## Knowledge sharing across boundaries

Sociologist **Professor Justin Waring** discusses his groundbreaking work to improve the process of hospital discharge, both for patients and healthcare systems, through enhanced knowledge sharing



Hospital discharge is a key time for patients, and for coordination of clinical and community services. Why is knowledge sharing so important for successful discharge and subsequent care?

Knowledge sharing is based upon the idea that stakeholders involved in hospital discharge have different views, experiences, skills and capabilities related to this process. However, in many instances, these are not well combined because these groups don't appreciate what each other offer or how they might work together. Knowledge sharing helps stakeholders learn about the expertise and practices of others, and use this to develop new and more integrated ways of working.

### What is the difference between knowledge and information in this context?

Although they are related and both are essential for discharge planning, information is more passive and based on evidence or fact. Knowledge, on the other hand, is more active and based on experiential know-how. So, communication is often associated with the transmission of information between stakeholders, but knowledge sharing is about the exchange of more practice-based expertise or skills.

## How did your project investigate issues of patient discharge?

The study aimed to understand how discharge happens, as a situated social activity, and how knowledge is shared, or not, thereby influencing how decisions are made. The research was based on the idea that these patterns of knowledge sharing could be a source of risk or safety, where more active and inclusive knowledge sharing might be

associated with more robust decision making and integrated working, thereby enhancing the safety of discharge. As such, it aimed to understand which factors might explain and enhance patterns of knowledge sharing.

## What kind of policy and practice should be adopted for successful patient discharge?

The study suggests a number of organisational practices and resources support knowledge sharing and enhance discharge safety. First, key individuals can help to share knowledge across different groups. These are discharge coordinators or outreach workers. Second, stakeholders need opportunities to work with each other routinely, so their knowhow can be recognised and used by others, without it needing to be documented. We term this 'functional proximity', which relates to the co-location of health and social care specialists during decision making and care provision. Third, services need to support and value collaboration in their combined practices. Where services had a culture of sequential, rather than integrated, working there were fewer opportunities for knowledge sharing. Finally, organisations should use more procedural and technological resources. We found that discharge planning processes are useful for coordinating efforts and patient records should be streamlined for easier use.

## Was it possible to identify interventions and codes of good practice to improve the current system?

There were several practices and procedures associated with more integrated care planning and more seamless and safer patient discharge. This included the appointment of discharge coordinators, who take day-to-day responsibility for discharge and provide a link to external health and social care agencies. The study also suggests a clear, stepwise discharge planning toolkit to help integrate different clinical specialists across the process. This should not be too prescriptive, because

many patients have complex needs that do not fit within standardised practices. The same is true of setting an estimated date of discharge, which should not be used as a deadline, but instead used to help steer and focus different specialists.

Another important activity, which is also recognised in policies and research, is the use of a regular multidisciplinary team meeting. Such meetings facilitate joint decision making by enabling different specialists to openly share their knowledge of the patient. However, they must be inclusive of both health and social care perspectives and based upon mutual recognition of each professions' expertise and contribution to the discharge process.

## Could you discuss the most important elements and outcomes of this study?

Hospital discharge involves a complex system of interactions. It is nonlinear and involves various false starts, complex connections and networks of knowledge sharing. This complexity represents an upstream source of clinical risk because of the difficulties associated with combining professionals and organisations to provide integrated, patient-centred and safe care. Knowledge sharing can help mitigate this complexity by enabling different health professionals and organisations to understand how each other contributes to discharge planning and, importantly, to integrate and combine their respective areas of expertise.



## Safe hospital discharge

A study undertaken by the **Nottingham University Business School** has revealed the importance of knowledge sharing for effective hospital discharge in the care process. It is hoped the report's recommendations will make hospital discharge safer and more efficient

PATIENT SAFETY IS a priority for health service providers worldwide. The 2013 Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry highlighted the complex social, cultural and organisational factors which impact patient care. In spite of advances in research into patient safety, there remain worryingly high levels of inferior care; it has been estimated that one in 10 NHS hospital patients experience an 'adverse event' during care provision. Many areas need further study, and hospital discharge is one of the most pressing.

Hospital discharge is often neglected. It can be seen as the final stage of the care process, although in many cases it is just one stage in a long process extending into the community. According to reported incident data, 7-8 per cent of all patient safety incidents relate to hospital discharge or transfer. Patient discharge is a complex process, fraught with challenges. Medical, logistic, economic and psychosocial considerations affect whether a patient should be discharged, and clinical and logistic aspects must be considered in deciding whether a patient is safe to be sent home or is in need of a different care environment. A well-timed and cohesive transition from hospital is central to patient recovery, quality of life and independence, as inappropriate discharge without proper planning introduces risks to safety, additional resource costs, threatens recovery and increases the chance of readmission.

Research has highlighted failures in communication and coordination as underlying delayed and unsafe discharges. In fact, NHS England figures show that over 78,000 hospital bed days were lost because of delayed discharges in October 2013. This clearly important, but largely overlooked, area of research is being addressed by Professor Justin Waring of Nottingham University

Business School. Waring designed and led a study which aims to identify interventions and practices that support knowledge sharing across care settings, and so promote safe hospital discharge by mitigating complexity.

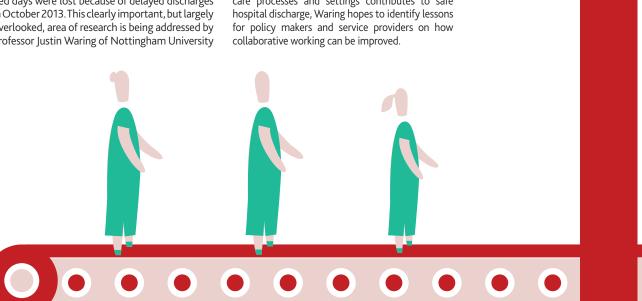
#### **DESIGN AND METHODOLOGY**

The study, entitled 'Knowledge sharing across the boundaries between care processes, services and organisations: the contributions to safe hospital discharge', was undertaken in two English regional healthcare systems, each chosen to investigate differences in location, size and teaching commitments. The project compared the experiences of stroke and hip fracture patients as paradigms of complex discharge pathways. Waring explains precisely why these two groups were chosen: "These are high priority areas for acute health and social care. The study design enabled comparison, so both common and divergent lessons could be learnt to improve discharge".

# Knowledge sharing can help mitigate complexity by supporting collaboration and coordination

The project is focused on the importance of shared understanding, common values and ways of working to coordinate different healthcare professionals and organisations operating within a complex system. By understanding how knowledge sharing across care processes and settings contributes to safe hospital discharge, Waring hopes to identify lessons for policy makers and service providers on how collaborative working can be improved.

In-depth ethnographic research of knowledge sharing in discharge planning and care transition comprised over 180 hours of observations on discharge processes and knowledge-sharing activities in various care settings; focused 'patient tracking' to understand discharge activities across the patient journey; and interviews with 169 individuals working in health, social and voluntary care. This rich body of data facilitated analysis of distinct knowledge and practice domains which characterise different groups, and how their cultural norms, values and identities impact on discharge practices. Waring provides examples of this in action: "Hospital discharge involves linking a wide range of specialists together to solve the puzzle, but they don't always fit neatly together. There can be stark differences in how health and social care professionals understand discharge, with the former group often seeing it as an endstage in patient care, whereas the latter sees it as the first stage in their care". Such differences often complicate coordination of efforts, but collaboration is paramount to patient recovery and a high standard of care, as Waring emphasises: "When patients move back to a community setting, specialists are on hand to support recovery. The availability of these care providers depends on planning carried out when the patient is still in hospital".



#### **AREAS FOR CHANGE**

- Knowledge brokers in the form of discharge coordinators can facilitate knowledge sharing and coordination
- Co-location and functional proximity of health and social care stakeholders can support knowledge sharing and alignment of divergent practices
- Local cultures should prioritise and value collaboration
- Organisational resources, procedures and leadership should be aligned to foster knowledge sharing and collaborative working



### INTERDEPENDENT KNOWLEDGE FLOWS

The study confirms that hospital discharge is a complex process, comprising dynamic and multidirectional patterns of knowledge numerous sharing between Comparison of research sites showed how a range of common situations, or opportunities for knowledge sharing, are implicated in discharge planning and care transition. These situations are diverse, in terms of the individuals involved, media and resources utilised, forms of knowledge shared, and the wider culture and organisation of discharge. The report goes on to describe the threats to patient safety associated with discharge, as perceived by stakeholders. These are diverse, and can arise from falls, medicines, communication. clinical procedures, infection, timing and scheduling of discharge. Waring analysed and explained each of these risks with reference to observations of discharge planning and care transition, to show how variations in knowledge sharing can impede or promote safe discharge.

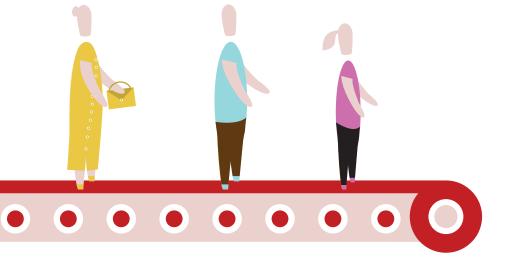
Further investigation revealed many interesting findings. A consistency of staff and formal opportunities for shared decision making were found to be important for knowledge sharing. Hospital staff also provided multiple recommendations, including a streamlined, easy access, multidisciplinary IT system and introducing delegated discharge coordinators.

#### THE FOUNDATION FOR INTERVENTION

Waring's work emphasises the importance of robust knowledge sharing and integrated working across the patient journey. Where knowledge sharing is missing, incomplete or poorly timed, future aspects are not adequately planned and delays or patient harm occur. A range of factors were found to affect this information exchange, arising from differences and tensions in knowledge, culture and organisation.

Based on its findings, the study makes recommendations to simplify the discharge system and improve work patterns. The report indicates that knowledge sharing can mitigate complexity by supporting collaboration and coordination, and specifically suggests four areas of change which could enhance knowledge sharing, reduce complexity and encourage patient safety. These learning points will provide insight for future interventions to improve discharge planning and care transition. However, the study has already begun to have a realworld impact: "The findings of the study have been shared with research partners through a series of workshops and feedback events. This has helped inform local planning of services," Waring elucidates.

This article presents independent research commissioned by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, NIHR, NETSCC, HS&DR programme or Department of Health.



#### **INTELLIGENCE**

KNOWLEDGE SHARING ACROSS
THE BOUNDARIES BETWEEN
CARE PROCESSES, SERVICES AND
ORGANISATIONS: THE CONTRIBUTIONS
TO 'SAFE' HOSPITAL DISCHARGE

#### **OBJECTIVES**

- To determine the stakeholders involved in hospital discharge, their distinct roles, responsibilities and relationships
- To uncover the patterns, media and content of knowledge sharing between stakeholders
- To identify stakeholders' relative perceptions of the threats to 'safe' discharge
- To distinguish how knowledge sharing represents a latent threat to safe discharge
- To explain the patterns of knowledge sharing as threats to patient safety
- To identify lessons and interventions that support knowledge sharing and in turn integrated, efficient and safe hospital discharge

#### **KEY COLLABORATORS**

Dr Fiona Marshall; Dr Simon Bishop; Professor Marion Walker; Dr Rebecca Fisher; Professor Tony Avery, University of Nottingham • Professor Opinder Sahota, Nottingham University Hospitals • Professor Graeme Currie, Warwick Business School

#### **FUNDING**

NHS National Institute for Health Research: Health Services and Delivery Research

#### CONTACT

**Professor Justin Waring** 

Director, Centre for Health Innovation, Leadership and Learning Faculty Deputy-Director of Research

Centre for Health Innovation, Leadership and Learning Nottingham University Business School Jubilee Campus Nottingham NG8 2BB. UK

T +44 115 951 5117 E justin.waring@nottingham.ac.uk

www.nottingham.ac.uk/business/lqzjjw.html

PROFESSOR JUSTIN WARING is a medical and organisational sociologist whose work investigates how new ways of organising healthcare interact with institutionalised practices and cultures. He completed a BA(Hons) in Sociology and Social Policy at the University of Liverpool in 1998, an MSc in Healthcare Policy and Management at the University of Birmingham a year later and finished his doctorate in Sociology at the University of Nottingham on 'The social construction and control of medical errors'. In 2013, he was selected as a Health Foundation Improvement Science Fellow and appointed a Fellow of the Royal Society of Arts.

