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INSTITUTIONALISING EMERGENT ORGANISATION IN HEALTH AND SOCIAL CARE

ABSTRACT

PURPOSE

This paper argues for the institutionalisation of emergent forms of organisation in health and social care and offers a conceptual framework for this purpose.

APPROACH

Ethnographic research on the organising work of nurses and Translational Mobilisation Theory are deployed to extend two classic Straussian sociological concepts – illness trajectory and articulation work – to conceptualise emergent organisation as Care Trajectory Management.

FINDINGS

Failures of coordination are well-recognised threats to quality and safety and recent decades have witnessed an explosion of neoliberal technologies and governance arrangements designed to ‘measure and manage’ these risks. Yet in a significant and growing proportion of health and social care provision successful service integration depends not on rational planning, but iterative negotiations and adjustments in response to contingencies. While ubiquitous in health and social care systems, these emergent forms of organisation lack legitimacy, the work involved is relatively invisible, and practice is poorly served by prevailing management discourses.

ORIGINALITY

The Care Trajectory Management Framework provides an alternative discourse and logic on which to develop strategies and technologies to support emergent organisational processes in acute and community care contexts.

INSTITUTIONALISING EMERGENT ORGANISATION IN HEALTH AND SOCIAL CARE

INTRODUCTION

Failures of coordination are well-recognised threats to the quality and safety of health and social care (Institute of Medicine, 2001). Recent decades have witnessed an explosion of neoliberal management and governance technologies to ‘measure and manage’ these risks (Allen, 2017; Waring, 2009). Yet health and social care is a complex adaptive system (Braithwaite, 2018) and a significant and growing proportion of service delivery is emergent and uncertain. Here, successful integration depends not on rational planning processes, standardisation and regulatory structures, but negotiations and adjustments to treatment and care arrangements in response to contingencies (Strauss, et al. 1985). While ubiquitous in health and social care systems, these emergent forms of organisation lack legitimacy and are not well served by prevailing management discourses. This paper argues for explicit acknowledgement of emergent forms of organisation in health and social care and offers a conceptual framework for this purpose.

This manuscript proceeds as follows. First, I describe the challenges of coordination in health and social care and consider how these have been addressed within prevailing neoliberal management and governance discourses. Second, I examine illness trajectory and articulation work, two core concepts from Strauss et al.’s (1985) classic sociological study *Social Organization of Medical Work*, and consider their value for understanding emergent forms of organisation. Third, drawing on ethnographic research on the organising work of hospital nurses (Allen, 2015) and Translational Mobilisation Theory (Allen, 2018b; Allen and May, 2017), I extend these ideas to conceptualise emergent organisation as Care Trajectory Management. Finally, I consider the implications and applications of institutionalising emergent organisation and care trajectory management in health and social care systems.

THE CHALLENGES OF COORDINATION IN HEALTH AND SOCIAL CARE

Health and social care is arguably the most complex system of work in contemporary society (Allen and Pilnick, 2005). Patients receive input from different providers and these relationships are conditioned by differences in knowledge, occupational cultures, social worlds, power and prestige. Service delivery is characterised by action and knowledge that is distributed across time and space (Zerubavel, 1979); fragmented and multiple understandings of the patient (Mol, 2002); and staff that make largely independent contributions to care (Allen, 2015). This complex system of work is also embedded in a turbulent environment; care organisations have less control over workflows than do other services and experience constant churn (Duffield, et al., 2007). As ‘people work’ health and social care has additional singular qualities; including a high degree of unpredictability - increasingly so in aging populations with complex needs - and the requirement to engage with patients and their families as both producers and consumers of services (Osborne, et al., 2013). These features pose very real challenges for the integration of care, with failures of coordination now a well-recognised threat to the quality and safety of care provision (Kobewka et al., 2016; Waring, et al., 2016; Weinberg, et al. 2007). For example, a World Health Organisation Europe report (2012) maintained that service fragmentation and insufficient coherence were the main factors inhibiting the efficiency of interventions and quality of healthcare outcomes and, in the North American context, the Lucian Leape Institute report, *Order from Chaos: Accelerating Care Integration* (Lucian Leape Institute, 2012) concluded that poor care integration is linked to adverse events, and that improvements in this area should be among the top priorities for achieving consistently safe, effective and efficient healthcare.

In responding to these challenges health and social care organisations in the developed world have favoured approaches underpinned by theoretical and empirical ideas from the fields of engineering and management science, which assume linear cause and effect relationships and privilege measurement, rational planning, standardisation and structures. This has precipitated widespread realignment of service processes and organisational arrangements (Morris et al., 2014); a proliferation of standardised coordinating technologies such as care pathways,

protocols and algorithms (Allen, 2009); attention to key organisational interfaces such as hospital discharge planning (Agency for Healthcare Research and Quality, 2013); the development of case management and navigator roles (McMurray and Cooper, 2016); and more recently, financial incentives for greater integration and coordination (Zutshi, Peikes, and Smith, 2014). While not without value, a recent review concluded that improvements in care coordination have only been incremental and that there is a need to move beyond structural approaches to secure further gains.

“As care becomes more complex and shared among more providers, it is essential to improve both processes (eg, teamwork, communication and patient engagement) and technologies (eg, EHRs) for patients and providers”

(Gandhi et al., 2018, pp 4).

While this change of emphasis from ‘hardware’ (structure) to ‘software’ (culture) (Braithwaite, 2018), is welcome, it can only take us so far if we continue to operate within existing neo-liberal frameworks of understanding. An important limitation of orthodox approaches to addressing the problem of coordination is that they are predicated on a linear conceptualisation of health and social care processes and organisation that presupposes predictability, linear cause and effect relationships, and the possibility of rational planning and control. This is an understanding that is increasingly at odds with the profoundly contingent character of much health and social care provision.

In their classic large-scale ethnographic study – *The Social Organization of Medical Work* – Strauss et al., drew attention to the emergent and uncertain qualities of healthcare provision, comparing this to the challenges faced by Mark Twain's celebrated Mississippi River pilot:

“[T]he river was tricky, changed its course slightly from day-to-day, so even an experienced, but inattentive pilot could run into grave difficulties; worse yet, sometimes the river drastically shifted in its bed for some miles into a new course. [...] Some of the various contingencies may be anticipated, but only a portion of them may be relatively controllable, [...] stemming as they do, not only from the illnesses themselves but from organizational sources.”

(Strauss et al., 1985, pp. 19-20)

Strauss et al.'s observations on the non-linear qualities of healthcare work laid the foundations for the development of one of the first process theories of organisation - the negotiated order perspective – and healthcare continues to stimulate theoretical advances in this area in which order (organisation) is conceptualised as arising from flow and ordering processes not the other way round. Hernes' *A Process Theory of Organization* (2014) is a case in point:

“I was hospitalized in a large public hospital in Geneva some years ago and was struck by the combined vastness, complexity, and fluidity of its organizational life”

(Hernes, 2014, pp. vii-viii)

Yet while empirical studies of healthcare work have laid down an important counterbalance to the dominance of structural approaches in organisational theory, the impact of these ways of thinking in real world practice has been muted.

The *Social Organization of Medical Work* (Strauss et al. 1985) examined how healthcare had been ‘radically and irrevocably’ altered by the prevalence of chronic diseases and specialisation of technologies developed to manage them. These impulses have continued unabated and have been overlaid with an increase in the number of people presenting with coexistent morbidities and accumulative complexity (May, et al. 2016), resource pressures which have created increased acuity and accelerated throughput in the acute sector (Duffield, et al. 2007) and the redistribution of care (Exley and Allen, 2007) and treatment (May, et al. 2014) in the domestic sphere. Paradoxically then, while health and social care is increasingly organised through management models that emphasise standardisation and rationalisation, a growing number of service users present with non-standard, unpredictable and evolving needs (Allen, 2018a).

There are certain parallels here with the situation in the safety field described by Hollnagel in his work on resilient systems (Hollnagel, 2014). Hollnagel argues that the dominant model - which he terms Safety-I - assumes tractable sociotechnical systems and linear cause and effect relationships that can be managed through safety interventions, regulation and control. He makes the case for a Safety-II model, which recognises that some sociotechnical systems may be too complex (intractable) to fully

understand and control through rational means, with safety dependent on human actors adjusting what they do to match the conditions of their work. Hollnagel argues that in contrast to the focus on failure and adverse events that characterises Safety-I, adopting a Safety-II approach invites inspection of why things go right (see also Messman, 2008). Here Hollnagel is drawing on Weick's observations on the invisibility of reliability; reliable outcomes are constant, which means there is nothing to pay attention to (Weick, 1987).

Like reliability, successful emergent organisation in health and social care is largely invisible with responsibility for this work falling predominantly, but not exclusively, on nurses. As with much invisible work, the better this is done, the less visible it is to those who benefit from it. Drawing on in-depth ethnographic research designed to better understand this dimension of the nursing function (Allen, 2015), and insights from Translational Mobilisation Theory (Allen and May, 2017), this paper outlines a conceptual framework of the work involved in managing emergent organisation as a precursor to the formalisation of these organisational forms in health and social care. Maintaining the analogy with new approaches to safety, if rational planning methods represent Organisation-I, we might think of the framework presented here as Organisation-II, which in the health and social care context, can be characterised as 'care trajectory management'.

STRAUSSIAN FOUNDATIONS

The phenomenon of emergent organisation in healthcare was captured by Strauss et al. (1985) in the notion of an illness trajectory, which they defined as 'the physiological unfolding of a patients' disease' and 'the total *organization of work* done over that course, plus the *impact* on those involved with that work and its organization' (pp. 8, original emphasis). For Strauss et al. the challenges of coordination, stem not only from the uncertainty of attending to injury and disease, but also from the complexity of the division of labour, the turbulence of the work environment, and biographic and psycho-social considerations relating to patients, kin and staff. Thus, while some trajectories can be predictable and controlled through

generic strategies such as standards and routines others are contingent and uncertain and more challenging to manage.

“[A] helpful image of what goes on with relatively problematic trajectories is this: efforts to keep the trajectory on a more or less controllable course look somewhat gyroscopic. Like that instrument, they do not necessarily spin upright but, meeting contingencies, they may swing off dead center – off course – for a while before getting righted again, but only perhaps to repeat going awry one or more times before the game is over. Sometimes, though, the trajectory game finishes with a total collapse of control, quite like the gyroscope falling to the ground”.

(Strauss et al. 1985, p. 20)

Strauss et al. argue that the relationship between contingency and control in complex trajectories challenges the notion of management as this is conventionally understood. To address this they develop the concept of ‘articulation work’ which refers to the full spectrum of secondary work processes necessary to align trajectory activity and ensure ‘that the staff’s collective efforts add up to more than discrete and conflicting bits of accomplished work’ (p. 151). As formulated by Strauss et al., articulation work includes generic articulation strategies that would typically be associated with formal management processes - such as standards, routines, and formal communication systems — as well as the singular and non routine strategies and negotiations required in response to contingencies.

While Strauss et al. provide an important point of departure; these ideas require modification and extension for current purposes. First, much of contemporary care is concerned not just with disease management, but also patients’ wider need for on-going support with daily living. So in applying these concepts to contemporary health and social care systems it is more appropriate to look beyond illness to focus on the ‘*care trajectory*’ (Allen, Griffiths, and Lyne, 2004).

Second, while Strauss et al. acknowledge the importance of ‘articulation work’ for trajectory management, and offer valuable insights into generic articulation strategies and the ‘veritable hurricane’ of sources of disarticulation in problematic cases, they say little about how emergent and contingent articulation work is enacted in practice.

“Tactically, the articulation work is likely to get done case by case, depending at least on the nature of the trajectory, its phasing, the organizational conditions bearing on articulation possibilities, and the individual styles of the articulating agents on the ward itself. Doubtless there are patterns of tactics, but we have neither studied them nor believe it is necessary to detail them here.”

(Strauss et al. 1985, p. 158)

Third, while stressing the relationships within trajectories of care and the ‘thick context of organizational possibilities, constraints, and contingencies’ in which they are negotiated, Strauss et al. (1985) do not provide any basis for systematically analysing these assemblages. They provide vivid depictions of patient trajectories - the false starts, blind alleys and changes in direction - but the organisational context, work relationships, tools, technologies, and negotiation processes remain hidden from view. As a consequence, the concept does not furnish the analytic resources to understand the relationships between actors and explain why trajectories take the shape that they do (Allen et al., 2004).

Fourth, while Strauss et al., move away from the language of management in preference for articulation in order to highlight the emergent qualities of health and social care work, for the purposes of institutionalising emergent organisation in health and social care work, I have elected to return to the language of management in order to increase the visibility and legitimacy of this work and also to recognise that ‘articulation’ work is only one of a number of processes through which emergent organisation is achieved. In the next section I build on and extend these concepts to offer a framework for institutionalising emergent organisation and care trajectory management work in health and social care.

CARE TRAJECTORY MANAGEMENT: A FRAMEWORK FOR INSTITUTIONALISING EMERGENT ORGANISATION IN HEALTHCARE SYSTEMS

TRANSLATIONAL MOBILISATION AND THE ORGANISING WORK OF HOSPITAL NURSES

The Care Trajectory Management Framework is derived from the secondary analysis of ethnographic research on the organising work of hospital nurses (Allen, 2015) and the application of Translational Mobilisation Theory (Allen and May, 2017). Nurses are often referred to as the ‘glue’ in healthcare systems, but the organisational component of nursing is poorly understood. Informed by ecological approaches to work (Strauss et al., 1985) and practice-theories (Gherardi and Nicolini, 2000; Nicolini, 2012) in-depth ethnographic research was undertaken to better understand this nursing function, identify the skills and knowledge that underpin it, and the circumstances that make it necessary (Allen, 2015). Data were generated in a large University Health Board in Wales by shadowing 40 hospital nurses working in clinically facing roles. Observational data were combined with embedded interviews and the analysis of documents and artefacts. The total data corpus comprised of a computer-processed field-diary of approximately 5000 words. The research identified that nurses’ organising work arises from the requirement to manage trajectories of care in turbulent conditions and described four broad domains of activity through which they fulfilled this function:

“Their location in the sites of care and at critical departmental and organisational interfaces casts nurses in a pivotal role in mediating the relationships between the heterogeneous actors through which patient and population needs are addressed. Through four inter-related domains of practice nurses function as obligatory passage points in hospital orders: creating the working knowledge that supports care delivery; articulating the configurations of socio-material actors required to meet individual needs; matching people with beds and supporting patient flows; and parsing patient identities to secure transfers of care. Not only is this work an essential driver of action, it also operates as a powerful countervailing force to the centrifugal

tendencies inherent in healthcare organisations which, for all their gloss of order and rationality, are actually very loose arrangements.

(Allen, 2015, p. 132)

‘Translational Mobilisation’ was the term coined to refer to the mechanisms involved in care trajectory management. *Translational Mobilisation Theory* (TMT) (Allen, 2018b; Allen and May, 2017) builds on this analysis to describe, identify and explain the mechanisms of emergent organisation in complex organisational contexts. TMT is a practice theory founded on a process view of organisation and has three components. The **Project** – what is done in collective action; the **Strategic Action Field** (Fligstein and McAdam, 2011) – the institutional contexts where collective action takes place; and **Mechanisms** – how collective action is mobilized. These are elaborated on below in their application to the Care Trajectory Management Framework.

CARE TRAJECTORY MANAGEMENT

The Project is the primary unit of analysis in TMT and provides a frame for understanding the ecological relationships in a collective activity. The trajectory of care is the ‘project’ of interest for current purposes and incorporates the people, materials and organisational arrangements enrolled in meeting a patient’s unfolding health, welfare and social needs. In line with TMT these relationships are understood as conditioned by the resources and constraints - structures, organising logics, interpretative repertoires, materials and technologies - of the Strategic Action Field in which the project of collective action is mobilised. In health and social care these contextual factors can vary widely, which is why the absence of systematic attention to these features of context and their consequences for trajectory management is an omission in Strauss’ et al.’s work that it is necessary to address in formalising emergent organisation in health and social care systems.

The Care Trajectory Management Framework conceptualises the work necessary to mobilise and organise collective action in meeting patient’s unfolding health and social care needs wherever this takes place. It represents a synthesis of the five mechanisms of translational mobilisation from TMT (Allen, 2015) and comprises of three core components: **trajectory awareness** (practices that maintain awareness of

trajectories of care); **trajectory working knowledge** (practices that support information sharing to allow care to progress); and **trajectory articulation** (practices that ensure all the elements necessary to meet patient needs – expertise, materials, information – are aligned in the right place and at the right time). Each component is elaborated below and illustrated by reference to Allen’s (2015) original study of nursing work.

TRAJECTORY AWARENESS

“Knowing exactly what’s going on everywhere” [Senior Nurse].

Trajectory awareness is the first component of care trajectory management. It refers to the work involved in maintaining oversight of trajectories of care as they evolve. Trajectories develop in response to changes in patients’ health and social care needs, shifts in the social, organisational and material arrangements associated with managing these needs, and the interaction of these elements. It is necessary to maintain awareness of these developments in a context in which facts and understanding pertinent to an individual’s care are dispersed throughout a diverse network of professionals, communities, artefacts and information systems (Ellingsen and Monteiro, 2003).

Maintaining trajectory awareness involves the translational mobilisation mechanisms of reflexive monitoring, sense-making and object formation. **Reflexive monitoring**, which is derived from normalisation process theory (May and Finch, 2009), denotes how actors monitor projects of collective action. In care trajectory management it draws attention to the processes involved in keeping oversight of an individual’s care and treatment – such as the history of the case; the current situation and what is planned; the status of the clinical environment and the organisation – such as shifting patterns of demand, priorities and resources, accessibility of personnel, availability of materials; and assessing the implications of this relationship for trajectory management – such as whether treatment plans have to be amended in the light of organisational capacity.

In the ethnographic study, nurses reflexively monitored trajectories of care as these evolved in response to patient and organisational factors, shifting their gaze from

attending to individuals to focus on whole populations and the wider organisation in order to keep these relationships under review. In the following example we see two nurses discussing the plans for an individual patient.

Nurse: She needs a review by Orthopods

Coordinator: Who's she under? She's not been seen by anyone?

Nurse: It says to be seen on the ward round today

Coordinator: We'll see which team she is under. I'll check in the notes

Closely related to reflexive monitoring is the mechanism of **sense-making**. Derived from the work of Weick (1995), in TMT, sense-making denotes how actors comprehend and make order in work. In care trajectory management it refers to the activities involved in interpreting information pertinent to trajectory management (which may be clinical or organisational), identifying any inconsistencies and resolving gaps in understanding, and detecting abnormal patterns and processes. In the following example, a staff nurse is scrutinising the patient record to try and understand a transfer of care that does not fit with her knowledge of organisational processes.

SN1: I can't understand this transfer as she came in under Gynae but she was under urology. I didn't think you could transfer from an outlier to an outlier

SN2: You can't; not really!

The mechanisms of reflexive monitoring and sense-making come together in **object formation** which, in TMT, refers to how actors construct the focus of their activity in order to be able to do their work. For the purposes of care trajectory management, object formation refers to the processes through which the overall status of a care trajectory is encapsulated, recorded and communicated in order to support its management. The nurses in my study fulfilled this function through the generation and maintenance of 'trajectory narratives'. These were stories that summarised a patient's overall care, and were typically initiated during the admissions process, circulated through the nursing handover, recorded as 'plot summaries' on handover sheets and revised as trajectories evolved. Maintaining trajectory awareness was often a collaborative process. The following extract, taken from the nursing handover,

is a typical example. The night nurse is handing over to the coordinator who had been working the previous day. The extract begins with the night nurse explaining that the patient is a new admission, indicating that her trajectory is short and uncertain. On several occasions the nurse identifies areas of incomplete knowledge and the coordinator responds by filling in information fragments where she can. What emerges is a clearer picture of the patient in which some gaps in understanding are resolved, and issues requiring clarification identified.

Night Staff Nurse: ‘Bed 3 [...] a new lady, 84, came in with a fall and broken arm. She has a POP ((plaster cast)) in situ. She’s on 12 hourly obs and is to be seen in Fracture Clinic in a week. She’s for a 24-hour tape to see whether her fall was due to arrhythmias. She’s mobile over short distances but has some shortness of breath. She’s been using a commode over night. I don’t know what she’s like during the day.’

Coordinator: ‘I didn’t have chance to assess her with all that was going on yesterday.’

Night Staff Nurse: ‘She is a smoker and we need the doctor to assess whether she wants a nicotine patch or anything. She lives alone but I am not sure how well she copes.’

Coordinator: ‘Her daughter spoke to me yesterday and said that she is no longer coping at home so we need to make a social worker referral.’

Through the linked mechanisms of reflexive monitoring, sense-making and object formation nurses created the awareness that was essential to care trajectory management and a precondition for the second component of the framework: trajectory working knowledge.

TRAJECTORY WORKING KNOWLEDGE

“We’re the link; they tell us and then we tell everyone else!” [Senior Nurse]

Working knowledge is the second component of the Care Trajectory Management Framework. This refers to the translational work that creates the information flows

necessary for the practical organisation of trajectories. Derived from Actor Network Theory (Latour, 2005), in TMT ‘translation’ refers to the practices that enable differing viewpoints and multiple interests within a care trajectory to be accommodated in order to enable concerted action.

People do not arrive in healthcare systems as ready-made patients; work has to be done to enable them to become the object of professional attention. Nurses assess their nursing care needs; doctors assess their medical needs and allied health professionals assess needs for rehabilitation and assistive technologies. Patients report frustration with having to re-tell their stories, but in each case the healthcare professional brings a singular set of cognitive concerns to the interaction. The result, as Mol (2002) has shown, is that patients are understood and ‘seen’ in numerous ways for different purposes. A major challenge for care coordination is how these diverse understandings can be brought together to enable concerted action.

‘Good’ communication in health and social care is typically conceptualised in terms of the comprehensiveness of information, but in practice successful trajectory management depends less on the exhaustiveness of information and more on ensuring that the right information is shared in the right form for the purposes at hand (Allen, 2015) and that there is sufficient consensus between participants on the salient features of a trajectory to allow progress. Such agreements can have different degrees of stability; some may have a level of permanence and travel across time and space; others might be relatively ephemeral and temporally bounded by the requirements of the situation. Translation entails transformational chains in which one ordering or understanding is enfolded into another.

One of the advantages of trajectory narratives for supporting information flows is that they can be modified for different audiences. Allen’s study showed that nurses draw on their relational knowledge of trajectory actors and their roles and responsibilities to select out those elements of the story that are relevant to participants. This sensitivity to the recipient design of narratives is revealed below by the nurse’s ‘repair’, which acknowledges that she has offered extraneous information to the doctor about the patient’s dietary requirements when asked about this patient in the context of a ward round.

Dr: and this new gent?

SN: [checks list] He has low BP and sore groins

Dr: Are we applying Canestan?

SN: [] its like a raised rash [reading from list] He's allergic to gluten, but you probably don't need to know that!

TRAJECTORY ARTICULATION

'Nurses run the place. [...] That requires anticipating people's needs and constantly being two steps ahead' [Senior Nurse]

Articulation is the third component of the Care Trajectory Management Framework. Its use in TMT draws directly on the insights of Strauss (Strauss, 1988; Strauss et al., 1985), and refers to the secondary work processes that align the actions, knowledge and resources necessary for the mobilisation of projects of collective action. Health and social care is complex and decisions must be taken about what should be done, by whom, when, where, and with what materials. Because patient care is often uncertain, emergent and unpredictable, and the social organisation of health and social care work is distributed in time and space, alignment of all relevant actors cannot be taken-for-granted. The more elements involved, the more challenging this becomes.

My empirical study revealed that in managing patient trajectories, nurses undertook three different kinds of articulation work. **Temporal articulation** was work carried out to ensure things took place at the right time and in the right order. Here nurses deployed their organisational knowledge and understanding of processes and procedures in order to anticipate need and plan. The following extract relates to incident observed while shadowing a nurse coordinator.

She said that in the afternoon she would look at the discharges planned for Thursday and see what needs to be done. 'So I can be proactively phoning the OT ((occupational therapist)) and the physio and getting them to come and do their assessments'.

Integrative articulation work was designed to ensure decision-making was joined up. When largely independent actors interact around the patient, decisions that seem reasonable in isolation can be problematic in the context of a wider trajectory of care. With their overall trajectory awareness, nurses had an important role in identifying and addressing these potential dangers. The following extract is an incidental observation recorded while located at the Nurses' Station.

Nurse makes a call to another doctor to clarify earlier advice about a dextrose infusion and blood glucose monitoring in the light of a decision taken by another team that the patient can eat and drink.

Trajectories are socio-material ensembles and **material articulation** work aimed to ensure the availability of materials and resources to support care. In the following extract, I was shadowing a ward coordinator.

Coordinator bumps into the ward pharmacist on her way to coffee break.

Coordinator: 'Oh, I decided not to bleep you but we've run out of IV GTN (Glycerly Trinitrate).'

Pharmacist: 'I put enough up for twenty four hours; have they increased the dose?'

Coordinator: 'No. My concern is that it's a bank holiday weekend and I don't want to run out.'

This is not a mundane task; lack of equipment is an important cause of safety incidents (BBC, 2012; National Patient Safety Agency, 2007; Telegraph Reporters, 2012).

IMPLICATIONS

In this paper I have developed the case for formalising emergent organisation in health and social care and have outlined a conceptual framework for this purpose. The framework is illustrated by reference to the work of hospital nurses, but care trajectory management is not an exclusively nursing activity. In different contexts it may be more evenly distributed between actors, in others, it might fall disproportionately to particular occupational groups or technologies, and increasingly in the community, responsibility for care coordination rests with patients and family

carers. This work is poorly understood and conditioned by the contextual features of the Strategic Action Field in which it takes place. By conceptualising the core elements of care trajectory management and understanding the relationship of mechanisms to conditioning factors we are better placed to consider how these might be achieved in different contexts and the technologies and resources that might facilitate this work.

While distinguishable analytically, rational and emergent forms of organisation are intertwined in real life, with patient care comprising of standard interventions and processes that can be planned for, as well as emergent elements that require a preparedness to respond flexibly. Organisation-I and Organisation-II represent different but complementary approaches to the challenges of coordination, and, like Safety-I and Safety-II, real world practice requires a mixture of the two models. Having institutionalised emergent organisation in health and social care then, a further challenge is to develop a better understanding of the relationship between routine and emergence in a given trajectory. This in turn invites more systematic approaches to assessing care trajectory complexity, not with the aim of rationalising emergence, but to facilitate more proactive approaches to anticipating and managing contingencies which may reduce the likelihood of what Strauss et al. call ‘cumulative mess trajectories’. In this context, attending to the project provides a structure for defining the boundaries of a trajectory and keeping this under review as new actors enter or leave; attending to the strategic action field highlights how local structures, organising logics, interpretative repertoires and materials might interact and impact on complexity in a given case.

In making the case for formalising emergent organisation in health and social care I have underlined its non-standard and negotiated qualities and the lack of congruence with existing management technologies founded on the rational linear logics of general management and engineering. While it is reasonable to argue that emergent organisational processes are poorly served by existing systems and that alternative systems and technologies are necessary, it would, however, be misleading to suggest that structures and routines have no value in emergent organisation. Allen (2015) draws attention to the importance of routines in the organising work of nurses, not as naïve coordinating mechanisms, but as resources for sense-making and sense-giving through which trajectories were mobilised. This is more in line with Weick’s (1979)

conceptualisation of routines as a set of recipes for connecting episodes of interaction in an orderly manner, or Pentland and Reuter's (1994) ideas about routines as a grammar or organising resource and points to the need for a fundamental shift in existing systems of governance to accommodate the process-based conceptualisation of routines necessary for institutionalising emergent organisation in health and social care.

CONCLUSION

In this paper I have made the case for acknowledging emergent organisation in health and social care and institutionalising the work involved in care trajectory management. Taking Strauss et al.'s (1985) concepts of illness trajectory and articulation work as a point of departure I have extended these ideas through a reworking of an ethnographic study on the organising work of hospital nurses in combination with TMT. Care coordination in health and social care is a well recognised risk to quality and safety, but the requirement for emergent organisation is not acknowledged in prevailing approaches to service management, which are over determined by neoliberal Organisation-I discourses. Being explicit about the requirement of care trajectory management work and the mechanisms involved provides an alternative Organisation-II discourse and logic on which to develop strategies and technologies to support emergent organisational processes in acute and community care contexts.

REFERENCES

- Abbott, A. (1988), *The System of Professions: An essay on the Division of Expert Labor*. Chicago: University of Chicago Press.
- Allen, D. (2009), "From boundary concept to boundary object: the politics and practices of care pathway development", *Social Science and Medicine*, Vol. 69, pp. 354-361.
- Allen, D. (2015)., *The invisible work of nurses: hospitals, organisation and healthcare*. Oxford, New York: Routledge.
- Allen, D. (2017), "From polyformacy to formacology", *BMJ Qual Saf*.
<http://dx.doi.org/10.1136/bmjqs-2017-006677>
- Allen, D. (2018a), "Care trajectory management: A conceptual framework for formalizing emergent organization in nursing practice", *Journal of Nursing Management*, 1-6. doi:<https://doi.org/10.1111/jonm.12645>
- Allen, D. (2018b), "Translational mobilisation theory: A new paradigm for understanding the organisational elements of nursing work. *International Journal of Nursing Studies*, 79(February), 36-42.
- Allen, D., Griffiths, L., and Lyne, P. (2004), "Understanding complex trajectories in health and social care provision", *Sociology of Health and Illness*, Vol. 26 No. 7, pp. 1008-1030.
- Allen, D., and May, C. (2017), "Orgainsing practice and practicing organisation: An outline of translational mobilisation theory", *Sage Open*,
<https://doi.org/10.1177%2F2158244017707993>
- Allen, D., & Pilnick, A. (2005), "Making connections: healthcare as a case study in the social organisation of work", *Sociology of Health and Illness*, Vol. 27, No. 6, pp. 683-700.
- Institute of Medicine (2001), *Crossing the quality chasm: A new Health system for the 21st century*. Washington, DC: Institute of Medicine
- BBC. (2012), Secret Scottish NHS incident reports released. Retrieved from
<http://www.bbc.co.uk/news/uk-scotland-20395257>

- Braithwaite, J. (2018), "Changing how we think about healthcare improvement", *BMJ*, Vol. 361(k.2014), pp. 1-5.
- Duffield, C., Roche, M., O'Brien-Pallas, L., Aisbett, C., King, M., Aisbett, K., and J. Hall. (2007). *Glueing it Together: Nurses, their Work Environment and Patient Safety*. Retrieved from Centre for Health Services Management.
- Ellingsen, G., and Monteiro, E. (2003), "A patchwork planet: Integration and cooperation in hospitals", *Computer Supported Cooperative Work*, Vol. 12, No. 1, pp. 71-95.
- World Health Organisation Europe, (2012), *Modern health care delivery systems, care coordination and the role of hospitals*. Copenhagen, Denmark: World Health Organisation Europe
- Exley, C., and Allen, D. (2007), "A critical examination of home care: End of life care as an illustrative case", *Social Science & Medicine*, Vol. 65, pp. 2317-2327.
- Fligstein, N., and McAdam, D. (2011), "Toward a general theory of Strategic Action Fields". *Sociological Theory*, Vol. 29, No. 1, pp. 1-26.
- Gandhi, T., Kaplan, G., Leape, L., Berwick, D., Edgman-Levitan, S., Edmondson, A., . . . Wachter, R. (2018). Transforming concepts in patient safety: a progress report. *BMJ quality & Safety*. doi:10.1136/bmjqs-2017-007756
- Gherardi, S., and Nicolini, D. (2000), "To transfer is to transform: the circulation of safety knowledge", *Organization*, Vol. 7, No. 2, pp. 329-348.
- Hernes, T. (2014)., *A Process Theory of Organization*, Oxford: Oxford University Press.
- Hollnagel, E. (2014), *Safety-I and Safety-II: The past and future of safety management*. Boca Raton, FL: CRC Press.
- Lucian Leape Institute. (2012), *Order from chaos: accelerating care integration*. Boston, MA: National Patient Safety Foundation.
- Kobewka, D., van Walraven, C., Turnbull, J., Worthington, J., Calder, L., and Forster, A. (2016), "Quality gaps identified through mortality review", *BMJ Qual Saf*, Vol. 26, pp. 141-149.

- Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- May, C., Cummings A, Myall M, Harvey J, Pope C, Griffiths P, et al. (2016), “Experiences of long-term life-limiting conditions among patients and carers: what can we learn from a meta-review of systematic reviews of qualitative studies of chronic heart failure, chronic obstructive pulmonary disease and chronic kidney disease?” *BMJ Open*, Vol. 6, No. 10.
- May, C., Eton, DT., Boehmer, K., Gallacher, K., Hunt, K., MacDonald, S., Mair, FS., May, CM., Montori, VM., Richardson, A., Rogers, AE., Shippee, N. (2014), “Rethinking the patient: using Burden of Treatment Theory to understand the changing dynamics of illness”, *BMC Health Services Research*, Vol. 14, No. 14, pp. 281.
- May, C., and Finch, T. (2009), “Implementing, embedding, and integrating practices: An outline of Normalization Process Theory”, *Sociology*, Vol. 43, No. 3, pp. 535-554. doi:10.1177/0038038509103208
- McMurray, A., and Cooper, H. (2016), “The nurse navigator: An evolving model of care”. *Collegian: The Australian Journal of Nursing Practice, Scholarship & Research*, Vol. 24, pp. 205-212.
- Messman, J. (2008), *Uncertainty in medical innovation: experienced pioneers in neonatal care*. Basingstoke: Palgrave Macmillan.
- Mol, A. (2002), *The body multiple: ontology in medical practice*. Durham, NC: Duke University Press.
- Morris, S., Hunter, R., Ramsay, A., Boaden, R., McKeivitt, C., Perry, C., Fulop, N. (2014), “Impact of centralising acute stroke services in English metropolitan areas on mortality and length of stay: difference-in-differences analysis”, *BMJ*, Vol. 349, pp/ g4757.
- National Patient Safety Agency (2007), *The fifth report from the Patient Safety Observatory. Safer care for the acutely ill patient: learning from serious incidents*, London: National Patient Safety Agency.
- Nicolini, D. (2012)., *Practice Theory, Work and Organization: An Introduction*. Oxford: Oxford University Press.
- Osborne, S., Radnor, Z. J., & Nasi, G. (2013), “A new theory for public service management? Towards a service-dominant approach”, *American Review of*

Public Administration, Vol. 43, No. 2,
<http://journals.sagepub.com/toc/arpb/43/2>.

Pentland, B., & Reuter, H. (1994), "Organizational routines as grammars of action", *Administrative Science Quarterly, Vol. 39*, pp. 484-510.

Agency for Healthcare Research and Quality (2013), *Re-engineered Discharge (RED) Toolkit: Tool 1 Overview*. Rockville, MD: Agency for Healthcare Research and Quality.

Strauss, A. (1964), *Psychiatric Ideologies and Institutions*. New Brunswick: Transaction Publishers.

Strauss, A. (1988), "The articulation of project work: an organizational process", *The Sociological Quarterly, Vol. 29, No. 2*, pp. 163-178.

Strauss, A., Fagerhaugh, S., Suczet, B. and Wiener, C. (1985), *The Social Organisation of Medical Work*. Chicago: University of Chicago Press.

Telegraph Reporters. (2012), Patients die due to flat batteries in hospital equipment. *Telegraph*. Retrieved from <http://www.telegraph.co.uk/health/healthnews/9589157/Patients-die-due-to-flat-batteries-in-hospital-equipment.html>

Waring, J. (2009), "Constructing and re-constructing narratives of patient safety", *Social Science & Medicine, Vol. 69, No. 12*, pp. 1722-1731.

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. 14, No. 16*, pp. 297.

Weick, K. E. (1979), *The Social Psychology of Organizing*. London: Random House.

Weick, K. E. (1987), "Organizational culture as a source of high reliability", *California Management Review, Vol. 29*, pp. 112-127.

Weick, K. E. (1995), *Sensemaking in Organizations*. Thousand Oaks, London, New Dehli: Sage.

Weinberg, D., Gittel, J., Lusenhop, R., Kautz, C., and Wright, J. (2007), "Beyond our walls: impact of patient and provider coordination across the continuum of

outcomes for surgical patients”, *Health Serv Res.*, Vol. Feb, No. 42(1 Pt 1), pp. 7-2.

Zerubavel, E. (1979), *Patterns of Time in Hospital Life*. Chicago: Chicago University Press.

Zutshi, A., Peikes, D., and Smith, K. (2014). *The medical home: what do we know, what do we need to know?* Rockville, MD: Agency for Healthcare Research and Quality.