Institution: University of Nottingham		
Unit of Assessment: 17 – Business and Management Studies		
Title of case study: Informing the policy and practice of safer hospital discharge		
Period when the underpinning research was undertaken: 2005-2019		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	**Role(s) (e.g. job title):**	**Period(s) employed by submitting HEI:**
Professor Justin Waring	Professor	2005 – 2011, 2012 – 2019
Dr Simon Bishop	Associate Professor	2008 – present
Period when the claimed impact occurred: August 2014 to Dec 2020		
Is this case study continued from a case study submitted in 2014? N		

1. Summary of the impact

Research from the Nottingham University Business School has shaped national and regional policies to improve the organisation and planning of hospital discharge with the goal of enhancing the safety of care transition through supporting better inter-professional communication. This impact has taken the form of a National Patient Safety Alert issued to all NHS Trusts in England, the co-design of an online toolkit and resources hosted by NHS England, informing the formation of a national priority group for care transition led by the English Patient Safety Collaboratives, and informing the recommendations of a House of Commons Select Committee and NICE guidelines on communication standards during hospital discharge.

2. Underpinning research

The underpinning research is drawn from a specific NIHR-funded study on communication and patient safety in hospital discharge (2010-13), as well as a larger portfolio of research dating back to 2005 that develops a socio-cultural and organisational analysis of safety and risk in healthcare settings **[G1]**.

The underpinning portfolio of research draws together a series of studies led by Professor Justin Waring on the topic of patient safety dating from the mid-2000s, that included one of the first studies of new safety reporting systems and professional understandings of safety **[1]**, the threats to safety in the operating theatre **[2]**, reviews of the UK and international quality and safety research agenda **[2, 5]**. Together, these culminate in a distinct socio-cultural perspective on patient safety that has come to re-define research and policy **[5]**.

Drawing on this body of research, Waring and colleagues sought to apply this perspective to the challenge of hospital discharge. Wider research suggested that as many as two in every ten hospital discharges experience some form of safety event, often related to inter-professional communication issues, and leading to extended admission, prolonged recovery and human suffering. An exploratory study of intra-organisational knowledge brokers within three large acute NHS hospitals, found that those occupying hybrid organisational roles, such as clinical-managers, are often best positioned to support knowledge sharing and learning **[3]**. Building on this, Waring, with Dr Simon Bishop, led an NIHR-funded study on knowledge sharing and patient safety in hospital discharge **[4,5]**. This ethnographic study in three regional health and social care systems aimed to better understand the occupational and organisational boundaries, which can exacerbate health system complexity and represent sociocultural threats to safe discharge, Findings from the study described in detail the multiple threats to safety located between care settings, rather than within care settings. Further, findings outlined how hospital discharge relies upon the coordination of multiple actors and that attention to the sociocultural boundaries they work across can help inform interventions that might support enhanced discharge safety **[4]**.

From this work, Waring and colleagues have developed unprecedented insight into the types and sources of risk **[5]**, as well as the barriers to and drivers for improved inter-professional communication and, in turn, safer care transitions. The research presented new evidence on the prominent types of risk, including their proximal and distal causes, and highlighted the influence of organisational and professional boundaries as significant latent threats to safety **[5]**. Underpinning these risks were found to be a number of common organisational challenges, including the differences in professional knowledge, status and care practices across acute, primary and community settings; the emphasis on throughput and accelerated care pathways in

acute hospitals creating time and resource pressures on discharge; over-reliance on partial and fragmented IT systems; and the limited opportunities for face to face working following efficiency focused professional role-redesign. In combination these were found to contribute to systemic communication and knowledge-sharing barriers between care settings **[5]**.

Alongside these risks and challenges, the research also developed evidence from an organisational perspective on the contribution of communication and coordination interventions associated with perceptions of safe and effective discharge, including:

- the roles of people who work across multiple organisations or organisational domains (boundary spanners)
- the contribution of functional proximity (where stakeholders routinely work side-by-side)
- a culture of inter-sectoral and cross boundary collaboration (where stakeholders share common priorities)
- establishing common organisational procedures (that facilitate knowledge sharing across professional and/or organisational boundaries)

The research not only shows the relative contribution of these strategies to improving communication during discharge planning, but also the contextual organisational factors that condition implementation and operation. In particular, the benefits of resource pooling between health and social care providers and the development of common communication standards.

Subsequent publications in leading international journals in the field have sought to theorise failings in discharge, including the role of, and impact on, patients and families **[6, 7]**. The analysis of these papers has fed into the impact work following the study, leading to changes in practice at the level of national institutions and at the level of individual NHS organisations.

3. References to the research

1. **Waring, J.** (2009) 'Constructing and re-constructing narratives of patient safety' *Social Science and Medicine*, 69 (12), pp.1722-31 https://doi.org/10.1016/j.socscimed.2009.09.052
2. **Waring, J.**, Rowley, E., Dingwall, R., Palmer, C. and Murcott, T. (2010) 'A narrative review of the UK Patient Safety Research Portfolio', *Journal of Health Services Research and Policy*, vol.15(1), supp.2, pp.26-32 https://doi.org/10.1258%2Fjhsrp.2009.009042
3. **Waring, J.**, Currie, G., Crompton, A. and **Bishop, S.** (2013) 'An exploratory study of knowledge brokering in hospital settings: facilitating knowledge sharing and learning for patient safety' *Social Science and Medicine*, vol.98, pp.79-86 https://doi.org/10.1016/j.socscimed.2013.08.037
4. **Waring, J.**, Marshall, F. and **Bishop, S.** (2015) 'Understanding the occupational and organizational boundaries to safe hospital discharge' *Journal of Health Services Research & Policy* vol.20(s1), pp.35-44 https://doi.org/10.1177/1355819614552512
5. **Waring, J.**, **Bishop, S.** and Marshall, F. (2016) 'A qualitative study of professional and carer perceptions of the threats to safe hospital discharge for stroke and hip fracture patients in the English National Health Service' *BMC Health Services Research*, vol.16, 297. https://doi.org/10.1186/s12913-016-1568-2
6. **Waring, J.**, **& Bishop, S.** (2019). Health States of Exception: unsafe non-care and the (inadvertent) production of 'bare life'in complex care transitions. *Sociology of health & illness* https://doi.org/10.1111/1467-9566.12993
7. **Bishop, S.**, & **Waring, J.** (2019). From boundary object to boundary subject; the role of the patient in coordination across complex systems of care during hospital discharge. *Social Science & Medicine*, 235:112370 https://doi.org/10.1016/j.socscimed.2019.112370
8. **Waring J.**, **Bishop S.**, Marshall F, Tyler N, Vickers R., (2019). An ethnographic study comparing approaches to inter-professional knowledge sharing and learning in discharge planning and care transitions. Journal of Health Organisation Management 5;33(6):677-694. https://doi.org/10.1108/jhom-10-2018-0302
9. Wright, N., Rowley, E., Chopra, A., Gregoriou, K. and **Waring, J.** (2016), From admission to discharge in mental health services: a qualitative analysis of service user involvement. Health Expectations, 19: 367-376. https://doi.org/10.1111/hex.12361

Grant Details

Funding body	*Investigators*	*Title*	*Dates*	*Amount*
G1. National Institute for Health Research	Waring, Bishop, et al.	Knowledge sharing across the boundaries between care processes, services and organisations: the contributions to 'safe hospital discharge and reduced emergency readmission	June 2011 – June 2013	GBP228,994.29

4. Details of the impact

The impact of this research has accumulated through a series of knowledge exchange and engagement activities undertaken by Waring, Bishop and colleagues involving co-design activities in which close working with regional and national policymakers has led to changes in policy and practices.

National Patient Safety Alert

At the national level, Waring shared the findings of his research in a report to NIHR, with the NHS' Head of Patient Safety, Policy and Partnerships and the NHS England Patient Safety Team which directly led to the publication of a Stage 1 National Patient Safety Alert in August 2014 on the 'Risks arising from breakdown and failure to act on communication during hand over at the time of discharge from secondary care' **[A, B]**. This alert was issued to all NHS organisations and providers in England (over 200 commissioning organisations and 135 provider NHS Trusts) and alerted them to the communication problems associated with hospital discharge, the need to identify an individual to work with NHS England in sharing best practice on hospital discharge and called for participation in a national survey being led by NHS England in collaboration with Waring. The Head of Patient Safety, Policy and Partnerships described the alert as 'vital' and noted that Waring's 'work in this area directly contributed to the development and publication of a Stage-1 Safety Alert' which not only 'clearly conveyed the significance of this problem' but also 'invited NHS organisations to engage with a nation-wide programme … including a consultation exercise and webinars' **[B]**.

As part of this nation-wide programme, Waring delivered an online webinar on the NHS England Website and contributed to the co-design and analysis of the national survey, collaborating with NHS England, NHS IQ and the regional Patient Safety Collaboratives, to establish a nation-wide understanding of communication breakdowns in hospital discharge and to identify best practice. He then collaborated in follow-up case study research that aimed to evidence how a selection of these local interventions worked to improve the safety of hospital discharge. The lessons from these case studies were showcased on the NHS England website as a portfolio of online resources **[B]**. The Head of Patient Safety, Policy and Partnerships states that 'this programme of work … has significantly raised the profile of hospital discharge as a major area for patient safety improvement, to which Professor Waring has been at the forefront in producing new evidence and advising service leaders. The problems facing hospital discharge remain difficult to address, however as a direct result of our work with Professor Waring, we are better enabled to support NHS care providers to develop and implement interventions to improve the safety of hospital discharge which not only reduces the demands on care services but more importantly improves the quality of patient recovery and wellbeing' **[B]**.

English Patient Safety Collaborative

In parallel with the above, Waring worked with the English Patient Safety Collaborative network to promote care transitions and hospital discharge as a priority for future patient safety interventions. This collaboration allowed Waring to work closely with the East Midlands PSC to build on the findings from the NHS England project to share best practice with all practitioners on communication and collaboration strategies which improve the safety of patients. The AHSN (Academic Health Science Network) Patient Safety Director (formerly Executive Regional Lead of the East Midlands AHSN Patient Safety Collaborative network 2014-2018) states that Waring's work with the organisation led to the development of local case studies of learning from

regional exemplars of good practice which could then be shared by the network to relevant practitioners **[C]**.

Waring's work with the East Midlands PSC, and the findings from the local case studies, then led to the formation of a national grouping, described by the Executive Regional Lead 'as a 'cluster' to develop and spread best practice in hospital discharge' which 'brought together 9 out of 15 PSCs across England to work together in collaboration with NHS England (commissioners of the PSC) to collaborate on developing best practice in relation to safer discharge from hospital' **[C]**. This Discharge, Transfer and Transitions of care cluster was set up in June 2015 and was a direct response to the 2014 Stage One NHS Alert which, as has already been set out, was directly informed by Waring's research. The East Midlands AHSN was nominated to lead on the Discharge, Transfers and Transitions cluster on behalf of all other AHSNs and is described as 'a result of the sharing of priority areas exercise and a willingness to explore how we could work together' and was 'strengthened and supported by Professor Waring's research study' **[C]**. In particular, the evidence presented the NIHR project and subsequent work with NHS England on discharge best practices, communicated via the NHS England website, directed attention across the cluster to the potential risks to patients during hospital discharge as well as potential strategies for improving communication and coordination across boundaries. This was reflected in The Executive Regional Lead final report, 'Discharge Case Studies: Transfers of Care, March 2016', which summarises the impact of the work conducted **[C, D]**. Examples include, the Nottingham University Hospitals NHS Trust's readmission reviews which led to 'an improvement in patient experience and care and a decrease in patient stress and anxiety', 'an improvement in integrated care across the health and social care system in Nottingham', and 'from 2013/14 to 2014/15 there was a decrease in the readmission rate from 8.7% to 8.4%' **[D, pp. 4-8]**. Another example, from University Hospitals of Leicester NHS Trust, built on research findings which identified to the importance shared organisational procedures [5], and involved integrating the 2 systems used for discharging patients. Since this was done, it is reported 'there has been a decrease in the number of clinically significant prescribing errors' and that drugs to take home (TTOs) 'are dealt with more quickly which has led to quicker discharges and TTOs are no longer seen as causing delays in discharge' **[D, pp. 18-21]**. Finally, Nottingham CityCare Partnership state that they have seen 'an increase in equipment to support earlier discharge' and that 'removing exclusion criteria' has had a 'positive impact with more health input for patients who would in the past have had only a social care input' **[D, pp. 30-33]**.

Ultimately, the Executive Regional Lead summarises that Waring's research directly led to the development of case studies which showcased exemplars of effective of good practice which others could learn from, the formation of a national grouping (cluster) to develop and spread best practice in hospital discharge, and that the safe discharge and transfers of care was taken up as a priority for Patient Safety Collaboratives in nine regions of England' **[C]**.

National Institute for Health and Care Excellence

Waring and Bishop's NIHR funded research also provided the foundation for them to submit written evidence to the Houses of Parliament Public Administration and Constitutional Affairs Select Committee (2017), 'Follow-up to the PHSO report in unsafe discharge from hospital' Fifth Report Session 2016-17. The committee used Waring and Bishop's research to understand the problem surrounding hospital discharge with specific reference to their research showing that 'incidents are produced by the coming together of a number of systematic and organisational problems on a daily basis' **[E]**. Plus, the committee cited Waring and Bishop's research when discussing poor communication with relatives and carers, including their findings that given the lack of organisational focus on discharge in acute care, some staff 'saw families as a 'barrier to achieving discharge rather than integral to it'' **[E]**. The PHSO report was submitted to government in 2016 and received a response on 24th January 2017. Waring and Bishop's research has had further policy influence as findings from **[4]** were used to underpin recommendations from the National Institute for Health and Care Excellence (NICE) as cited in their guidelines for 'Transition between inpatient hospital settings and community or care home settings for adults with social care needs', published in December 2015. Specifically, NICE cite **[4]** and summarise its findings by stating 'that good hospital discharge relies upon close collaboration and interaction between health and social care actors, and that attention should

therefore be paid to the sociocultural boundaries that influence communication in order to help form interventions that support enhanced discharge safety' **[F]**. These findings informed NICE's recommendations 1.5.3-5.5 - 'Health and social care organisations should agree clear discharge planning protocols', 'Ensure that all health and social care practitioners receive regular briefings on the discharge planning protocols', and 'During discharge planning, the discharge coordinator should share assessments and updates on the person's health status, including medicines information, with both the hospital- and community-based multidisciplinary teams' **[F]**.

Derbyshire Healthcare NHS Foundation Trust

Additionally, Waring and Bishop have collaborated with local service providers and users of acute mental health services to develop interventions to support communication and shared decision-making at discharge. This work stemmed from the evidence of the NIHR research which was used as a template around which to engage stakeholders in the co-production of interventions. Following on from this, Professor Waring collaborated with Dr Nicola Wright (Associate Professor in Mental Health in the School of Health Sciences, UoN) and the Derbyshire Healthcare NHS Foundation Trust's Assistant Director for Clinical and Professional Practice, to co-design and pilot a discharge planning tool for people receiving acute mental health care **[9]**. Building on this, and in collaboration with the Greater Manchester Patient Safety Translational Research Centre (GM PSTRC), Waring and Wright worked further with the Derbyshire Healthcare NHS Foundation Trust to support the co-design and testing of further discharge tools. The Assistant Director for Clinical and Professional Practice, at the Derbyshire Healthcare NHS Foundation Trust, states that, from 2016 until December 2020, the trust, following on from the above research, 'implemented and continued the work around the electronic handover and, after some extra work was conducted around this within inpatient older adult services, it has led on to some additional work around care plans and documentation to make the quality of the process even better' **[G]**. Furthermore, 'the trust has also implemented the bleep holder checklist in the North of Derbyshire' and, 'from a discharge point of view', 'we have improved our [daily] rapid review process' and 'implemented an outreach team linked to rehabilitation services' **[G]**. According to Assistant Director for Clinical and Professional Practice, going forward, the aim of this work 'will be to pull out patients from acute inpatient wards and work with them at home on rehab needs alongside a community Psychiatric nurse and with the aim of reducing readmissions' **[G]**.

5. Sources to corroborate the impact

A. National Patient Safety Alert
B. Statement from the NHS Head of Patient Safety, Policy and Partnerships and the NHS England Patient Safety Team
C. Statement from the AHSN Network Patient Safety Director (formerly Exec Regional Lead for EMAHSN PSC 2014-2018)
D. Discharge Case Studies: Transfers of Care – East Midlands Patient Safety Collaborative (March 2016)
E. Follow-up to PHSO report on unsafe discharge from hospital: Fifth Report of Session 2016-17 – *House of Commons: Public Administration and Constitutional Affairs Committee*
F. NICE guidelines (2015) – Transition between inpatient hospital settings and community or care home settings for adults with social care needs
G. Statement from Assistant Director for Clinical and Professional Practice, Derbyshire Healthcare NHS Foundation Trust