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ORIGINAL PRACTICE DEVELOPMENT AND RESEARCH

Calling time on the 'dance of the blind reflex': how collaborative working reduced older persons' length of stay in acute care and increased home discharge

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Abstract

Background: A practice development project was undertaken with nurses from acute, older persons, primary care and rehabilitation services across two counties in the north east of the Republic of Ireland over a 12-month period in 2018-19. For acute hospital patients aged over 65 years, the average length of stay in 2017 was 44.44 days; for medical patients it was 55.69 days. The average length of stay on the pre-discharge unit was 36.5 days, after which 54% of patients transferred to nursing homes, 14% to rehabilitation services and 18% to home.

Aims and objectives: The objectives were to provide a more person-centred, integrated approach to care across the services, to facilitate patient and family involvement in care planning and to understand why so few patients transferred home, with the aims of reducing lengths of stay in the acute hospital and increasing the number of patients going home.

Methods: Person-centred and Lean Six Sigma approaches were combined. Lean Six Sigma provided the framework for data collection, analysis, planning and scheduling, while engagement within the team and with other colleagues, patients and their families was underpinned by person-centred principles.

Results: The project resulted in an average reduction in length of stay on the pre-discharge unit of 16 days. More than 47% of patients are now being discharged home compared with 18% in 2017.

Conclusion: A combination of Lean Six Sigma and person-centred approaches was used to shift from the status quo and transform care by implementing process changes that promoted better communication and facilitated a smoother transition for patients through the services. This combination was effective in promoting a culture that supports patients and their families to determine and achieve their preferred health outcomes.

Implications for practice:

- Understanding culture and context within healthcare organisations is an essential part of practice development, especially in cross-service initiatives
- Creating a shared vision across all services that puts the patient at the centre of care supports patients and families to choose and achieve their care preferences
- Lean Six Sigma and person-centredness can be used in combination to design person-centred improvements that benefit staff, patients and their families

Keywords: Person-centred approach, older person's care journey, integrated care, Lean Six Sigma, collaborative practice, discharge planning

Introduction

In Ireland, the overriding objective of the National Clinical Programme for Older People (NCPOP) is to facilitate the older citizen to lead an independent life in their community. To this end, the programme has prioritised the use of evidence-based multidisciplinary care and continuing education to ensure all staff members caring for older people have the appropriate skills and competencies to deliver quality-assured services (Republic of Ireland Health Service Executive, 2012, 2016). As part of the HSE's Programme for Health Service Improvement, the Integrated Care Pathway for Older People (2016) identified the need for a multifaceted approach to integrated care, including the recognition and management of frailty in day care and acute hospitals, and access to rehabilitation and integrated care teams for older people with complex needs in the community. Aligned with the integrated care pathway, we undertook a practice development project with nursing staff from four services – acute, older persons, primary care and rehabilitation – across two counties in the north east of the Republic of Ireland in 2018-19. Its objectives were to provide a more person-centred, integrated approach to care across the system and to facilitate patient and family involvement in the planning of care. We wanted to improve the experience of patients and their families and to understand why so few patients transferred home. The overall aim was to establish the conditions necessary to enable patients and their families to receive care in an appropriate setting of their choice, reducing length of stay in acute hospitals and increasing the number of patients going home.

The person-centred principle of collaborative, inclusive and participative (CIP) ways of working (Manley et al., 2014; Dewing and McCormack, 2015) underpinned the approach to this project. The working group comprised nursing staff from all four services and the use of key practice development principles enabled us to appreciate and work with the culture and context in each of the four. The effectiveness of workplace cultures is an issue that has been highlighted in the literature (Manley et al., 2019; Manley and Jackson, 2020). Manley and colleagues (2011) identified five features of effective healthcare workplace cultures:

1. Specific values shared in the workplace
2. All values are realised in practice
3. Adaptability, innovation and creativity maintain workforce effectiveness
4. Appropriate change is driven by the needs of patients, services users and communities

The creation of a person-centred healthcare system, a system without entrenched silos, is a challenging prospect. Within healthcare there is a tendency to maintain the status quo, which can result in inward-looking organisations where the potential for improvement is seen solely through the lens of current ways of thinking and working. The system is founded on a 20th-century model that creates unnecessary complexity, confusing matrix structures, information overload and ever-increasing silos. Mintzberg (2018) advocates the need to reorganise our heads rather than our institutions. In doing so, we need to think differently about systems and strategies, sectors and scale, measurement and management, leadership and organisation, competition and collaboration. There is a real need for communities to work together, within healthcare institutions and across them, to deliver quantity, quality and equity simultaneously. Such thinking is reflected in the work of this project.

The challenge for health services today stems not from management as such but rather from a form of remote-control management that is detached from the operations yet determined to govern them (Manley et al., 2016). The impact of such arrangements on those who work in the system and on those served by it is well known. Senior executives can become overburdened by unmanageable complexity, frontline workers feel vulnerable and neglected by authority figures whom they see as insensitive to the requirements of their jobs, and middle managers feel pulled in opposing directions. Service users experience a system that is insufficiently responsive to their needs, leading to a service that falls short of their legitimate expectations (Oshry, 2007). Each of these agents, however, may fail to perceive their own part in maintaining the status quo and overlook other ways of being, thinking and doing; without recognising this, they are engaged in patterns of behaviour that Oshry (2007) refers to as the 'dance of the blind reflex'.

For this project we were fortunate to work with a team of nurses who had either previously completed some practice development work or were aware of the concepts and principles of person-centredness and open to collaborative working based on them. Practice development programmes have been shown to be effective in enabling nursing teams to explore person-centred concepts within their own practice areas, with a view to improving care delivery (McCance et al., 2013). The project required significant understanding of, and reflection on, the current patient journey from primary to acute care, and on to rehabilitation, older persons services and subsequently to home and long-term care. This echoes Oshry's (2018) position that to understand the entire system, it is necessary to adopt the position of a participant observer who can stand apart from the whole system and observe it anew.

The project team was convened in July 2018 to examine current ways of working from staff and patient perspectives, and to seek to understand why patients who might want to go home did not do so, and instead had lengthy stays in the acute hospital. We used Guba and Lincoln's (1989) fourth-generation evaluation tool to reflect on our claims, concerns and issues, to examine our own thoughts and experiences of the patient journey and to formulate our aims and objectives. It emerged that, in our experience, the responsibility for care delivery was considered to rest completely with the healthcare provider and not at all with patients and their families. This was experienced by all team members as impacting on the culture of care across the various services. It was seen by staff as disempowering for patients and families, impeding the movement of patients through the care journey in the acute hospital, and extending their stay in often-inappropriate settings. The current system was adding to delays in accessing both diagnostics and support in the community. Above all, the status quo was impacting adversely on patients' choice and autonomy.

Aims and objectives

The aims of the project were to:

- Provide a more person-centred, integrated approach to care
- Facilitate patient and family involvement in the planning of care
- Understand why so few patients transferred home in a timely way
- Enable a patient-focused healthcare journey
- Improve patients' experience of their journey

Although four services were involved, we collectively decided to focus on acute services to reduce hospital admissions and bring care closer to the person's home.

Improved communication within and among services, and with patients and their families, was a necessary condition to achieve the goal of providing care in an appropriate setting of choice for patients. The project's objectives were to:

- Support the active involvement of patients and families in informed decision making from the outset
- Support staff in discharge planning and decision making
- Support patients to go home if they wished to do so
- Reduce patients' length of stay in the acute hospital

Methods

We used a combination of person-centred and Lean Six Sigma methodologies. The principles of person-centredness, adopted throughout the project, ensured that the entire team recognised the following aspects of person-centred planning of care:

- It starts with the person's perspective on his or her life
- It entails a creative approach that asks what is possible, rather than assuming common understandings and limiting itself to what is available
- It takes into consideration all the resources available to the person

In healthcare systems, Lean Six Sigma facilitates change within a continuous improvement cycle that requires engagement with all relevant care givers and recipients to design care processes that enable staff to flourish in their work environments and patients' experiences and outcomes to be positive. It was adopted for the project because it has been shown to have synergies with person-centredness (Teeling, Dewing and Baldie, 2020), facilitating process and quality improvement while promoting patient and staff empowerment (Ryan et al., 2019; Teeling et al., 2019; Connolly et al., 2020). Lean Six Sigma offers a way to respond to challenges, not through seeking more resources or restricting activity and services, but by collaborating with all grades of staff to improve the way work is done (Laureani et al., 2013). There is little research on the combined use of Lean Six Sigma and person-centred methodologies. However, recent research has identified that, in healthcare settings, they can be synergistic in many ways, including in seeking the participation of all people involved in delivery and receipt of care (Teeling, Dewing and Baldie, 2020). Lean Six Sigma provided the framework for data collection, analysis, planning and scheduling for this project, and person-centred principles were used to engage with the team, wider stakeholders, patients and their families. A project plan was agreed and the project team established.

The project included seven stages:

1. Reviewing current processes nationally
2. Understanding reasons for admission to hospital
3. Examining lengths of stay
4. Determining patients' discharge destinations
5. Process mapping
6. Chart review
7. Patient and staff feedback

Each stage is discussed in turn below.

1. Reviewing current processes nationally

In the past decade, the issue of choice and consumer involvement has become increasingly important in the planning of older persons' services. In Ireland, the advent of the Home Care Package scheme has introduced some opportunity for older people to exercise choice in respect of home care services, although cutbacks often limit these choices. A decision to admit to a nursing home is a major life event for patients and their families, and making that decision at a time of acute illness is not ideal. The reality for some families who think they can cope is suddenly finding they no longer can. Following their episode of acute care in this region, there are currently six pathways for patients:

1. Home
2. Transitional care in a pre-discharge unit in an acute hospital while waiting for nursing home admission to be finalised
3. Rehabilitation
4. Convalescence
5. Nursing home
6. Hospice

Our collective experience was that the current process for patients and their families was neither person-centred nor inclusive, and a concerted effort was required by all involved to unravel and develop an approach based on person-centred principles.

2. Understanding reasons for admission to hospital

Identifying the main reasons for admission was important in understanding the cohort of patients attending the acute hospital. We collected data for the previous year (2017) on reasons for admission for the population of the two counties. Similarly to other acute hospitals across the Republic of Ireland, these were predominately cardiac and respiratory disorders, and infections.

3. Examining lengths of stay

We collected data for 2015-17 on the average length of stay for patients aged over 65 years in the acute hospital. In 2017, this was 44.44 days overall, with medical patients remaining in hospital for an average of 55.69 days.

4. Determining patients' discharge destination

We collected and analysed data from a pre-discharge unit opened in the acute hospital in 2015 to support patients transitioning to long-term care. In 2017, the average length of stay on the unit was 36.5 days, with 54% of patients (n=115) being transferred to nursing homes, 18% (n= 38) home and 14% (n= 30) to rehabilitation services.

5. Process mapping

A Lean process mapping tool (Figure 1) was used to map out the different patient journeys identified. It provides a visual overview of the different parts of the patient journey and of who was responsible for communicating and supporting patients and their families at each stage. It became apparent that there was a blurring of roles between public health liaison nursing, ward staff and the discharge team. We were aware that lack of role clarity could lead to tension and conflict between workers (Boyd et al., 2009).

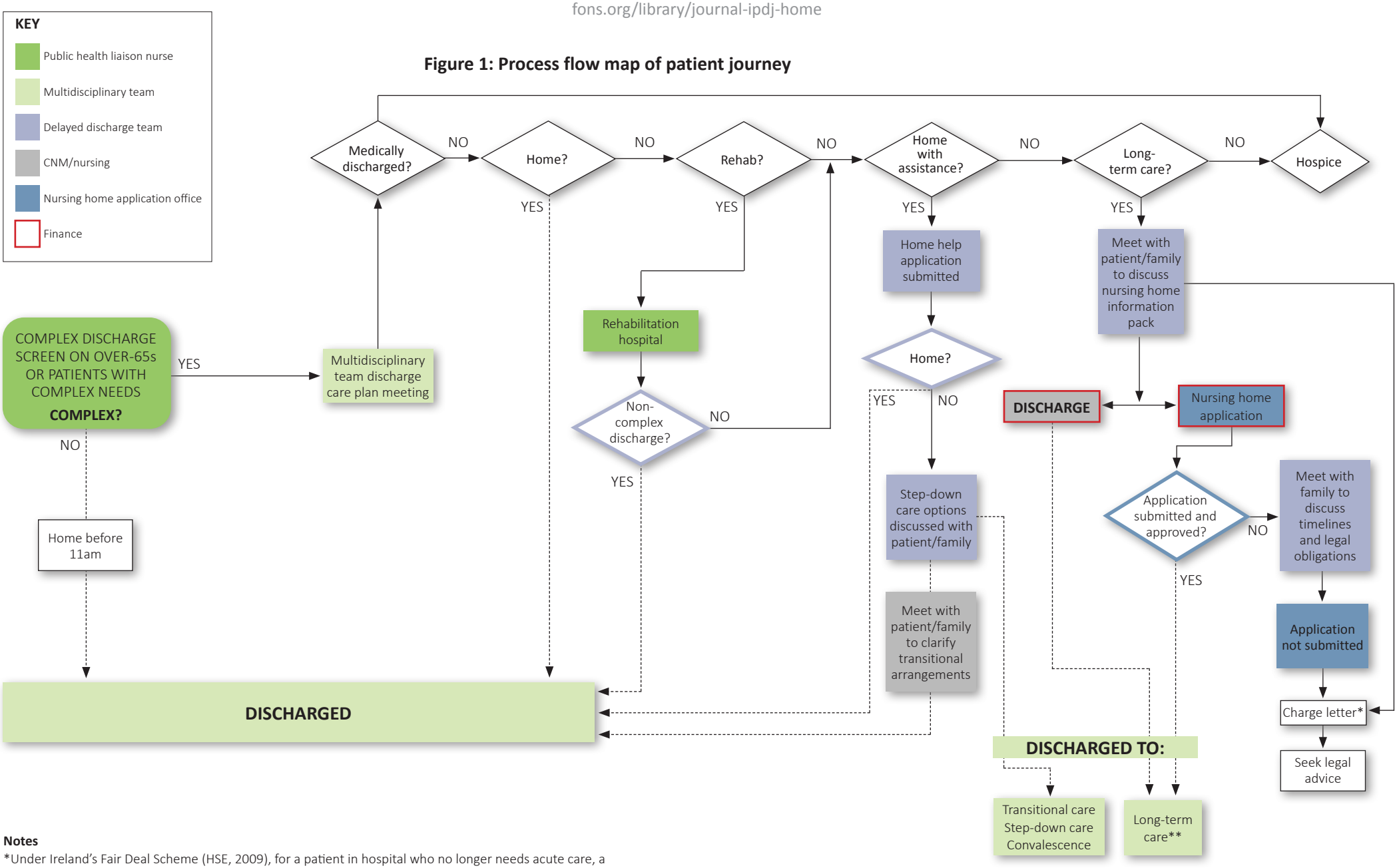
6. Chart review

We reviewed a sample of available patient charts (n=20) for those clinically discharged but awaiting long-term care and admitted to the pre-discharge unit. The chart review showed a fragmented approach to discharge planning, poor engagement with families and a lack of role clarity around the discharge process. We captured these findings in a value stream map (Figure 2). This is a Lean technique used to visualise, document, analyse and improve the flow of information or materials required to improve service for customers (Jackson, 2017); in this case our customers were our patients and their families.

7. *Patient and staff feedback*

A joint survey of patients, their families and staff conducted over a week in July 2018 received 33 responses (16 from patients and their families and 17 from multidisciplinary staff who were rostered during the period). The feedback predominantly focused on experiences while awaiting discharge and largely reported a lack of meaningful activity for patients during their time on the pre-discharge unit. Both patients and staff suggested more walks, games, and music therapy (Table 1). An additional need identified when listening to staff was that they felt they needed greater support and more education and training in the care of vulnerable patients with dementia. As well as further training for staff, ideas explored included the introduction of rummage boxes and a 'my story' booklet.

Figure 1: Process flow map of patient journey

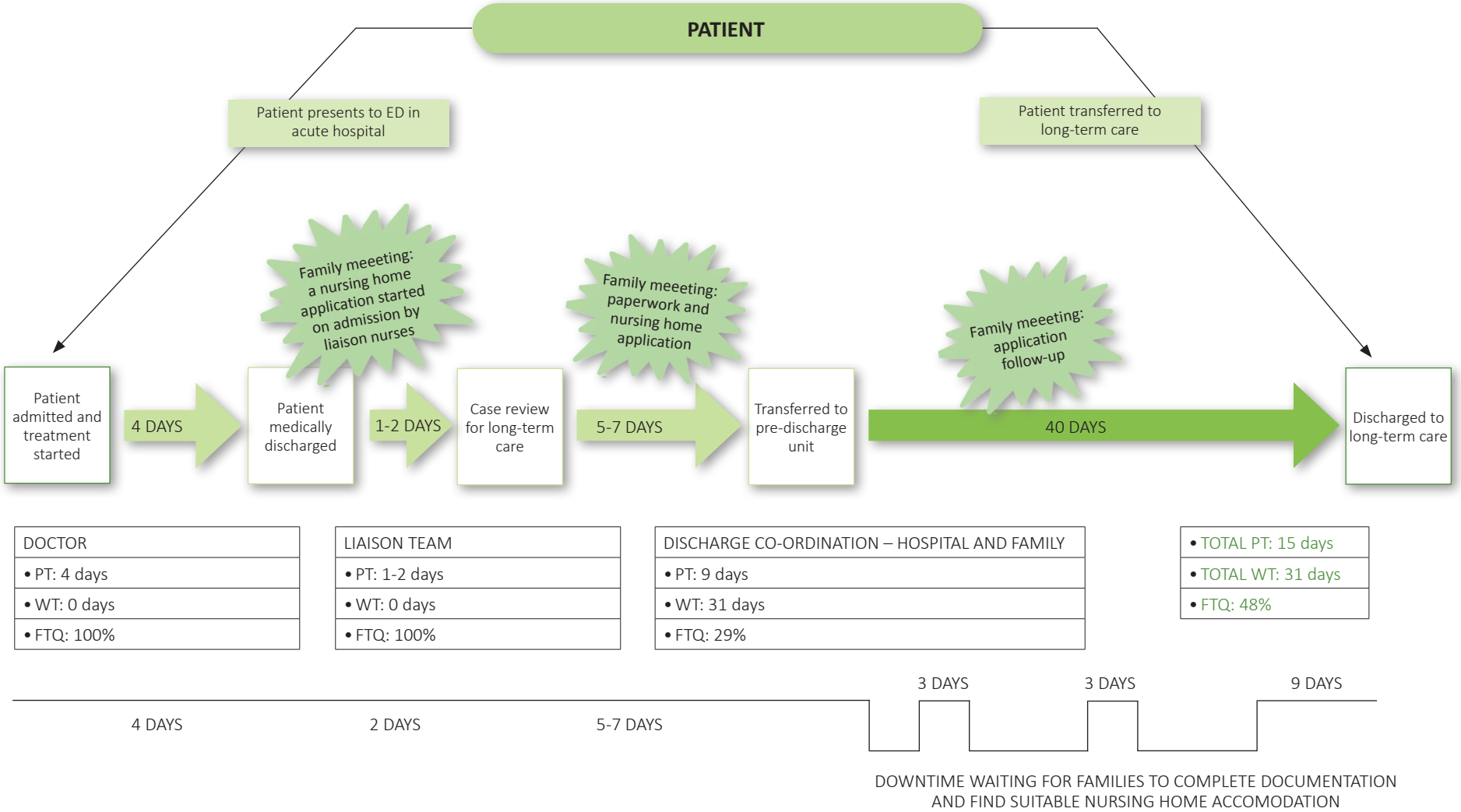


Notes

*Under Ireland's Fair Deal Scheme (HSE, 2009), for a patient in hospital who no longer needs acute care, a charge can be made for long-term care in that hospital

**Some patients may need to go to transitional or step-down care while awaiting availability of long-term care

Figure 2: Value stream map of acute hospital patient journey



Key
PT = process time
WT = wait time
FTQ = first time quality [in this context, FTQ = no wait time]

Table 1: Themes from the survey

Themes that emerged	Number of people who identified theme
Walks or outdoor activity	33
Interactive games (for example, board games, charades, card games)	28
Music sessions	26
Mass	22
Arts and craft sessions	20
Use of old photos and memorabilia	17
Cooking demonstrations	10
Books, a book trolley	9
Quiz night	2

Further team meetings gave us the time to reflect on all the quantitative and qualitative data collected, together with the process and value stream maps. The following seven key issues emerged from our reflections:

- Essential lifestyle planning needs to be better supported in primary care. In 2017, at least 40% of patients were given the opportunity to plan their care through primary care services. However, many patients and their families do not engage proactively, preferring to wait until admission to the acute hospital
- Better communication is needed with patients and families around nursing home funding arrangements
- Patients and families require more clarity about the roles of various professionals and whom they can talk to at each stage of their care journey
- More education and training for staff in the care of vulnerable older people is needed
- Communication between services needs to be improved
- Older persons services require more beds so that patients have adequate time to recuperate and make informed decisions regarding future needs and wishes
- Discharge policies in the acute hospital need to be updated

We used Rolfe and colleagues' (2001) model of reflection to structure our approach to change:

What? Our data indicated that staff, patients and their families all identified problems with the current processes for navigating care transitions among services.

So what? Current problems stem from a process that is not fully person-centred, with care decisions predominantly seen as the responsibility of the staff.

Now what? Our data can be used to brainstorm solutions collaboratively, in order to redesign the current process to facilitate patient and family involvement in the planning of their care. This would be with a view to reducing length of stay in the acute hospital and increasing the number of patients able to go home.

We made use of sticky notes and creative materials to form affinity maps (Ulrich, 2003) that helped to organise outputs from our brainstorming session. Constructing an affinity map is a creative process that facilitates the expression of ideas. It enabled us to represent solutions visually and to decide which team members would work on which solutions. The nurses involved acknowledged that, in their experience, the pace of work of the acute setting does not lend itself to a truly holistic approach

to care. They identified a need for a more appropriate pathway to ensure older people have time to recover and make informed decisions about their care preferences.

Solutions and results

The primary output from our collaborative brainstorming and discussion was an agreed list of solutions to facilitate enhanced communication between staff, patients and their families. These solutions were designed with the intention of meeting our goals of improving the patient journey, reducing the time spent in the acute hospital and enabling more patients to return home after their episode of care. These solutions are presented below following the seven themes from the survey.

1. Essential lifestyle planning to be better supported in primary care

In November 2018, the public health nursing team began implementing the Irish Hospice Foundation's *Think Ahead* document (2015). It supports patient choice around care preferences and recommends one person be identified who knows a patient's choices and will advocate for them. This helps encourage open communication within families for the often-difficult conversations needed to assist patients in making choices and retaining control of their care planning. The project team supported the implementation of this across GP and community networks by creating awareness posters. The initiative is nurturing a real opportunity for individuals to communicate their wishes and preferences.

At the same time, the public health nursing liaison team in the acute hospital designed and implemented a new 'transfer of care' form to aid the process of referral back to primary care services. This has reduced the need for follow-up phone calls between services. Community multidisciplinary team meetings are more integrated and there is greater collaboration with patients and their families for care planning in the community. In addition, a weekly palliative care meeting has been established in the hospital to help ensure the wishes of patients who prefer to die at home are honoured.

2. Better communication with patients and families around the nursing home funding arrangements

In September 2018, in collaboration with the acute services, the public health nursing team designed a patient information pack that clearly explains the nursing home funding process and provides relevant contact numbers. The pack also contains details on local nursing homes, guidelines on choosing a nursing home, information and advice on long-term and transitional care, and 'think ahead' documentation.

3. Role clarity

The identification by the project team of more clearly defined roles at each stage of a patient's journey resulted in a more proactive approach to supporting patients and a more person-centred approach to care. This role definition included ensuring patients and their families were aware that the:

- Public health liaison nurse would provide information and support regarding long-term care planning options and process
- Ward nurse manager would support the patient and their family through family meetings to design their individual long-term care plan
- Delayed discharge team was available to support the patient and family in the case of more complex care requirements

Patients and families are now more actively involved in their care planning and know whom they need to communicate with, and when, regarding their preferences. In February 2019, the project team applied for and was granted funding for a new role from the HSE Nursing and Midwifery Planning and Development Unit's innovation funding stream. This was used to appoint a clinical nurse specialist in frail elderly care to work in the emergency department of the acute hospital. The role works to help ensure frail elderly patients are linked to appropriate services in a timely manner, alongside the other older person service roles, including existing advanced nurse practitioners.

4. Education and training for staff
The project sought additional education and training for staff in the care of vulnerable older people and, following consultation and agreement with the director of the regional Centre for Nursing and Midwifery Education, an education programme started in November 2019, focusing on understanding dementia, managing behaviours and meaningful activities. No additional funding was required.

5. Improved communication among services
The establishment of a project team representing all four services has resulted in a collaborative approach to finding solutions that has enhanced communication within and between acute, primary care, rehabilitation and older persons' services. This has meant smoother transition for patients among the services and, from the acute hospital perspective, an improvement in patient and family engagement.

6. More beds in older persons' services to afford patients adequate time to recuperate and make informed decisions regarding future needs and wishes
An existing 32-bed facility on the hospital campus was functioning as a long-term care facility for older people. Its manager, a member of the project team, recognised the potential for the redesignation of some of these beds for transitional care. The data gathered by the project team on length of stay in the acute hospital proved instrumental in making a case for this. Between September and December 2019, 16 of the 32 beds were converted to transitional-care beds, providing the capacity for patients to recuperate and recover, and the time and space to make informed decisions about their long-term care preferences. The facility also offers the option of direct admission from primary care for an older person who needs assessment, and also accepts palliative care patients from the acute hospital and from primary care services who would otherwise have remained in the acute hospital. Given the time to make decisions, more than 30% of patients who initially opted for long-term care subsequently chose to go home with support. The success of the unit led to all 32 beds being allocated as transitional-care beds from March 2020.

7. Implementation of an up-to-date discharge policy
A new discharge policy for the hospital was written and is awaiting final medical governance committee approval for implementation across the acute and rehabilitation services.

In terms of overall impact on the patient journey, the project has enhanced communication and engagement with patients, their families and colleagues. This has brought a greater understanding of people's needs and a more seamless transition of patients among the four services. This collaborative practice development work has led to:

- A 41% reduction in average length of stay of medical patients on the pre-discharge unit, from 40.64 days in 2017 to 23.97 days in 2019
- A 13% reduction in average length of stay for patients over 65 years admitted to the acute hospital, from 55.10 days in 2017 to 48.09 days in 2019
- An increase in patients being discharged home from the pre-discharge unit, from 18% in 2017 to 47% in 2019

Discussion
To change practice successfully, we need to understand and take account of how that practice developed over time. Organisational culture is the pattern of shared basic assumptions, invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration. Over time, this pattern is accepted as working well enough to be considered valid and legitimate. Therefore, new members come to see it as the correct way to perceive, think and feel in given situations (Schein, 1985). Particular identities and loyalties are forged and become highly valued and entrenched.

This project provided the time for participants to reflect deeply on the current patient journey from hospital to rehabilitation to older persons' services and home. It created a safe space to examine professional roles, practices and values, and to pose difficult and even disturbing questions around ingrained and hitherto unexamined ways of thinking and doing. It allowed participants to consider whether there could be better pathways for patients, how communication might be improved within services and with patients and families, and how patients can transition across services in a more person-centred manner. All the while, participants had to consider the impact of their own ways of thinking and working on internal integration, adaptation to external policy and strategy and, most importantly, on the needs and expectations of patients and families.

Asking and addressing such questions raises important issues around identity, loyalty and values; this may give rise to conflict and instability because these are adaptive issues that entail upending deep and entrenched norms (Heifetz and Linsky, 2002). Ultimately, all those involved must come to recognise their contribution to the problem before they can engage in devising and delivering a solution. This applies equally to those leading, managing and delivering care (Oshry, 2007, 2018). This project engaged participants from different services and at different levels and enabled them to work together to identify underlying problems and develop solutions. This required courage and persistence in facilitating innovation first from within. When innovation enables strategic and policy imperatives to be realised, the chances of enlisting support and additional resources increase, as this project demonstrated. Challenging existing practices is disruptive but person-centred approaches allow new ways of working to emerge. For this project, co-designing new ways of working resulted in a more person-centred, integrated approach to care across the services and facilitated patient and family involvement in the planning of care. This reduced length of stay in the acute hospital and increased the number of patients able to go home.

Conclusion

Over time, silos emerge in organisations and become invisible to those working in them even as they are constrained by their effects (Oshry, 2007, 2018). It is difficult for patients and their families to find their way in and out of these silos and, in many cases, a crisis results in a response from one silo that may not reflect a patient's true wishes. This project has contributed to the breaking down of some traditional boundaries, by critically examining the journey for patients and empowering them to reflect and plan their care.

This initiative supports the HSE's strategic objective to create an integrated system of care. Understanding the cultures of the different services was an essential part of this project, as was a clear grasp of how roles, practices and perceptions impact on the patient journey. The group learned to recognise and to let go of the 'dance of the blind reflex' (Oshry, 2007) and realise the power of choice for themselves, and for patients and their families.

Healthcare faces formidable challenges globally. Its delivery is constrained by inefficiencies of service models, workforce limits and the need for capital investment in critical infrastructure (Herzlinger, 2018). However, service delivery is also constrained when employees cannot bring their whole selves to work, are disconnected from one another and from their professional purpose (Laloux, 2016) and when they cannot use their knowledge and skills to make a difference to patients' experience of care. This project mobilised people who were sufficiently able, willing and knowledgeable to make change happen on top of their day-to-day challenges (Stigter and Cooper, 2015). This team of nurses managed to shift the status quo and implement changes to promote better communication and facilitate a smoother journey for patients through their services. Placing patients at the centre of healthcare planning promotes a culture that facilitates them to determine and achieve their preferred health outcomes.

Implications for practice

This project has the following implications for practice:

- Understanding culture and context within healthcare organisations is an essential part of practice development, especially in cross-service initiatives
- Creating a shared vision across all services that puts the patient at the centre of care supports patients and families to choose and achieve their care preferences
- Lean Six Sigma and person-centredness can be used together to design person-centred improvements that benefit staff, patients and their families, with measurable results
- This work highlights the importance and value of process improvement and person-centred approaches used collectively in delivering safe, effective and collaborative care in meaningful ways. We believe this is particularly important during the current Covid-19 pandemic
- Given the dearth of empirical work on Lean Six Sigma's contribution to person-centredness, care and cultures (Teeling, Dewing and Baldie, 2020), we believe this work makes a valuable contribution to a developing body of knowledge

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