

A formative quality improvement implementation study to improve care transitions through information capture upon admission to an acute mental health ward

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Abstract

Background:

Many interventions have been developed that aim to improve the transition from ward to community at the time of discharge, with varying success. Guidelines suggest that discharge planning should begin at admission, but in reality this is ideal rather than standard practice. This quality improvement aims to develop a novel intervention that improves mental health care transitions by providing a framework for capturing relevant information at admission that facilitates and accelerates discharge.

Methods:

A formative implementation study to co-design, implement and evaluate a novel tool that improves information capture upon admission to acute mental health wards within a single English National Health Service (NHS) trust. Two cycles of PDSA were completed which included two workshops based on the principles of co-design. During implementation the tool was piloted on three wards. Ethnographic observations (145 hours) and interviews (45) were used to evaluate the implementation of the tool across the three wards. The consolidated framework for implementation research was used to analyse and categorise the qualitative data generated.

Results:

The tool developed considerably as the process evolved. The finished product is a list of 10 information categories that should be captured from external agencies upon admission to facilitate discharge planning. The most reported advantages of the tool were: 1) facilitating confidence in junior staff to legitimately question the suitability of a patient for an acute ward 2) collecting and storing essential information in a single accessible place that can be used throughout the care pathway and 3) collecting information from the services/agencies that patients will eventually be discharged to. The consolidated framework analysis highlighted multiple barriers to implementation from both an outer and inner setting perspective.

Conclusions:

The results suggest that improving the quality of information captured upon admission has the potential to facilitate and accelerate discharge. The novel tool provides a framework for capturing this information that can be incorporated into existing information systems.

Background

At any one time in the UK, 1 in 6 adults will be experiencing a diagnosable mental health condition (1). The majority will be treated by primary care professionals or IAPT services (Improving Access to Psychological Therapies). However, in 2017-2018 over 69,000 people were admitted to adult inpatient mental health services in England (2). A recent Care Quality Commission Report stated that 36% of NHS mental health trusts were rated as 'requires improvement to be safe' (3). The reasons for inadequate safety on inpatient wards was attributed to numerous factors, including ineffective information systems, staffing levels, difficulty in accessing services, medications management and physical/environmental issues. One particularly dangerous time in the care pathway is transition, i.e. movement in or out of a care setting at admission, hand-over, transfer or discharge. In a review of English National Health Services (NHS) patient safety incident reports in mental health in 2017, 9.8% were categorised within 'Access, admission, transfer, discharge' (4).

Delayed discharge is a particular problem in mental health services. Although there is limited consensus on the definition of 'delayed discharge' in this population, research suggests 14% of UK mental health patients experienced delayed discharge (5), i.e. where they are determined as medically appropriate to leave hospital but are unable to leave due to problems with securing onward care services. Delayed discharge has financial consequences for healthcare organisations, in addition to many human consequences such as stressed, bored and anxious patients, an increase in serious incidents, potential delays in admitting appropriate at risk service users or the premature discharge of others and increased risk of dependence on inpatient care (6).

The most common threats to timely and efficient hospital discharge are often related to notifying and organising 'external services' (18). One reason for this common problem is that hospital staff may lack important information at discharge to facilitate discharge planning. In particular they miss important information related to the person's personal circumstances in the community which could easily be recorded or collated at the point of transition into the hospital, thereby enabling discharge planning from the point of admission. This highlights the importance of improved communication between providers at discharge from acute services, but very few interventions aim to develop interventions that address this. Literature suggests that planned rather than ad hoc actions are essential to address suboptimal information sharing in fragmented care settings (19). In England and Wales, NICE (National Institute for Health and Care Excellence) guidelines advise that discharge planning should begin from admission (20), but in practice this is not always the case. Qualitative work has found discharge from mental health settings to be unplanned and unexpected in many cases, leaving patients feeling vulnerable and without control (21).

This quality improvement project aims to work with healthcare professionals to co-design an intervention that a) enables staff to implement best practice guidelines/policy into practice to enable discharge planning from admission b) standardises the information collected from referral services and c) develop an intervention that has the potential to accelerate discharge or prevent delayed discharge due to missing information.

Conceptual and Analytical Approach

Plan-Do-Study-Act

We used Plan-Do-Study-Act (PDSA) cycles to enable learning that happened throughout the process to feed into the co-design process. PDSA cycles are an increasingly popular approach to quality improvement in healthcare (22). The PDSA method follows a predetermined four-stage cyclic learning approach to adapt changes that aim to improve (for example quality and safety in healthcare). Firstly, in the 'plan' stage a change aimed at improvement is identified, then in the 'do' stage these changes are tested, the 'study' stage assesses the successes and challenges of the proposed change and the 'act' stage adaptations to inform a new cycle are identified (23).

Consolidated Framework for Implementation Research

In this paper we report on a service improvement study within a single NHS trust. As we recognise the need to evaluate small scale quality improvement initiatives on a formative as well as summative level, we use the consolidated framework for implementation research (CFIR)(24) as structure for the design and analysis of the study. Many interventions found to be effective in health services research, fail to translate into meaningful patient care outcomes across multiple contexts. The CFIR acknowledges the need to evaluate summative outcomes, but more specifically formative outcomes to assess the extent to which implementation is effective in a specific setting, promotes sustainability, and encourages dissemination into further settings. The CFIR synthesised labels used in numerous published studies to develop an overlapping framework consisting of five domains: intervention characteristics, outer setting, and inner setting, characteristics of individuals and process of implementation. The CFIR presents a structure for approaching complex, multi-level constructs in the real world by consolidating and unifying key constructs from published implementation theories.

Study Methods

Design

This was a formative implementation study based upon two Plan-Do-Study-Act cycles, including two co-design events, pre-implementation interviews and observations and an implementation study (see figure x). The key events that happened within the PDSA cycles were in the following order 1) Exploratory work 2) Co-design event 1 3) Implementation Study 4) Co-design event 2 5) Development of final tool.

Study settings

Study settings

The quality improvement study was carried out within a single English National Health Service (NHS) trust. The quality improvement study was conducted on three acute adult inpatient mental health wards within a single campus that were in close proximity to one another. The wards were mixed-gender wards, two wards cared for adults and one was a mixed adult/older adult ward (18 years plus).

All of the wards had 20-22 bed capacity were almost exclusively full with a 93-95% occupancy of patients physically in beds and a remaining 5-10% on leave but still admitted to each ward. This at times resulted in wards having 24-27 patients allocated to their ward with only 20-22 beds available as several patients would be on leave from the ward with no bed to return to. Each ward aimed to have 15 qualified nurses and 15 unqualified staff in total, (around 5-7 per day shift) but were frequently understaffed. The wards were understaffed by one member during most of the observations, because of this plans would often change on the day of observation. Admissions to the wards were both informal/voluntary and also under the Mental Health Act 1983/2007. During the period of the project the wards had a patient group (as per Health of the Nation Outcomes Scales, HONOS ratings) of Cluster 7 14% (Enduring non psychotic disorder high disability), Cluster 8 8% (Non psychotic disorder, chaotic and challenging behaviour), Cluster 11 11% (Ongoing and recurrent psychosis low disability) and Cluster 12 7% (Ongoing or recurrent psychosis high disability) (25).

Exploratory Work

Focus groups with healthcare professionals (inpatient and community) and service users. The initial iteration of the tool was developed based on focus group interviews with healthcare professionals from inpatient and community services and service users who had experienced admission and discharge from hospital (n=52), full methodological details described in Wright et al. 2016 (21). Seven uni-professional/service user focus group interviews were conducted (consultant psychiatrists (inpatient and community), junior (inpatient based) medical staff, inpatient mental health nurses (including nurses working in the local 136 suite), health-care assistants, community mental health services and service users). Each focus group lasted approximately 60 minutes and was audio-recorded and transcribed verbatim. Data analysis was undertaken using conventional, qualitative thematic techniques. This work was not conducted with staff in the implementation site. A draft tool was developed based on the thematic analysis of the interviews. This was a form that consisted of information categories that were deemed important to capture from the qualitative analysis. This tool formed the basis of the co-design events.

Co-design event 1

The draft tool was presented at a co-design event to a group of healthcare professionals within the implementation trust. Professionals that were invited to the event all worked within acute services and ranged in experience and roles including healthcare assistants, nurses, doctors, bed managers. Twenty-three healthcare professionals of various cadres attended co-design event 1 (see additional file x).

The research team presented the potential draft tool as a starting point for discussion to professionals who worked in groups of 3-6 participants. Participants were first of all asked to discuss whether this would be useful and feasible within their workplace, and whether this is something they would like to see implemented. Afterwards participants were given the opportunity to critique the tool, suggest additions or removals of information categories or suggest another idea to replace this. Each small group were asked to feedback their opinions to the wider group and all information was recorded and collated by the researchers. The research team then met to adapt the tool based on the feedback from the event.

Co-design event 2

The adapted tool was presented back to a smaller group of healthcare professionals, to ensure the changes were agreed and representative of the group's opinions in event 1. Nine healthcare professionals attended co-design event 2 (see additional file x). This event involved presenting each participant with a printed version of the tool and prompting each participant to discuss the feasibility of implementing that tool within their workplace, suggesting further adaptations, additions or removals of information domains.

Implementation Study

Design and Data Collection

The tool developed from the first PDSA cycle was implemented within a ward and fidelity and feasibility were qualitatively analysed. An implementation study was carried out over two months informed by the principles of ethnography, in that it aimed to observe first-hand and understand through critical interpretation how the co-designed intervention was experienced and enacted in everyday clinical practice and in the context of prevailing organisational cultures, routines and structures.

Observations aimed to understand existing tools, processes and systems used for care transitions and the introduction of the new admission tool. Observations focused only on professional activities (i.e. bed management, meetings between ward staff, phone calls with external agencies, handovers, multi-disciplinary meetings etc.) No patients were observed, nor staff interactions with patients. The fieldwork strategy aimed to progressively deepen understanding of processes, systems and tools on mental health care transitions to: a) understand existing processes of admission by shadowing key healthcare professionals that are involved in processing admissions b) observe staff using the new tool c) speak to staff directly about existing processes and the new tool d) refine and adapt the tool based on feedback (discussions with staff adaptations the tool/processes/policy to improve fidelity and usability). The fieldwork was carried out by one author (NT) who recorded observations and interpretations in hand-written journals with on-going summary reports typed up and shared with the wider team to inform ongoing reflections and analysis.

Forty-Five semi-structured interviews were conducted with 40 unique individuals during the observation period. This included 4 key informants who were interviewed twice: two nurses who were shadowed frequently and added co-design events thereby playing a key role in implementation and two service managers who were integrally involved in the project and leading co-design events. . The four follow-up interviews with key informants were conducted six months after the initial observations to assess the longitudinal impact of the work and clarify our findings. 145 hours of ethnographic style observations were conducted. Semi-structured interviews were conducted with healthcare professionals during the observation period at times that were suitable for the professionals A purposive sampling strategy was used. Participants were purposively identified on the basis of observed involvement in care transitions, and were usually recruited to interview whilst the researcher was carrying out ethnographic observations, or through working with service leaders to identify relevant individuals. Whilst most of the interviews were with acute ward staff, we also interviewed staff from associated agencies that were involved in care transitions and were based in close proximity to the acute ward (same corridor) for example, crisis team nurses, bed management team, liaison nurses and housing officers.

Interviews were semi-structured to understand professional perspectives of mental health care transitions with a primary focus on admission and discharge processes, the interplay between the two and the co-design process. Interviews ranged in length from 10 minutes to 90 minutes, the majority lasted between 20 and 40 minutes as they happened only when staff were available within working hours. All interview participants gave written consent ahead of the interview and all interviews were recorded and transcribed verbatim.

The quality improvement study received favourable approval from Research and Development department at the trust. Information sheets and briefings were provided before each interview and at the beginning of the observations. In advance of carrying out observations of any staff member, either through shadowing, staff meetings or gatherings of multiple staff, written consent was sought from all those who were present in the first instance to be observed for the remainder of the study.

Data Analysis

The data collected was analysed in line with the five domains of the consolidated framework for implementation research: intervention characteristics, outer setting, inner setting, characteristics of individuals and process of implementation. The subcategories and data used within these domains were discussed within the wider research team for verification purposes.

Developing final iteration of the tool

The final version of the tool of developed as a result of two PDSA cycles. Throughout the implementation study feedback from staff using the tool was continuously gathered. The research team worked with the 33 individual suggestions for improvement that were synthesised from the qualitative results of the implementation study observations and interviews. This qualitative data was synthesised into distinct action points and each one was considered in turn in depth by a team of authors (NT, NW, KG).

Results

Information Capture Tool

The final developed tool was an information capture pro-forma that can be adapted and used in most existing information systems. The purpose of this tool is to standardise information capture upon admission. The pro-forma enables the healthcare professional that is responsible for liaising with external referral

agencies to capture 10 domains of information which participants in this process deemed to be important to enable effective and efficient discharge. The proforma provides prompts and open-text boxes to enable flexibility. The information categories generally concerned personal and social circumstances of patients.

Box 1: Final Co-designed information capture tool

Please complete the following free text entry in relation to the admission. This needs to include the key information needed to commence the admission onto the ward. The following should be included, if the information is not available please state why. Please highlight any information that is missing, as it will need to be followed up and addressed by the inpatient team within 72 hours of the patient on the ward.

1. Source of the referral (e.g. crisis, MHA)
2. Purpose of admission
3. Current presentation (e.g. symptoms)
4. Current risks
5. What is needed for discharge (e.g. what are unmet needs in the community)
6. Social needs (e.g. accommodation, finances etc.)
7. Caring responsibilities (e.g. children, elderly relatives, pets, other)
8. Safeguarding issues (present or past)
9. Physical healthcare (e.g. what monitoring is needed, appointments, equipment and resus status)
10. Other services involvement (3.g. community team, police, social care)

Implementation Study

1. Intervention Characteristics

Relative Advantage

There were three broad relative advantages associated with using the tool as opposed to an alternative solution 1) facilitating confidence in junior staff to legitimately question the suitability of a patient for an acute ward 2) collecting and storing essential information in a single accessible place that can be used throughout the care pathway and 3) collecting information from the services/agencies that patients will eventually be discharged to that will speed up the discharge process.

'But, I think, from what I've seen it's empowering them...And, I've seen a bit of a change in them actually, in terms of stand...you know...sort of, asking the right questions, and challenging, should this person be admitted' – Acute Service Manager

'this is the information that you're gathering, that you're giving to your staff to say, this is the person that's coming in, these are their risks, these are their needs, this is what we need to help them with, this is the time they're coming in, this is extra support that they might need. And for me, that's all part of clerking and introducing that person to the ward'– Lead nurse

Having the information collected as standard and in a single place had 'knock-on' effects for practice of other staff groups on the acute ward, for example, a junior doctor interviewed was unaware of the tool but had noticed its beneficial implications exemplified in a difference in the quality of information she had access to. A similar experience was had by ward staff, who felt that the questions asked using the new tool had a positive effect on the appropriateness of admissions.

'this patient got admitted and essentially all that information was there and I've not seen the checklist but I've seen all of this information on an admission... Yeah, so they may have used it and actually made life a lot simpler' – Junior Doctor

It could be that the tool was most beneficial as it collected the information into one place and documentation format that the ward staff needed, were familiar with and involved in the process of design. One junior doctor described how all of the information is probably in the online system anyway, but it's difficult to access and spread across multiple files that may be slow to open.

'It was just on [information sharing system] and in different places in the different case notes.' – Junior Doctor

Intervention Source

There was a lack of knowledge amongst staff who did not attend the co-design events about the tool being internally developed. Despite all staff being invited to join in the development of the tool at co-design events, there was a general consensus particularly amongst lower-level staff that they were not involved in the development of the tool and that they did not know who was. There was a lack of communication between those who attended events and other staff members.

'I don't know who went to them. Or how often they used it on the other tool since they've done the co-production meetings'– nurse.

Complexity

There was a perceived complexity in terms of the scope of the tool; which enabled staff to make their own decisions about when to use it. The data highlighted that there were inconsistencies amongst professionals about when the tool should be used. For example, many lead nurses that were responsible for using the tool to capture information, felt that it wasn't necessary to use the tool if there was a transfer back to the ward (for example from an out of area bed or psychiatric intensive care units). Inconsistencies in definitions of what constitutes an admission and therefore use of the tool were also noted in the ethnographic field notes. However, by choosing what defines an admission (and subsequently when to use the tool), there is a risk of missing the opportunity to capture pertinent information.

'Yeah, I think admissions that you would use that tool for 'cause you don't sort of use it for transfers' – lead nurse acute ward

'Most of the calls that have been received today have been for transfers rather than what staff would constitute as 'new admissions' therefore the blepholder today, as well as yesterday, has chosen not to use the tool for transfers for potential mental health act assessments that are not yet definitive admissions. They used scrap paper instead to collect skeletal information.' - researcher field notes, day 3 of implementation.

There were also many instances when the typical process would not be followed, as individuals chose to 'by-pass' the system, and therefore using a standardised format for information capture might be difficult.

'Yeah, there's lots of occasions when it might just get by-passed. So it might be that the mental health liaison team at A&E just ring the bleep-over themselves, and get the bed themselves.' – crisis team lead nurse

2. Outer setting

External Policies and Incentives

The tool was co-designed with staff to fit into the current systems, processes and policies; which are amenable to change at any time. The implementation process also promoted a deeper engagement with transition quality and safety, by facilitating meaningful discussions on a frontline and management level.

I think, it's a bigger picture, I think, the whole idea of the, kind of, assessment services being more responsible for the admission process, is something that is being discussed at quite a high level. - lead nurse

3. Inner setting

Networks and communication

The implementation and co-design events highlighted the effect of weak communication between services, wards and professions, that potentially had an effect on ineffective information transfer. The interviews highlighted that staff are unaware of roles, associated documentation and intentions/capabilities of other teams. This was a particular barrier in gaining 'buy in' from other teams that felt that the tool was duplicating work or implicitly suggested that other teams were not performing. This was particularly problematic in a complex period, such care transitions, whereby inter-agency working is essential. Those interviewed from associated agencies other than the acute ward felt that they were already gathering this information from referral agencies (crisis team, bed management team). However, interviews with all of the ward staff highlighted that they did not feel they had access to the information they needed to improve safety and patient experience and accelerate discharge.

'We gather it all anyway, I make sure that I've got it all anyway. I wouldn't dare ring the bleep holder and say I want a bed and them say, well why and me saying, I don't know.' - crisis nurse

'I think that is absolute basic stuff that doesn't get...I think that doesn't get asked by anybody half the time.' – Acute service manager

A similar misunderstanding of roles and tension was felt by the blepholders, they felt that other agencies didn't understand the pressures they faced trying to secure beds; which inevitably leads to inter-agency tension. Although staff from groups worked together in co-design events, there was a definite tension between ward staff and those from other associated services which was a barrier to implementation and changed the format of the tool after the co-design event 2.

"Because I'm sure most people think we actually do hide beds up...but people still think we do, so they think they can threaten you or they'll talk to your manager' – Lead nurse

'In the co-design event 2, there was evident tension between the crisis team and blepholders. The crisis team felt that the tool was redundant and a duplication of existing process, whereas the blepholders felt that they were missing vital information and would like a standardised tool to collect this. The crisis team refused to pilot the tool as they felt they did this anyway, however the blepholders really favoured the tool, so we decided to pilot the tool with the blepholders only' – researcher field notes

Implementation Climate

Many staff felt one of the benefits of the tool was that it empowered more junior staff to be more confident in asking questions. However, there was also a sense that although the tool empowered staff to ask the right questions, it didn't necessarily give them the power to change anything based on the responses they receive. Another unintended consequence was that some staff reported using the tool as a vehicle to block admissions, by describing the tool as a process of rejecting admissions. One interviewee (lead nurse) described the tool metaphorically as a way of depersonalising the rejection process *'computer says no'*. A beneficial unintended consequence, was that the work sparked changes in policy around the roles and processes associated with discharge on a local level.

'why ask a question, if it doesn't change anything? ...But, I can also see that if you ask for information, and then you challenge it, and you basically get told to pipe down, I can see that you wouldn't keep asking for stuff' – Assistant head of nursing

'It's given us the evidence to really robustly challenge that and it's made the referrers think, when we've said, well, have you got a safety plan on? Oh, well, no. Well, I'm not accepting them until we've got a safety plan. Because we've got the structure of the tool and because we appear to know what we're talking about, and everybody's saying the same thing, I think it's been better' – Lead nurse

Discussion

The developed tool provides a framework for information capture upon admission that was co-designed with healthcare professionals and researchers. It includes ten information categories, including physical health needs, what is needed for discharge, social needs and caring responsibilities.

Current interventions in this field, place little focus on information/knowledge sharing and instead focus on preventing outcomes such as suicide, self-harm and readmission (7, 8). However, knowledge and information sharing is considered a key element of safe care particularly in transitions (14, 15). This research highlights how this view is shared by mental healthcare professionals, many of whom feel standardisation of information capture is necessary and beneficial. The research also presents a framework for wards to use to ensure this information is captured.

A body of literature exists that highlights the relationship between knowledge/information sharing to psychosocial variables such as trust and problem-solving (26). There is also a body of literature concerning the effect of confidence of junior staff on patient safety (27, 28). The current research highlights the relationship between confidence, information sharing and patient safety, whereby professionals with lower levels of confidence may be less likely to capture necessary information (that could improve safety). It also suggests that a knowledge sharing intervention can potentially reduce the effect of lower confidence on patient safety.

There are many formative learning points that this study offers in terms of implementation. There were unintended relative advantages of the tool, which potentially affected stakeholders perceptions of the advantage of implementation, increasing fidelity (29). But because of this the purpose of the tool may have shifted in the stakeholders perceptions from an information capture tool to facilitate timely discharge, to a tool that provides power to a formerly underpowered group to resist admissions. The power tension between the blepholders (who were responsible for utilising the tool) and other gatekeeping agencies (primarily crisis team), who made the majority of decisions about admissions was evident throughout the process. Formatively, it highlights the importance of considering the effect of any information capture tool or standardised process on power dynamics, as it provides a means of documentation and legitimacy to raised concerns and tensions between groups. The implications of this secondary purpose needs further analysis. Another key formative learning point was in terms of intervention source in co-design, literature suggests that stakeholder perception about internally and externally developed interventions may influence implementation (30). Many of the professionals involved in the co-design workshop did not work on the three pilot wards and/or were of other professional cadres that they would not use the tool (doctors, ward nurses or healthcare assistants as opposed to blepholders/lead nurses). There was a lack of communication between those involved in the co-design process and those involved in the pilot, therefore improving information sharing after co-design events or involving greater numbers of staff from specific pilot wards, could be a crucial way of influencing perceptions of interventions to be internally developed.

What this tool does is provide a vehicle to enable information capture at admission that aims to reduce delays in discharge due to social factors. It also provides a way of capturing important social information in a single accessible place. The implementation evaluation suggests that it also has a secondary purpose of providing confidence to junior ward staff to question the rationale behind the admission from external agencies. Key learning messages for other settings would be to ensure that representatives from agencies are involved in the referral processes are included in the co-design or implementation process as they may be resistant if they feel they already capture this information. Another beneficial process would be to establish perceived roles of each of the stakeholders in relation to social information capture at the beginning of implementation to ensure staff from other agencies don't feel threatened or undervalued. Finally, to ensure that everybody is aware of the purpose of the tool as an vehicle from information capture as opposed to a process to prevent admissions.

Limitations

This study was conducted within a single trust so applicability to other trusts cannot be assumed. The definition of co-design could also be criticised in this study as a) service-users were not involved in the design process and b) we presented a potential tool based on exploratory work rather than allowing a truly bottom up idea to emerge. We were unable to involve service users in this work as it was service improvement rather than research, so we had to work solely with professionals in co-design and the implementation study. We did not capture quantitative data, therefore we cannot assess whether there was a direct impact on delayed discharge or length of stay. This was service improvement study, rather than research, therefore a quantitative analysis of the effect of this tool on length of stay or delayed discharge is now necessary.

Future Directions

The co-design method allowed us to highlight the ten key information categories to capture. Future research is needed to robustly quantitatively assess the effects of implementation of this tool on delayed discharge rates and average length of stay. Realist approaches to evaluation intervention implementation studies suggest that understanding the context-mechanism-outcome configurations (CMOCs) of interventions researchers are better able to understand why interventions work for some people/organisations and not others (31). Through elicitation of the patterns of CMOCs that are evident across settings, one can establish the CMOCs that operate as the common thread of an intervention across various contexts (31). As many of the findings of this work highlighted the importance of context for implementation and co-design methods, identifying the mechanisms that are common to implementation across wider settings

would be beneficial to generate greater learning. Also to enable better integration into practice, the consolidated framework often focuses on the use of change agents in implementation research. Identifying formal change agents and local champions, that champion the tool and facilitate the implementation of new processes would likely have benefits in terms of fidelity in future implementation (32).

Conclusions

The results suggest that improving the quality of information captured upon admission has the potential to facilitate and accelerate discharge. The novel tool provides a framework for capturing this information that can be incorporated into existing information systems. Key formative learning points were to ensure that professionals on the pilot wards specifically are involved in co-design processes, or to enable co-design event attendees to formally communicate the outcomes to non-attendees. The study also highlighted the potential for an information capture tool to have a secondary purpose to be used to empower unpowered groups by providing a formal structure to report concerns.

Abbreviations

CFIR – Consolidated Framework for Implementation Framework

HONOS - Health of the Nation Outcomes Scales

IAPT - Improving Access to Psychological Therapies

NICE- National Institute for Health and Care Excellence

NHS – National Health Service

PDSA – Plan Do Study Act

UK – United Kingdom

Declarations

Ethics Approval and Consent to Participate

The quality improvement project received favourable approval from Research and Development department at the trust. Information sheets and briefings were provided before each interview and at the beginning of the observations. In advance of carrying out observations of any staff member, either through shadowing, staff meetings or gatherings of multiple staff, written consent was sought from all those who were present in the first instance to be observed for the remainder of the study. The exploratory work was given a favourable opinion by a University of Nottingham Business School Research Ethics Committee 201312008.

Consent for Publication

Not applicable

Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available as they are qualitative in nature, but are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests

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Authors' contributions

NW, JW and KG coined the idea. JW and NW supervised the project and provided analytical oversight. NT conducted the interviews, observations and analysis. KG organised the study. NT wrote the manuscript. KG, NW and JW critically reviewed the manuscript.

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Figures

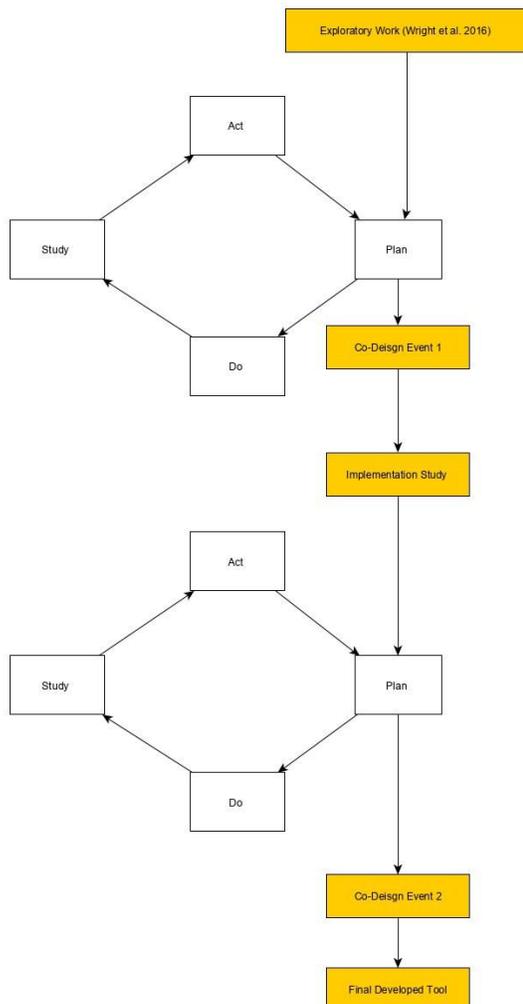


Figure 1

Flow diagram to show the study design