East Midlands Patient Safety Collaborative: Discharge Case Study

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Introduction

The Centre of Health Innovation Leadership and Learning (CHILL) working in collaboration with the East Midlands Patient Safety Collaborative (EM PSC) was asked to examine how strategies, interventions and technologies aimed at improving the quality and safety of hospital discharge practices are being developed, implemented and utilised by healthcare organisations in the region. A priority area for NHS England and the Patient Safety Collaborative is the reduction in harm to patients that arises due to delayed transfers of care and discharge from hospitals. In 2015, the East Midlands Patient Safety Collaborative (EM PSC) carried out a scoping review within the region and invited healthcare organisations to submit examples of strategies and interventions they had implemented that looked at reducing this source of harm. This report details the findings from the in-depth process evaluation of the implementation of a trust in the East Midlands ETMS Discharge template. The case study was selected by EM PSC as a case for CHILL to examine, as it was identified as an ideal intervention for generating new learning around safety improvement and safe discharge practice.

Aim of the evaluation

The overarching aim of the evaluation was to assess if the implementation and use of the Discharge element of the trust’s Electronic Task Management System (ETMS) reduces delays and improves patient safety and to determine if this is an example of good practice that EM PSC could share and spread widely.

Evaluation questions

The following questions were proposed

- What factors influenced the implementation of the Discharge template element of the Electronic Task Management System?
- How do staff use the Discharge template currently to support the discharge process?
- Has the Discharge template improved the discharge planning process?
- Has the introduction of the Discharge template had an impact on improving patient safety?
- What lessons can be learnt from the evaluation regarding the suitability of the intervention in improving patient safety
Objectives

The objectives of the evaluation were as follows

- Examine how the Discharge template element of the Electronic Task Management System was implemented
- Examine how staff use the Discharge template to inform and support discharge planning processes
- Determine if this intervention should be promoted as an example to improve discharge practice

Evaluation approach and method

The evaluation was retrospective in nature and focused on examining the implementation and use of the Discharge template introduced in 2014. Following the EM PSC Researcher-in-Residence model, the evaluation approach was ethnographic, in the form of an in-depth qualitative field study, taking place over a period of 5 months. Data was collected through interviewing and observing staff as they carried out discharge related activities on the ward.

Members of staff from the trust’s Acute / Emergency Department specialist medicine (ESM), clinical management and patient safety directorates were identified as key stakeholders to participate in the evaluation. This included staff from the operation management department (discharge lead, operations duty managers, discharge sisters, bed coordinators) nursing and medical staff on the acute and general medical ward (discharge coordinators), staff from the patient safety management and hospital transport team and social services.

Data collection took place in two phases, the first phase, profiling or scoping review, was carried out to gain an understanding of the context, identify stakeholders and review documents. This stage involved; reviewing national and local reports, observation of staff at meetings as they carried out discharge planning related activities, ethnographic interviews with members of staff identified as having keys roles in patient safety and the coordination and planning of discharge across the trust. Observations were recorded in a field journal as they provided rich descriptions of events, activities and discussions. In addition, publicly available documents on discharge and press releases regarding the ETMS were reviewed.

The researcher spent on average three days a week as a non-participant observer in the setting. This included observations on eight of the 14 acute medical wards, conversations with members of the operations team as they went about their daily duties and shadowing two senior members of ESM as they visited ward areas, attended the board rounds and conducted the daily conference calls. Six semi-structured interviews with members of the ESM operations team were carried out and were audio taped with permission and transcribed verbatim.
Further informal conversations took place with members of the patient safety directorate, and with nurse coordinators and two consultants on six of the 14 general medical wards.

The second stage of the evaluation, the in-depth case study analysis to assess the impact of the intervention in supporting discharge planning did not take place. Instead, the stakeholders expressed the wish to work in partnership with the researcher to explore the implementation process to enable them to identify the barriers and enablers. They wished to use the learning to approach the process differently in the future; as they acknowledged that, the Discharge template had not been fully implemented and neither was it being used as expected.

Background

National picture of hospital discharge

Hospital discharge is described in the DH (2010) guidance “Ready to go?, Planning the discharge and the transfer of patients from hospital and intermediate care” as the point in which inpatient hospital care ends with care being transferred to other health and social care providers outside of the hospital.

According to NHS England, a patient is ready for discharge when these three conditions are met.

1. A clinical decision has been made that a patient is ready for discharge
2. A multidisciplinary team decision has been made that the patient is ready for transfer
3. The patient is safe to discharge/transfer

The DH guidance also includes 10 principles for safe discharge. These include; set an EDD or transfer within 24–48 hours of admission, discuss these with the patient and carer(s), review the clinical management plan every day and take the necessary actions and update process1. In addition to these principles, the following are also expected to have taken place to ensure that a patient can be safely discharged without them experiencing a delay.

- Discharge planning begins on admission to hospital or in the early stages of recovery
- There are no built-in delays in the process of deciding that a person will no longer benefit from acute care2 and is safe to be transferred to a non-acute (including community and mental health) setting

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1DH. (2010). Ready to Go? Planning the discharge and the transfer of patients from hospital and intermediate care

2 Acute care in the context of discharge planning is defined as ‘treatment received under the supervision of a consultant and lasts for a limited period after which the person receiving the treatment no longer benefits from it’
The NHS and Local Authority will jointly review policies and protocols around discharge, including handling of choice of accommodation; and have systems and processes for assessment, safe transfer and placement, as part of their capacity planning. These steps should be guided by good professional practice and safe, person-centred care because although acute care is not appropriate once an acute episode is over, joint planning is needed to ensure that appropriate care is available in other settings.

It is noted, that in all the policy and guidance documents on the topic, discharge planning is considered as having a key role in preventing delays in discharge. Discharge planning is recognised as a complex process, because it involves the cooperation of many actors and coordination of activities across many sectors and professional groups. A multidisciplinary approach that includes the involvement of professionals from all agencies working together has been indicated as necessary for the process to be effective. It is also recognised that maintaining and establishing effective communication between health care professionals, patients, their families, social services and other healthcare providers outside an acute care setting can be time consuming and difficult. So having the right mechanisms to facilitate and ensure communications between all are effective and productive is considered essential.

A number of toolkits\(^3\), interventions and solutions have been developed to support healthcare professionals and organisations in their endeavours, as well as ETMS. The use of a number of validated frameworks and approaches, such as the DH’s SAFER bundle, theory of constraints and Lean approach have been promoted.

### The problem of delayed discharge

Delays in hospital discharge occur when there has been a disruption in the process. These disruptions can be caused by a mixture of hospital, patient and social care related factors, such as hospital assessments not taking place on time, the patient or family refusing the choice of services offered or statutory agencies disagreeing about readiness for discharge or accepting responsibility for ongoing care (NICE, 2015:22)\(^4\).

Delays in discharge are costly; they are associated with an increased risk for the patient and are a national issue. To the NHS, these delays result in increased length of stay, inability for admission targets to be met and rising costs. In the year 2015 delays in discharge cost the NHS an estimated £270m. In terms of safety between October 2012 and September 2013, around 10,000 reports of patient safety incidents were related to discharge.

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\(^4\)Transition between inpatient hospital settings and community or care home settings for adults with social care needs [https://www.nice.org.uk/guidance/ng27](https://www.nice.org.uk/guidance/ng27)
These delays are associated with an increased risk to patients, in the form of risk of acquiring hospital related infections and experiencing in stay falls.

Research into delayed discharge and transfers of care has consistently shown that poor communication, lack of coordination\(^5\) between healthcare professionals, patients and social services as ongoing. Current national reporting data figures in February 2016, indicate, of 3,436 reports of delayed in transfer of care, 437 (8\%) were waiting for completion of assessment. In the recent 2016 Parliamentary and Health Services Ombudsman report\(^6\), on the investigation of unsafe discharge, poor communications between healthcare professionals and social care providers and failure to involve patients and their families in discharge plans were identified as continuing issues. In addition to poor communication between staff and patients, there was evidence of poor coordination of discharge related activities.

In response to these issues raised around discharge, a number of initiatives were introduced by trusts across the UK. The trust of interest implemented an Electronic Task Management System Discharge template to improve discharge planning with the assumption being that an electronic system would aide communication and provides transparency of the patient journey.

**Local context**

The trust where the case study was carried out provides both acute and non-acute services to one million people. At the time of the evaluation, the trust was experiencing a high volume of admissions from the emergency department, the ambulatory care and the GP assessment unit. According to staff who were reviewing the situation daily, the volume of patients attending ED were higher than expected for the time of year, in fact it was similar to the peak demand associated with the winter months. According to members of the operations team, it was not only the volume of patients that had increased but also the acuity of patients attending and being admitted. In one shift, for example, 80\% of the 128 admissions were patients over 75 years old, with complex health and social care needs and high levels of acuity. In addition, there were profound issues with social services around arranging and providing packages of care. This was resulting in difficulties in discharging patients who were medically fit but requiring social services packages of care. Patient flow and the ability to timely discharge patients was compromised on a daily basis due to these factors, with all stages of the patient journey experiencing problems.

At the time of the evaluation, the IT team were in the process of rolling out across the trust another task management system the “electronic observations” (EObs) module. The introduction of the EObs module was described as a turning point for the trust, as the EObs electronic system would move the trust to a point where staff would only have to enter data

\(^5\)Safer Home [http://www.healthwatch.co.uk/safely-home](http://www.healthwatch.co.uk/safely-home)

\(^6\)A report of investigations into safe discharge Parliamentary and Health Services Ombudsman
once. All staff across the trust would now have access to a handheld device during their shift and this they assumed would lead to improvements in the recording of patient observations.

**Current practice**

Before the ETMS was implemented staff on the medical wards staff used large white display boards to view and record task information related to a patient’s discharge. Each ward visited by the researcher in residence had two white boards in use. One white board was in the patient area by the nurses’ desk and had basic patient details on it and a second white board was in the staff room on which additional clinical and social care information was recorded. After the implementation of the ETMS it was observed that staff had not stopped using this second white board to support discharge planning activities, they continued to display and record the information used to inform patient discharges decision on the ward whiteboard.

**The intervention**

The planned intervention was described as an interactive IT system that would to track patients through the hospital from admission to discharge or transfer of care. The IT system was central to the new way of working, as the trust wished to adopt an approach that ensured safe and timely patient discharge. The ETMS was to be implemented to “drive the patient pathway in a proactive and comprehensive way. It would do this by allowing staff to track patients through the hospital from admission to discharge”. The Discharge template was an element of the trust’s ETMS. It is described as a system that has the capabilities and capacity to allocate tasks and alert staff when a task has not been completed. Improving patient safety is the core function of the system. A key design feature of the intervention is the use of mobile devices to input data contemporarily so that information on the system can be constantly updated and up-to-date.

Discharge related information would be displayed on big screens on the wards. Staff at the beginning of each shift could view and discuss the displayed information. They would be able to see, for example, what tasks still needed to be completed, and make decisions about a patient’s readiness for discharge. All groups of staff (physiotherapists, nurses, occupational therapists, pharmacists, doctors etc.) involved in patient care would amend the information on the system on an ongoing basis thereby ensuring patient information is up-to-date. A Standard Operating Procedure (SOP) was to be developed and be in place to ensure strict adherence to the data entry process on a daily basis.
Measures of success

The established discharge process at the trust was aligned with the guidance and procedures around safe discharge practices as set out in national policy and guidance documents. Data and information for expected date of discharge (EDD) and length of stay (LOS) measures were captured to allow the monitoring and auditing of activities around discharge. Figure 1, is a validated depiction of the discharge related procedures, processes and activities that were expected to take place on the trust’s medical wards following implementation of the ETMS.

Figure 1: Trust’s Discharge Process
Figure 2 illustrates that the required supportive structures and arrangements were in place, such as a multidisciplinary team board round, a daily conference call to facilitate communications between the clinical staff on the wards, social care and members of the operation and ambulance and patient transport teams.

“So they have a board round followed by a ward round and then at … I think we used to do it at 11 o’clock in the morning and we’ve brought it forward now to 10 but we started with what we called a discharge conference call. So you’d have the likes of XXXI and/or myself in a room with a social worker, we used to have a PCC, a primary care coordinator and we had a team there who we went through every patient on the list” (Senior manager)

The approach to discharge planning was underpinned by elements of a number of approaches and frameworks, such as the theory of constraints and SAFER bundle.

**Figure 2: Discharge planning processes**
Assumptions of change

There were a number of assumptions expressed about the purpose and goal of the Discharge template. There was a general expectation that the Discharge template would play a major role in reducing delays, as it would facilitate better communications between clinical and managerial staff directly involved in discharge planning and patient care. The visual nature of the ETMS would enable better sharing and viewing of discharge related information. This in turn would lead to improved discharge planning and the avoidance of delays in discharge.

Figures 3 and 4 are illustrative examples of the managerial staff’s expectations around how the Discharge template would support addressing some of the key problems identified as causing delays in discharge. In figure 3, a key problem identified was not contacting social services in time to ensure that the necessary care arrangements are in place and ready for when the patient is discharged. It was assumed that information recorded on the ETMS would enable staff to see if social services had not been contacted and determine what social care arrangements needed to be organised. Depending on the situation and the information recorded on the system, they would be able to identify what actions were necessary to ensure this type of delay does not occur or be considered as a delay due to the hospital’s failure to interact with social services in a timely manner.

Figure 4 illustrates another given example of a cause for delays in discharge, Doctors not writing up patient discharge summary letters and prescriptions for take home medications in time. This results in delayed discharges and in some cases, patients having to be re-bedded. To reduce this type of delay occurring, it was assumed that the doctors would use the Discharge template to plan and review which patients were coming up for discharge and start working to complete patients’ summary letters and medications in preparation to prevent delays due to hospital related factors.
Figure 3: Problem one

Patient transferred from AMU to medical wards

Patient is admitted to the medical ward and treatment received

EDD

Patient medically fit for discharge (no longer requires hospital treatment)

- Discharge plan has not been started

- Social Services not informed

- Patient's therapy needs have not been assessed

- Therapy staff not informed

- Patient's therapy needs have not been assessed

Patient cannot be discharged

- Length of stay

- Delay due to hospital related factors

- Increased risk of harm

Delayed discharge
Members of the senior management team assumed that the discharge coordinators and medical staff on the wards would welcome the introduction of an electronic system to support their role in discharge planning. It was felt that the Discharge template would lead to a more proactive approach, as staff would now be in a better position to identify outstanding tasks and constraints and take the necessary action to avoid delays taking place.
There was an expectation that all members of staff would ensure that the information on the system was kept up to date and accurate. However, staff on the ward, the discharge coordinators in particular, had a different set of expectations and understanding of the purpose of the Discharge template to those of the managers. They felt it was primarily a tool for the members of operations team to use in their role in managing patient flow. Staff on the ward felt it allowed members of the operations team to get an overview of what was happening on the wards in terms of availability of beds to enable them to manage patient flow better.

Findings

The aim of this evaluation was threefold to:

1. Examine the implementation of the Discharge template element of trust’s ETMS
2. Understand how it was utilised by staff and
3. Understand the role the intervention had in improving discharge practices

It is suggested that the implementation of an intervention can be deemed successful when the intervention has been adopted and used for what it was intended. It illustrates for example, that the appropriate plans have been developed and put in place; there has been good levels of engagement, appropriate allocation of resources, and adherence to the design of the intervention. Unfortunately, in the case of the Discharge template, there was very little evidence to indicate that it was being used as intended so it is not possible to say that the implementation was successful.

Intervention development: implementation of the Trust’s ETMS

The trust initially engaged with an IT company to provide a task management system across the trust in 2009 and this was the start of a long-term relationship between the IT Company and the trust’s IT team.

In 2012, the trust came to an agreement with the company to support the design and trialling a task management system to improve handover at no cost. The trust’s IT team have been working alongside the company developing additional templates and add-ons to the system. The Discharge template is one of these additional templates; however, this led to a fragmented approach.

“So we’ve got the nurse’s profile, we’ve got doctor’s profile, we’ve got a different pediatric profile, we’re going to have a maternity/obstetric profile. We’ve got a discharge profile. And that’s how we’ve created this. We’re going to have a fractured clinic profile because that will pick up all the fractured clinic and their requirements for reporting. So it’s a profile, I wouldn’t call it a module”.
Since the creation, modifications and updates have been made to the Discharge template. Data entry fields have been changed in response to different information and monitoring requirements. Importantly, changes were made to address issues around poor compliance with data entry as this was identified as a common problem, on a daily basis; vital bits of information were not being recorded onto the system. These changes to the system tended to be instigated and carried out by members of the operations team, as they constantly reviewed ward staff's data entry compliance in an effort to try to establish ways to make it easier for staff to input data. They had tried for example to align the fields with other work, so made the fields reflect the discharge checklist and whiteboards that the nurses used on the wards. Several themes emerged as particularly important in implementation, these included design, communication and engagement, the process of implementation. These will now be discussed in more detail.

**Design**

A number of design issues were viewed as affecting the usability and functionality of the Discharge Profile and therefore the implementation. It was not for example a fully integrated part of the ETMS, so did not draw on the system's task management capabilities that could have supported the discharge planning process. Instead, it was implemented as a static standalone electronic data capture template and staff were expected to view information recorded on the template to identify actions and allocate tasks. There was recognition there were problems with the design, with many conversations amongst the members of the operation team around improvements, they thought would help with the layout of the Discharge template, what and how information should be displayed and what fields should the template contain to assist staff on the wards with their planning.

There was a general view from all the staff interviewed, that the ETMS did have the capability and the functionality to support the discharge process. Staff on the wards explained they had not been given an opportunity to be involved in any aspect of the implementation or to give feedback on how it worked. One of the staff nurses interviewed did not feel enough was done to include staff in the design of the Discharge template or to give an opinion whether it would work in practice.

The fact that the Discharge template was not designed to be a fully functioning element of the ETMS was puzzling to some members of staff on the wards. They thought it should have included some of task management capabilities of the IT solutions that had been implemented in the past. They also felt it should communicate or interface with the other hospital IT systems. However, in practice staff had to switch between different screens and trust information systems to gather information needed to inform discharge planning, this they found, to be time-consuming and burdensome. The relevance of the data entry fields to activities on the ward relating to discharge planning was also commented on. One nurse explained that it would have been useful if the system could indicate if an action had been completed, as that was the kind of things they were hoping it would do to help them improve their action planning around discharge. She also commented that she had very little opportunity to comment on the design and usability of the system.
Communication and engagement

The lack of communication between the trust’s different IT systems was a recognised problem and senior management staff were exploring how it could be resolved. The Discharge template was not designed to interface or pull information from the other key hospital information systems such as EDIS and ICE that staff used every day to record patient information. Some basic patient information data was pulled in from the PAS system but overall staff had to manually record and update information onto the Discharge template, which staff admitted they were not very good at doing this on a regular basis.

There was also a lack of communication about the anticipated outcomes although the outcome measures, Delayed Transfers of Care and Length of Stay had been agreed.

This lack of clarity regarding the role and purpose of the Discharge template was reflected in the many different accounts and assumptions around what it was supposed to achieve. It was during the evaluation workshop that different views and assumptions surfaced. There was a realisation amongst those who attended the workshop that there was a lack of aligned between the different the managerial groups around the role of Discharge template in reducing delays in discharge. This had influenced the way it was being promoted to staff on the wards. Members of the patient safety team saw the Discharge template as having a key role in supporting the discharge planning process to ensure a patient’s discharge was harmless. They were concerned with preventing readmissions due to early discharge or patients being discharged without the adequate care in place. On the other hand, members of the operations team saw it as a tool to drive patient flow. They were using it to identify patients who were either ready or potentially ready for discharge, so that they could set into motion the procedures for those patients to be discharged to free up beds for patients waiting to be admitted from other clinical areas. Their focus was on mitigating the operational risks across the whole system so that national targets, around ED waiting times, delays in transfer of care and ambulance waiting times for example were met. So there was a disconnect.

A key part of engagement is getting commitment from those to whom the intervention is intended. As already commented there was little indication that clinical staff were involved in the implementation process and this was reflected in the lack of engagement from members of the clinical teams in using the Discharge template. In particular, there was little evidence that the medical staff had ever been engaged supporting implementation process or were involved in designing the Discharge template. It was reported that it was difficult to get members of the medical team and therapist to update the Discharge template. Considering the key role medical staff have in ensuring a patient’s discharge is not delayed, it was surprising, how little effort was made to engage them to be part of the implementation process and to commit to using the Discharge template to support discharge planning. The managers proposed no strategies or mechanisms to engage doctors and bring them on-board. As the functionality and usability of the Discharge template strongly relies on members of all professional groups involved in patient care and discharge planning to regularly update and input information on the system, so without this happening it is in effect a redundant system with little ability to drive or support the discharge planning process.
The process of implementation

The Discharge template was introduced only on the general medical wards at one of the trust’s acute hospital sites. The implementation process involved installing a data capture template onto the existing ETMS. A small project team was created to support the implementation and once it was operational, the project team was disbanded. Because the Discharge template was added to an already established ETMS, it was not deemed necessary to develop a business case. Without the need to develop a business case, the project team, introduced and installed the Discharge template without developing a detailed project plan to support and monitor the implementation process. The approach to implementation planning was described as ad hoc and evolving, resulting in poor execution of the intervention in terms of its design, functionality and usability. There was also a lack of governance structures and arrangements in place to support the process and lack of clarity around roles and responsibilities.

The resources committed to the implementation included buying some additional computers for the wards and large TV screens to display the Discharge template during the multidisciplinary team meetings and the board round. There were also the hidden costs of training, resourcing the project team, the time of people to attend meetings etc. Unfortunately, there is no financial data available to quantify this.

The Discharge template ‘in practice’: understand how it was utilised by staff

According to members of the operation team, staff regularly viewed and updated the Discharge template during the board round and discharge conference call. However, it was observed that this was not taking place in this way on the wards. For example, of the two board rounds observed, the nurse coordinator and the medical staff present did not view or update information, record actions or tasks that they had discussed during the board round onto the Discharge template. In conversations with both doctors and nurses on the wards, they explained, it was rare for them to view the Discharge template on the large display screen. Instead they continued to use the “Whiteboards” and make notes on their handover print offs or in the ward logbook. The Whiteboards were large dry wipe boards situated in the staff rooms and next to the nurse’s station on the wards. Patient related information was recorded on the whiteboards according to the wards bays, side rooms and the beds. The discharge coordinators explained that they and the staff on the wards preferred to use the whiteboards because it was easier to get a quick overview of the situation on the wards. They went on to explain that it was easier to identify a patient’s readiness for discharge from the information written and displayed on the whiteboards. It was not easy to get this overview of the wards and patient status with the Discharge template because of the way the information was laid out on the screen.
Figure 5: The use of the ETMS as part of the Discharge Planning

Figure 5 provides an overview of how the Discharge template was used in practice. It shows in particular how the different elements of the discharge planning process were supposed to be connected and the points along the process in which the Discharge template was to be used to capture, review and record patient information. It also serves to show the number of other hospital IT systems, in addition to the ETMS discharge template staff were also expected to access to capture, review and record patient data.

Staff on the wards, when interviewed explained they did not consider inputting data into the system as a priority. They saw the Discharge template as an additional data entry system that added little value to their discharge planning related activities. The only time they explained they referred to it was when they took part in daily discharge conference call. It was rare that members of staff on the wards would log onto the system to update or review information outside of the daily conference call.

It became clear from the observations and conversations with all interviewed that it was not possible to use the Discharge template without having a conversation with someone to clarify and check the accuracy of the information recorded when determining a patient’s status for discharge. It was acknowledged, that Discharge template lacked the key components of a usable patient discharge information system in terms of completeness, timeliness and accuracy of data. Therefore, it could not be used as a stand-alone system to provide up-to-date information necessary to support decision-making around discharge and assist in making the process more proactive.
Understand the role the intervention had in improving discharge practices

It is important to understand what difference the system made for wider adoption and spread and whether these changes could be sustained. However, from the interviews there was no evidence that the intervention had improved discharge practices, though this may be due to the way it was implemented and subsequently used. To try to address this the researcher in collaboration with the stakeholders planned and carried out an evaluation workshop. It was agreed that a Logframe approach would be used to underpin the activities. The Logframe approach is a systematic and participatory one that allows stakeholders to explore the goal, purpose of the intervention and make them explicit. It also allows stakeholders to collaboratively determine and identify appropriate indicators of achievement or outcome measures. A key step in this process is the creation of a Logframe matrix. The logframe matrix, once developed can act as a project planning and management tool and can be revisited and revised at different stages of the implementation process. Three of the five Logframe approach steps were used problem analysis, solution analysis and Logframe matrix development. The workshop lasted three hours. Of the ten stakeholders invited five attended, two senior nurse managers, the discharge lead nurse, a patient safety manager, and a member of staff from the company that designed and provided the ETMS.

During the workshop the group explored and discussed; the problem, issues the trusts were experiencing around delays in discharge, the chosen approach, its implementation and how it was used in practice. The workshop ended with the group making a start with populating the Logframe matrix. They found the process challenging at times, as it became apparent there were differing views and expectations about the purpose, role and functionality of the Discharge template and how it should be used in supporting discharge planning.

The lack of a formal strategic or project plan did make it difficult to determine the progress and success of the implementation. It was difficult for example to establish how much the process has deviated from the plan or the impact of any adaptations or modifications made along the process. In this situation, the only way to judge how well the implementation had been executed would be by examining how it had been operationalised and become an established aspect of the discharge planning process and practice in the trust.

What can be concluded is that there was little evidence that the Discharge template was an established and embedded part of discharge planning activities or was driving the process in a proactive way on the medical wards. Evidence that the Discharge template was not implemented as intended was reflected in the quality of the data captured. The quality of data was poor, with key bits of information missing and out of date on almost all the ward’s Discharge template viewed. This was the case even on the wards on which discharge coordinators were described as “very good in keeping it all up to date”.

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Discussion

The aim of this evaluation was to examine the implementation of the ETMS, understand how it was utilised and whether it affected the discharge process. The first two aims will now be discussed, the last aim cannot be considered further as this evaluation was unable to detect the effect of the system on the discharge process.

How the system is being used is symptomatic of how the implementation was conducted. There was a reported good relationship between the company and the IT department, which is very helpful, but what is fundamental to good design and implementation is the input from the end user in the organisation where it is being implemented. This lack of involvement was in turn symptomatic of the lack of robust project plan and governance structure. One of the key parts to the project plan process is identifying and getting on board the key stakeholders. In this case, these included the end users, understanding the issues that they face and ensuring the system is a solution to those issues, not an additional task, it needs to help not hinder. Another key stakeholder in this process, which was ignored, was the patient and carer and there was little evidence provided to illustrate their perspective was sought during the implementation process. If the correct engagement strategy and the correct governance arrangements were in place the perspective and involvement of patients and carers could have been gained for example through a service users operational project group.

A vast majority of the communications observed were tacit in nature and there was a strong reliance on verbal communication between hospital staff, patients and their families and other agencies. This additional and important information gained from these interactions tended not to be recorded onto the system. In addition, staff involved in discharge planning were not issued with a handheld mobile device to input data contemporaneously as the system was designed to work with. The discharge coordinators, for example only had access to computers on the ward, which prevented them from being able to put input in a timely manner. The whole process relied on members of staff being responsible for recording and updating information but the tools and mechanisms to make this process easy were not made available. Therefore, understand the current situation before the project begins and engaging and communicating are key.

There also needed greater clarity around the desired outcomes (importantly these need to be achievable) and the measures that would be used (these need to be specific). Blunt measures such as DTOCs and LOS are dependent on a myriad of factors, some under the control of the hospital, others not. What we would recommend is the establishment of short, medium and long-term outcomes with more specific local measure, which can be confidently attributed to the contributing to the reduction in DTOCs and LOS.

So in summary the key enablers and barriers to this project are identified below:
Table 1: Barriers and enablers

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Lack of end user involvement</th>
<th>No clear project plan or governance</th>
<th>Lack of achievable outcomes</th>
<th>Other change happening</th>
<th>Lack of hand held resources</th>
<th>Large amount of tacit knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enablers</td>
<td>Good relationship between company and organisation</td>
<td>Add on to a system already being used</td>
<td>Executive sign off</td>
<td>Organisation open to this change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adoption and spread

Based on the findings from this evaluation, the implementation of an ETMS to improve discharge practice and improve quality of care cannot be done without the full engagement with all stakeholders. Stakeholders in the context of implementing a discharge planning solution should include for example, members of the trust's executive team, member of senior management team, staff user of the system, patients, their families, carers and other agencies who have a role in the discharge process.

ETMS are by nature complex systems to implement and therefore the process needs to be carefully planned, with the right level of resources provided. Therefore, in addition to resources such as funding a dedicated project management team, appropriate monitoring and performance management systems and measures and evaluation plan are necessary to ensure the system implemented is fit for purpose and is used as intended. If the supportive conditions identified in the evaluation are not or cannot be in place when considering implementing an ETMS then the introduction of an ETMS may not be the most appropriate solution to adopt to improve discharge practice.

Conclusion

There were fundamental issues with the implementation of this Discharge template, which meant the intervention, despite everyone’s best intentions, was not going to meet its intended objective to improve discharge practice. Determining if an intervention’s implementation has been successful or if it has had an on impact on reducing delays in discharge when no plans or strategies were in place to monitor process or evaluate is problematic and it becomes even more so when other interventions addressing the same problem are introduced at the same time. The lack of involvement of the end user in the design also resulted in problems with the usability and functionality of the Discharge Template.
Therefore moving forward there is need for:

- A clear project plan is needed to be developed and agreed
- A robust project governance structure with clear reporting and monitoring arrangements agreed and in place.
- Clear communications and engagement strategy with clear actions around identification and involvement of key stakeholders
- Identification of achievable outcomes and agreements around data collection
- Evaluation plan

**Funding**

This project was funded by the EM PSC. The role of East Midlands Academic Health Science Network and EM PSC is to support the adoption and spread of proven interventions. The findings from this evaluation aims to provide learning and information around the implementation process that leads to a better understanding of the steps needed to ensure that the implementation of interventions aimed at improving discharge practice are successful and effective.