting,*' FG3; '), the time course of those issues (e.g. '*what's been going on in the last few days, few weeks, ,*' FG6), and other factors relevant to the presentation (e.g. '*concordant with their medication... missing any of their secondary service appointments,*' FG6; '*under the influence of illicit substances or alcohol?*' FG6).

This theme also incorporated the notion of risk. Examples included '*risk factors that you identify in the assessment*' (FG2), whether '*someone had done something you know of a pretty serious nature to either put themselves at risk or someone else*' (FG5) and '*have they got forward planning [or] an intent to end their life,*' (FG2).

Related to both clinical and risk factors were considerations of whether the team can '*safely manage this person at home*' (FG3) or whether there are '*acute symptoms that cannot be managed in the community*' (FG2). In assessing this issue, practitioners '*look at a patient's care plan*' (FG1) and consider whether they '*live alone, have they got anybody to look after them*?' (FG6) and if there is '*evidence of carer breakdown, carer stress*' (FG3).

Participants reported that decision-making involves consideration of potential risks of admission and whether other options have been considered:

> '*admission … might be a really I guess dangerous experience for them if they become dependent on that environment.*' (FG1)

> '*for lots of reasons really it's better for the patient to be at home and rather than [hospital] it's not a great environment if you can avoid it … it's restrictive.*' (FG2)

> '*people do view hospital as the way of keeping people safe and we know that that's not true, hospitals can't keep somebody safe.*' (FG3)

'*we should have exhausted you know the all of you know collaborative options prior to making that decision to actually admit to hospital.*' (FG5)

There was a recognition that decision-making is subjective:

'*you can see it as inappropriate from the inpatient point of view but it may be appropriate from the community point of view … it's all perspective I don't think it's about what's appropriate or not appropriate.*' (FG4)

'*there are people's analytical sort of attempt to analyse the reason of admission and who are able to articulate it and put it in writing …. other people just intuition*' (FG4)

Patients with personality disorder were held to present a particular challenge for decision-making:

'*the [personality] disordered patients tend to be the ones that are the most challenging in terms of whether we send them home or we admit*'… '*the admissions aren't helpful to those disordered patients on the whole.*' (FG1)

'*some people with personality issues … say certain things to try and get into hospital and really you don't feel that they need to be in hospital er you feel that they probably won't act upon the things that they're saying and can easily be managed at home but unfortunately the things they are saying you've not got any choice sometimes to admit that person because you've not got the full MDT you're there on your own.*' (FG3)

'*diagnosis of EUPD [Emotionally Unstable Personality Disorder] quite frankly the hardest ones to deal with.*' (FG5)

Furthermore, patients with personality disorders seemed to be viewed more negatively and they were considered to present particular problems for in-patient management.:

'*personality disorders … are generally better if they are kept out of hospital you know because, because their coping strategies are taken off them.*' (FG1)

'*If the patient's got a personality [sic] … admission generally isn't helpful to them. They generally start to escalate, self-harming behaviours when people start talking about discharge for instance.*' (FG6)

'*you're going to create an absolute bit of a nightmare environment on the ward because …., they all start to escalate their behaviours to match each other.*' (FG1)

'*some people you know personality issues could learn behaviours and then learn more maladaptive coping behaviours whilst their on the ward.*' (FG3)

Threat/fear factors

A prominent topic that emerged across the interviews was fear of future adverse outcomes for both a patient and the staff member making the decision to admit or not. Including not having an alternative for patients who may be at high risk of dependency to being institutionalised, the environment potentially being restrictive and a negative experience for patients, or patients being under the influence of alcohol at the time of admission. Additionally, due to staff feeling as though they have no other alternative as hospitals for many were seen as safer places than perhaps a person's other alternatives;

'*for lots of reasons really it's better for the patient to be at home and rather than [hospital] it's not a great environment if you can avoid it … it's restrictive.*' (FG2)

'*I sent him home but then I always sit back and I always think oh my god you know worse case again, worse case what happens if he does go out and he does harm somebody and they look at all the documentation.*' (FG1)

The fear was greater where the practitioner was the last professional to see the patient before the adverse incident:

'there is fear now I mean I'm saying the word fear … so it makes you think … purely because based on the fact that … I'm the last person that's seen this patient.' (FG2)

There was a particular focus on anticipated negative evaluation in the course of internal or external scrutiny processes such as being called to be a witness at a coroner's court if a patient was to die who was not admitted to hospital:

'Usually there's a backlash from that …. like the threat of even coroner's court… we all dread it' (FG1)

'I think people also fear… the RCA [root cause analysis] process.' (FG3)

The attribution of fault and the personal consequences were discussed across all of the focus groups and seemed to increase the potential of fear and guilt for participants:

'if you send them away you're it's your fault he's dead.' (FG2)

'you know there is that worry about if things go wrong how will that look… what will be the repercussions from that.' (FG3)

It was not only the anticipation, but also the experience of staff and of negative evaluation that was reported. Participants reminisced of previous events that had caused them distress and upset and how they had felt unsupported and on their own:

'we were hounded and we had big meetings and we were told we'd failed this gentleman and the practitioner involved went through a horrendous time.' (FG1)

''cause I've been to coroner's and it was a quite horrendous five day event with barristers and everything it was awful, so everything I write I always look at it and think would he accept that.' (FG 2)

Participants felt that such experiences influenced their decision-making in admitting patients and thus making them more risk averse. The degree of support in the event of an adverse incident was referred to negatively:

> '*you're under pressure to admit these people because of the risk and it's a case of like well I don't feel that they probably need to be in obviously but am I going to be backed up if something happens.*' (FG2)

Interpersonal dynamics

Patient-clinician dynamic

Participants gave description of scenarios in which patients were overtly attempting to influence the practitioners' decision. They reported feeling pushed into a corner on occasion when patients threatened to harm or kill themselves if not admitted to hospital. They felt that some patients manipulated them into making a decision to admit them. Others were known to be in potential situations that would increase their risk such as going out:

> '*Sometimes the patient can push you in to a corner and say well if you send me home I'm going to kill myself.*' (FG1)

> '*the line which can be quite powerful around what a person may say that they will now be driven to do.*' (FG3)

> '*he was quite cute in how he was portraying I think he was sort of playing a bit of a game.*' (FG5)

> '*the person will always go out of a lot of time will go out and do something to try and influence that. … and that can be anything nothing to do with mental health whatsoever.*' (FG6)

Participants referred to some patients having the expectation to be admitted once they had made that decision themselves. Some patients were perceived to sabotage their

home treatment so that they would be admitted to hospital and others presumed that they could be admitted for long periods:

> '*It's hard when someone's expectation is admission and sometimes they'll reluctantly agree to [home treatment] but you know … will sabotage it … and not engage.*' (FG1)

> '*Public's preconception that we keep people in hospital for months on end and they think that that will solve everything and they don't realise that might only be a couple of days*' (FG6)

Another aspect raised by participants that may influence them not to admit patients was when they questioned the integrity about whether a patient was being truthful about their condition or whether they were wanting to be admitted for other reasons:

> '*Are they telling you the truth?*' (FG6)

> '*We've had people trying to hide from criminal proceedings but obviously they keep that part of it all quiet.*' (FG6)

Professional-clinician dynamic

Participants described the influence of other professionals on the decision-making dynamic, particularly when finding themselves in awkward positions. For example, when patients had already been informed that they would be admitted to hospital prior to their assessment taking place. Scenarios such as these sometimes influenced the clinician to make a decision to admit a patient, when perhaps this might not have been the outcome if an assessment had been conducted without raising a patient's expectations first:

> '*a big factor is the patient's expectations from other professionals.*' (FG2)

> '*I turned up, there was two practitioners for the CMHT and they had already said he was to be admitted and told his girlfriend and told him.*' (FG2)

'really difficult because those expectations are raised.' (FG3)

The pressure to admit a patient by other staff, family members or patients themselves was discussed. In some cases, participants would feel influenced and pressured into making the decision to admit a patient. Reflecting on the fear previously discussed, participants reported they would admit patients to avoid the criticism and backlash if anything were to go wrong in the future rather than due to the clinical need of a patient:

> '*everybody around them is screaming at you to admit or you feel as if you know if you don't as we've said and something does happen adverse happens to them that you're just going you're going to get all that sort of criticism of why you didn't admit so there is a big pressure.*' (FG1)

> '*you might have pressure from A&E staff who have already done an assessment and put high risk needs admission erm you've got the family shouting at you that they need admission so there's lots of other factors if it's the middle of the night sending them out at 3 o'clock in the morning when they say they're going to kill themselves there's those threats, there's all those things that influence your decision.*' (FG2)

These examples further illustrate how participants' may be influenced when another professional commits to a decision that can cause problems if it is then not adhered to:

> '*once other professionals have seen them and already made the decision that they feel they need to be in hospital you are kind of sometimes backed into a corner.*' (FG2)

> '*it's difficult to deviate from the prevailing consensus view particularly when it's about risk or high risk.*' (FG5)

Contextual factors

The influence of resource availability

Participants highlighted the importance of resource availability when considering whether to admit patients. If there was no bed availability in the local or nearby inpatient wards then a decision to manage a patient at home may have been made, whereas if there was a bed available the same patient may have been admitted:

'*People feel a lot of pressure because there's less inpatient beds.*' (FG2)

The lack of beds can then also increase the pressures on community teams who are then expected to follow up more patients within community settings and those at higher risk (who would have been admitted if a bed was available) will need to be monitored more often; thus adding more hours to their workload:

'*Our community teams are really struggling with their capacity as well.*' (FG3)

Additionally, there was a belief expressed by participants that patients with personality disorder had come to distract resources away from those with 'serious mental illness' [SMI]:

'*we didn't look after people with [personality] disorders. … We just looked after people with mental illness … but a lot of CMHT's time now is taken up with is taking up with managing and those people that are escalating their behaviours and seeking that constant attention that that constant because they don't know how to manage themselves and they're always seeking outside support… the SMIs are generally on the peripheries aren't they.*' (FG1)

Pressure and lack of support for lone workers

The pressure of working alone in the community or on night shifts within both hospital and community settings were raised as pertinent issues for participants. Night shifts were reported as the most difficult times of day to conduct assessments as often staff were making decisions on their own whereas during the day they may have had the opportunity to liaise with colleagues or other support networks:

'*you're like a lone practitioner 'cause you know if you've got like a few assessments waiting.*' (FG2)

'*it would have been a different decision from day time with other services available, with other support.*' (FG3)

Furthermore, participants felt that for some cases there was not enough time to reflect and discuss assessments with others on whether to admit patients or not and this was thought to be an important factor that may have influenced the outcome of their decisions:

'*the time to reflect to communicate if you think about what prevents an admission is the ability to step back think about it, discuss it with your colleagues er when you're having to work 100% all the time you don't get that time to be able to reflect with colleagues.*' (FG4)

DISCUSSION

This study is the first to directly examine both the clinical and non-clinical factors that influence mental health clinicians' decision-making in relation to acute psychiatric admissions. This study addresses an important topic that has been relatively understudied, considering the frequency of psychiatric admissions required to manage symptom exacerbations and crises. Discussions with a representative group of decision-makers found a wide range of factors that fell within four broad themes. The clinical/risk factor theme, which encompasses issues that would be expected to influence decision-making (e.g. the clinical history, associated risks and the viability of alternatives to admission), is consistent with other research examining decision-making in acute mental health scenarios (e.g. Unick et al, 2011, Lombardo et al, 2019, Jefferies-Sewell et al, 2015, George et al 2002). Of most relevance, a qualitative study of decisions at the interface between community and inpatient mental health services found a clinical criterion ('symptom severity') and risk to be the primary basis for

decision-making (Lombardo et al, 2019). In that study, a separate theme ('experience') described how the past history of managing crises was used to influence current decisions. In the present study such past history issues were bound up in the clinical/risk factor theme as they were considered part of the clinical/risk history. The effect of risk information on clinical decisions has been found to differ depending on the way that information is framed (Jefferies-Sewell et al, 2015). This study demonstrated that clinician decision-making was influenced by wider factors than those related to the clinical and risk history. The superiority of clinical judgement over statistical models in identifying the need for admission has been attributed to subjective factors (Zanovello et al, 2020), but few previous studies have set out to y examine the nature of these factors

The critical element of the second theme (threat/fear factors) was the consequences of a serious adverse event (particularly suicide or serious violence) following their assessment. Prior experiences and pre-existing beliefs by clinicians have been reported to affect hospitalisation decisions (Unick et al, 2011). In the present study, these were predominantly described as either the personal or vicarious past experience of negative evaluation of practice after an adverse event or a concern about a future investigation process and the anticipation of resulting negative evaluation of the clinician's practice. The threat/fear factor theme overlaps with the theme labelled 'anxiety' by Lombardo et al (2019) which described a process of decision-making to diffuse anxiety. Both themes highlight the need to recognise that clinical decision-making in acute scenarios involves the clinician managing negative affect. More research is needed on how past experiences influence clinician's future decisions making processes.

The third theme (interpersonal dynamics) was manifest in the form of clinicians attributing intent to the patient (e.g. assuming the patients' account was deliberately modified to influence the clinician to act in a way that otherwise they would not have done) which they then found made decision-making more difficult. If patients or other clinicians had prior expectations about the need for admission, this could also interfere with the assessment and decision-making. An additional element of the interpersonal dynamic theme was the pressure from others (e.g. other professionals or family). There are similarities between the interpersonal dynamic theme and Lombardo et als'

'agenda' theme (Lombardo et al 2019). The latter, which comprises the stated and perceived agendas identified in a referrer, patient or carer, also relates to the role of interaction-based processes on decision making.

The final broad theme (contextual factors) included general service capacity factors such as the reduced availability of inpatient beds. The role of contextual factors in general psychiatric decision-making (rather than specifically those in acute scenarios) has been previously identified (Bhugra et al, 2011). Contradictory findings are available for the specific influence of bed availability with older studies suggesting this has no significance influence (George et al 2002) but more recent studies an effect (Tyrer et al. 2017, Unick et al, 2011, Lombardo et al, 2019). In the present study, the increased pressures on community services as well the specific context (e.g. availability of peer support, lone working and the time of day) in which the clinician undertook the assessment were reported to influence decisions to admit patients.

This study highlighted that an assessing practitioner or clinicians is not just making a decision on hospitalisation. They are simultaneously deciding if not hospital, then where else may the patient be treated, such as via home treatment, community mental health support or in primary care. The decision-making process seems to be about how to get the most appropriate support for the person at that specific point in time. Similar to Lombardo et al, (2019) this study found that patient needs was the primary driver behind decisions but that heuristics also played a key role in decision-making for clinicians.

Running across all four themes was the particular relevance of personality disorder to decision-making. In line with previous studies (Burke et al, 2019; Bodner et al, 2015; Commons Treloar and Lewis 2008), the clinical assessment of patients with personality disorder (as opposed to those with mental illness) was considered more challenging. This study suggests tensions, negative attitudes and possibly a negative bias of staff towards this patient population. This finding is consistent the tendency for clinicians to hold more negative attitudes to personality disorder in comparison to mental illness (Lewis and Appleby et al, 1988; Chartonas et al, 2018). Previous studies have highlighted factors that influence attitudes which include service setting, practitioners' level of experience and the absence of specific training to enhance an

understanding of personality disorder (Commons Treloar and Lewis 2008). Thus highlighting the attitudes of staff on their judgement on the deservedness of people with personality disorder, the lack of training and skills to manage thus subgroup of patients, stigma attached to certain diagnosis and the malignant alienation of patients.

This study demonstrates that clinical decision-making in acute psychiatric scenarios is complex not only because of the need to formulate diverse information relating to the patient's presentation and history, but also because in real-world settings there are other factors that impact on decision-making processes. Whilst other studies have explored influences on decision-making by mental health clinicians, including in acute psychiatric scenarios, this study is novel because there has been a focus on objective and subjective factors involved in the specific decision to admit patients to psychiatric hospitals. This is a critical decision whether viewed from the perspective of the patient (e.g. in terms of entering an institution and potentially restricting their liberty), the clinician (e.g. admission is seen as an option they must consider if there is deemed to be a potential for harm to self or others) and from the provider organisation (e.g. inpatient resources are costly and have limited availability).

To understand the origins of the factors found in this study, instead of the viewing the clinician's role as just attempting to objectively appraise clinical data, it is necessary to firstly recognise that the clinician is just as susceptible as people in other decision-making scenarios to more subjective and implicit processes (such as those arising from anticipating the consequences of decision-making and/or from interactions with others). Secondly, to understand the way decisions are made, account needs to be taken of the wider system in which the decision-maker is acting. The findings of this study suggest training and supervision of mental health clinicians making decisions about patients should not just focus on how to elicit and interpret case-based clinical and risk-related information. Consideration should also be given to how to deal with wider influences which include fears of the consequence of future adverse events, pressures on decision-making from a range of sources and the relevance of contextual factors. Whilst it is possible to standardise approaches to appraising clinical and risk information relevant to decision making (through for example diagnosis and risk assessment tools, respectively), the implicit and subjective processes influencing decision-making are less amenable to standardisation. However, there is scope to

encourage clinicians' awareness of such processes to reduce the unwarranted variation in practice that can otherwise arise. The findings also support the need to take a whole systems approach to the way decisions are made. Although there are no clearly defined clinical criteria for admission to hospital, the legislative framework in which participants of this study were working sets a threshold for admission in some cases. The framework for the area where the current study was carried out, (the Mental Health Act 1983, amended in 2007, for England and Wales) provides for compulsory admission in the event that the patient is suffering from a mental disorder that warrants detention in hospital and that admission is necessary for the patient's health, safety or to protect other people. Whether or not admission is on a compulsory basis, this study demonstrates that the in-practice threshold is also heavily dependent on factors unrelated to the patient's needs. Further, the study highlights how current approaches to scrutinising past practice after serious incidents can have an adverse effect on future practice. These findings demonstrate that as well as attempting to decide what may be best for the patient, the clinician is considering the implications of their decisions on available resources and anticipating how their decision will be judged in the event of an adverse outcome (i.e. the patient causing serious harm to themselves or others). Although from the perspective of the clinician undertaking many assessments, the latter is unlikely and unpredictable (Graney et al, 2020), the clinician appears to hold in mind the possibility that a post-incident investigation will scrutinise each decision against the different standard of the incident having occurred. The theoretical framework 'mindlines' may be a useful starting point to consider where these influences sit within the overall decision-making underpinnings, albeit based around knowledge management in practice, there are useful parallels (Gabbay and Le May 2004; Wieringa and Greenhalgh, 2015)

Strengths and Limitations

Since this paper references mainly the content of focus groups with mental health clinicians, it is limited to their perspective. However, a strength of the study is the number of participants (n=38) and representation being sought from across the region and four different mental health disciplines. Previous studies have been limited to collecting data from one team (Lombardo et al, 2019). Future studies may also explore if predefined roles of teams influence their decision making. Associated affect (Kensinger and Ford 2020) may lead to greater reporting of certain factors (e.g.

threat/fear factors which by definition are associated with negative affect) and under-reporting of other less affect-laden scenarios. The use of focus groups rather than 1:1 interviews may have inhibited some participants from disclosing sensitive issues. It is not possible from this research to know the degree to which the identified factors actually do influence decisions in real time. The participants all worked within the same organisation and the role of organisation-specific cultural influences on decision-making cannot be not determined. Furthermore, the legislative framework in place in the area where the study was undertaken may have an influence on decision-making which limits the generalisability of this study to other areas. This study focused on the perspective of professionals and it is essential future research also include patients' experiences of decisions being made about them.

Conclusions

This study reveals that clinical decision-making at the point of hospital admission entails more than just making sense of clinical and risk-related data. Clinicians are faced with managing wider complex intra- and inter- personal factors that have the potential to interfere with the way the decision is made. Uncovering the breadth of relevant factors can contribute to a more informed approach to research into clinical decisions, to the training and supervision of clinicians, and to service delivery models.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article, further inquiries can be directed to the corresponding author.

AUTHOR CONTRIBUTIONS
TN, SB, CO and PS conceived of and designed the research. SB and TN collected the data and SB, TN, CO and PS analysed the data. TN and PS wrote the manuscript. All authors contributed to the article and approved the submitted version.

REFERENCES

Bighelli, I., Salanti, G., Huhn, M., Schneider-Thoma, J., Krause, M., Reitmeir, C., Wallis, S., Schwermann, F., Pitschel-Walz, G., Barbui, C. and Furukawa, T.A., 2018. Psychological interventions to reduce positive symptoms in schizophrenia: systematic review and network meta-analysis. *World Psychiatry*, *17*(3), pp.316-329.

Bhugra, D., Easter, A., Mallaris, Y., & Gupta, S. (2011). Clinical decision making in psychiatry by psychiatrists. *Acta Psychiatrica Scandinavica*, *124*(5), 403-411.

Bodner, E., Cohen-Fridel, S., Mashiah, M. *et al.* The attitudes of psychiatric hospital staff toward hospitalization and treatment of patients with borderline personality disorder. *BMC Psychiatry* **15,** 2 (2015). https://doi.org/10.1186/s12888-014-0380-y

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.

Burke, L., Kells, M., Flynn, D. *et al.* Exploring staff perceptions of the utility of clinician connections when working with emotionally dysregulated clients. *bord personal disord emot dysregul* **6,** 12 (2019). https://doi.org/10.1186/s40479-019-0109-0

Chartonas, D., Kyratsous, M., Dracass, S., Lee, T., & Bhui, K. (2017). Personality disorder: still the patients psychiatrists dislike?. *BJPsych bulletin*, *41*(1), 12-17.

Cipriani, A., Furukawa, T.A., Salanti, G., Chaimani, A., Atkinson, L.Z., Ogawa, Y., Leucht, S., Ruhe, H.G., Turner, E.H., Higgins, J.P. and Egger, M., 2018. Comparative

efficacy and acceptability of 21 antidepressant drugs for the acute treatment of adults with major depressive disorder: a systematic review and network meta-analysis. *Focus*, *16*(4), pp.420-429.

Commons Treloar AJ, Lewis AJ. Professional attitudes towards deliberate self-harm in patients with borderline personality disorder. Aust N Z J Psychiatry. 2008;42(7):578–84. https://doi.org/10.1080/00048670802119796.

de Jong MH, Oorschot M, Kamperman AM, et al. Crucial factors preceding compulsory psychiatric admission: a qualitative patient-record study. *BMC Psychiatry*. 2017;17(1):350. Published 2017 Oct 24. doi:10.1186/s12888-017-1512-y

Ellis, L.A., Churruca, K. and Braithwaite, J., 2017. Mental health services conceptualised as complex adaptive systems: what can be learned?. *International journal of mental health systems*, *11*(1), p.43.

Farmer, T., Robinson, K., Elliot, S.J. & Eyles, J. (2006). Developing and implementing a triangulation protocol for qualitative health research. *Qualitative Health Research*, *16*, 277–294.

Gabbay, J. and Le May, A., 2004. Evidence based guidelines or collectively constructed "mindlines?" Ethnographic study of knowledge management in primary care. *Bmj*, *329*(7473), p.1013.

George L, Durbin J, Sheldon T, Goering P. Patient and contextual factors related to the decision to hospitalize patients from emergency psychiatric services. *Psychiatr Serv*. 2002;53(12):1586-1591. doi:10.1176/appi.ps.53.12.1586.

Goldberg, J.F., Ernst, C.L. and Bird, S., 2007. Predicting hospitalization versus discharge of suicidal patients presenting to a psychiatric emergency service. *Psychiatric Services*, *58*(4), pp.561-565.

Graney, J., Hunt, I. M., Quinlivan, L., Rodway, C., Turnbull, P., Gianatsi, M., ... & Kapur, N. (2020). Suicide risk assessment in UK mental health services: a national mixed-methods study. The Lancet Psychiatry, 7(12), 1046-1053.

Heiden, S.M., Holden, R.J., Alder, C.A., Bodke, K. and Boustani, M., 2017. Human factors in mental healthcare: A work system analysis of a community-based program for older adults with depression and dementia. *Applied ergonomics*, *64*, pp.27-40.

Islam, R., Weir, C.R., Jones, M., Del Fiol, G. and Samore, M.H., 2015. Understanding complex clinical reasoning in infectious diseases for improving clinical decision support design. *BMC medical informatics and decision making*, *15*(1), p.101.

Jefferies-Sewell, K., Sharma, S., Gale, T.M., Hawley, C.J., Georgiou, G.J. & Laws, K.R. (2015) To admit or not to admit? The effect of framing on risk assessment decision making in psychiatrists, Journal of Mental Health, 24:1, 20-23, DOI: 10.3109/09638237.2014.951477

Joint Commissioning Panel for Mental Health, 2013. Guidance for commissioners of acute care – inpatient and crisis home treatment. London: Joint Commissioning Panel for Mental Health.

Lewis, G., & Appleby, L. (1988). Personality disorder: the patients psychiatrists dislike. *The British Journal of Psychiatry*, *153*(1), 44-49.

Lombardo, C., Santos, M., Van Bortel, T., Croos, R., Arensman, E. and Ray, M.K., 2019. Decision-making in crisis resolution and home treatment teams: The AWARE framework. *BJPsych bulletin*, *43*(2), pp.61-66.

Miller, D.J., Spengler, E.S. and Spengler, P.M., 2015. A meta-analysis of confidence and judgment accuracy in clinical decision making. *Journal of Counseling Psychology*, *62*(4), p.553.

Puschner, B., Becker, T., Mayer, B., Jordan, H., Maj, M., Fiorillo, A., Egerhazi, A., Ivánka, T., Munk-Jørgensen, P., Bording, M.K. and Roessler, W., 2016. Clinical

decision making and outcome in the routine care of people with severe mental illness across Europe (CEDAR). *Epidemiology and psychiatric sciences*, *25*(1), pp.69-79.

Munder, T., Flückiger, C., Leichsenring, F., Abbass, A.A., Hilsenroth, M.J., Luyten, P., Rabung, S., Steinert, C. and Wampold, B.E., 2019. Is psychotherapy effective? A re-analysis of treatments for depression. *Epidemiology and psychiatric sciences*, *28*(3), pp.268-274.

Rabinowitz, J., Mark, M. and Slyuzberg, M., 1994. How individual clinicians make admission decisions in psychiatric emergency rooms. *Journal of psychiatric research*, *28*(5), pp.475-482.

Riecher, A., Rössler, W., Löffler, W. and Fätkenheuer, B., 1991. Factors influencing compulsory admission of psychiatric patients. *Psychological medicine*, *21*(1), pp.197-208.

Sharfstein, S.S., 2009. Goals of inpatient treatment for psychiatric disorders. *Annual Review of Medicine*, *60*, pp.393-403.

Slade M. Implementing shared decision making in routine mental health care. *World Psychiatry*. 2017;16(2):146-153. doi:10.1002/wps.20412

Tiihonen, J., Mittendorfer-Rutz, E., Majak, M., Mehtälä, J., Hoti, F., Jedenius, E., Enkusson, D., Leval, A., Sermon, J., Tanskanen, A. and Taipale, H., 2017. Real-world effectiveness of antipsychotic treatments in a nationwide cohort of 29 823 patients with schizophrenia. *JAMA psychiatry*, *74*(7), pp.686-693.

Tyrer, P., Sharfstein, S., O'Reilly, R., Allison, S. and Bastiampillai, T., 2017. Psychiatric hospital beds: an Orwellian crisis. *The Lancet*, *389*(10067), p.363.

Unick, G. J., Kessell, E., Woodard, E. K., Leary, M., Dilley, J. W., & Shumway, M. (2011). Factors affecting psychiatric inpatient hospitalization from a psychiatric emergency service. *General Hospital Psychiatry*, *33*(6), 618-625.

Wieringa, S. and Greenhalgh, T., 2015. 10 years of mindlines: a systematic review and commentary. *Implementation Science*, *10*(1), p.45.

Zanovello, S., Donisi, V., Tedeschi, F., Ruggeri, M., Moretti, F., Rimondini, M., & Amaddeo, F. (2020). Predicting patients' readmission: Do clinicians outperform a statistical model? An exploratory study on clinical risk judgment in mental health. *The Journal of nervous and mental disease*, *208*(5), 353-361.

Ziegenbein, M., Anreis, C., Brüggen, B., Ohlmeier, M. and Kropp, S., 2006. Possible criteria for inpatient psychiatric admissions: which patients are transferred from emergency services to inpatient psychiatric treatment?. BMC Health Services Research, 6(1), p.150