Learning from Everyday Work: Making Organisations Safer by Supporting Staff in Sharing Lessons About Their Everyday Trade-offs and Adaptations

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Contents

We know a lot about the tragic consequences of failures in healthcare. For the past 20 years, there has been much public and media attention on high-profile healthcare incidents with catastrophic outcomes for patients as well as the healthcare professionals involved. Examples come to mind all too easily: the scandal around appalling standards of care at Mid Staffordshire NHS Foundation Trust that resulted in as many as 1200 patients dying needlessly has laid bare systemic failings at this organisation and more widely in the National Health Service (NHS); and the tragic death of 6-year old Jack Adcock at Leicester Royal Infirmary has become synonymous for the excessive pressures and demands that NHS emergency departments place on their staff, many of whom are left without proper supervision and support. These examples paint a dire and sobering picture of specific instances of the poor quality of care provided to patients. Without disregarding the harm and distress that these scandals and incidents have caused, there is another way of looking at this: despite having to work within a notoriously underfunded and overstretched health system, individuals, teams and organisations routinely provide good quality care to millions of patients every day. Aside from dedication and hard work of staff, we know

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C. P. Nemeth, E. Hollnagel (eds.), *Advancing Resilient Performance*,
https://doi.org/10.1007/978-3-030-74689-6_5

surprisingly little about how such daily successes are achieved, how we can learn from these, and how, as a result, care can be improved further.

The mainstream patient safety movement is, arguably, still quite young when compared with other safety-critical industries, such as commercial aviation and the energy and process industries. Patient safety became an important topic for politicians and health policy makers with the publication of the Institute of Medicine report "To err is human" in 1999 in the USA (Kohn et al., 2000), and the subsequent publication of the report "An organisation with a memory" in the UK in 2000 (Department of Health, 2000). These reports used data from earlier studies, such as the now famous Harvard Medical Practice Study (Brennan et al., 1991), and extrapolated these findings to produce figures that captured (and shocked) public imagination: as many as 98,000 patients might die every year in the USA as a result of healthcare errors.

From the start, these reports placed great emphasis on building capacity for organisational learning within health systems. The UK report carries this in its title (*An Organisation with a Memory*), as does the more recent (2013) so-called Berwick report that sets out recommendations for the UK government in response to the findings of the public inquiry into the failings at Mid Staffordshire (National Advisory Group on the Safety of Patients in England, 2013). The Berwick report is called "A promise to learn – a commitment to act", and it suggests that the NHS should aim to become a system devoted to continuous learning and improvement.

With this sustained focus on promoting organisational learning within health systems, one might expect to see significant progress and improvement with patient safety. However, the available evidence suggests differently (Wears & Sutcliffe, 2019). There is now a wealth of literature that demonstrates that healthcare organisations continue to struggle to generate useful learning from past experiences, and that they routinely fail to translate learning into meaningful and sustainable improvements in practice (Kellogg et al., 2017; Macrae, 2015; Peerally et al., 2016). The literature has identified numerous barriers to effective learning from experience in healthcare. Examples include fear of blame and repercussions, poor usability of incident reporting systems, lack of feedback to staff, and lack of visible and sustainable improvements to working practices and the working environment (Anderson et al., 2013; Braithwaite et al., 2010; Sujan, 2015; Tucker & Edmondson, 2003).

The argument in this chapter is that the struggles with organisational learning in healthcare are, at least in part, due to the narrow way in which learning has been cast as learning from incidents (LFI), without proper consideration of how healthcare professionals actually deliver care (the "work-as-done") and how the learning processes need to be embedded and supported within an organisation. This approach to learning only considers the few extraordinary situations, where a system has broken down, that is, organisations are seeing only half the picture at best. A resilience engineering (RE) approach that focuses on learning from everyday work (work-as-done) enables organisations to learn about why, most of the time, things go right, and how the manifold adaptations and trade-offs within a healthcare environment can prevent everyday disturbances and disruptions from turning into catastrophes (Hollnagel et al., 2015).

The next section reviews LFI theory more generally and discusses some of the major shortcomings with the narrow implementation of LFI in healthcare. Then, a short critique of LFI from a RE perspective is given, and an approach to learning from everyday work based on RE thinking is outlined, and its application in a multi-site study is described. The chapter concludes that healthcare organisations should adopt the RE perspective to create a more positive, inclusive, and ultimately more effective learning environment for improving patient safety. The proposed approach is one such way in which organisations can implement a RE approach to organisational learning.

1 Learning from Incidents

The literature and the concepts around organisational learning are very broad, and there is no universally agreed definition (Easterby-Smith et al., 2000). Organisational learning is sometimes described as a continuous cycle of action and reflection, which can take place at different levels, such as individual, group, organisation or even a business sector (Carroll & Edmondson, 2002). In safety-critical industries, an important approach to organisational learning is learning from incidents. Ideally, effective LFI triggers improvements in practice that enhance safety and productivity. The analysis of incidents seeks to reveal contributory factors and underlying causes, which can be addressed in order to reduce the likelihood of incidents recurring.

There is currently a lot of renewed interest in LFI, and the literature on LFI is growing. There has been a collection of papers providing analysis, reflection and critique of LFI in a recent special issue on this topic in the journal *Safety Science* (Stanton et al., 2017). A number of integrative frameworks have been proposed that demonstrate the depth and breadth of LFI (Drupsteen & Hasle, 2014; Jacobsson et al., 2012; Lindberg et al., 2010). These frameworks describe LFI as a process that includes not only the actual investigation of incident data, but also the steps that take place before and after, such as data gathering, identifying improvements, implementation and evaluation.

Lukic and colleagues developed an empirical model for LFI with subsequent extensions and refinements, which emphasises the social and organisational enablers for effective learning rather than the specific steps in the LFI process (Lukic et al., 2012; Lukic et al., 2010). This highlights the fact that learning is a social process and that effort and resource should be dedicated not only to improving the quantity and the quality of the data, but also the social infrastructure for effective learning.

Several papers in the special issue (see above) provide evidence that organisations across different sectors still seem to struggle with getting good LFI processes off the ground (Littlejohn et al., 2017; Margaryan et al., 2017; Rollenhagen et al., 2017). Organisations are often reasonably good at collecting, analysing and disseminating a lot of incident data, but then fail to link this to meaningful learning and changes to practice. In their analysis, Margaryan et al. (Margaryan et al., 2017) very

usefully observe that LFI tends to rely on insights from safety science and human factors, but has so far neglected to tap into the body of knowledge around the wider literature on adult workplace learning. LFI processes usually sit within risk management and safety departments, with little input from learning and development experts. As a result, organisations collect a wealth of incident data, but access to data by itself does not guarantee that any learning or changes to practice take place. This requires opportunities for collective sensemaking, deeper reflection ("double-loop learning" in the terminology of Argyris & Schön (Argyris & Schön, 1996)), and proper linking of safety information to professional practice (Stanton et al., 2017).

In healthcare, policy makers looked towards other industries for guidance and lessons about LFI. The end product was the widespread adoption of Root Cause Analysis (RCA) for the investigation of incidents with significant patient harm, and the implementation of organisation-wide and national incident reporting systems. In the NHS, the National Reporting and Learning System (NRLS) was set up in 2003 to collect and aggregate incident reporting data at a national level. NRLS has built up a repository of millions of incident reports, but there is little evidence that this has contributed to any kinds of significant and sustainable improvements in patient safety (Carruthers & Phillip, 2006; Vincent et al., 2008).

Numerous studies of LFI in healthcare have investigated the barriers to reporting and learning, and there appears to be an emerging consensus that in its current shape and form, it is simply not working. As alluded to in the previous section, criticisms that have been raised include inadequate feedback to staff who contribute incident reports, lack of visible improvements to clinical practice, the development of weak improvement interventions focusing largely on staff education and procedure compliance, and the use of LFI as a management rather than improvement approach (Westbrook et al., 2015). In addition, LFI can be perceived as contributing to the existing blame culture, because there is a temptation to focus on what individuals did wrong. The exclusive focus on LFI as a vehicle for organisational learning in healthcare also neglects other, more informal learning mechanisms, such as local communities of practice (Sujan, 2015). The breadth of these criticisms has prompted some to argue that LFI (in its current narrow implementation) is part of the problem of the lack of progress on patient safety, rather than part of the solution (Cook, 2013; Kellogg et al., 2017).

Arguably, this might be a conclusion that is debatable, and there are some promising recent attempts to make LFI work better in the NHS. The establishment of an independent investigation body, the Healthcare Safety Investigation Branch (HSIB), has opened up a new form of organisational learning based on LFI for the NHS (Macrae & Vincent, 2014). HSIB receives voluntary significant incident reports from organisations, and selects specific ones for further investigation based on national priorities and their relevance to the NHS as a whole. In the investigation process, HSIB investigators within a multidisciplinary team speak to people at the organisation, but also consider similar incidents and speak to stakeholders and experts more widely with the aim of moving beyond the specifics of the incident

under investigation. So far, this appears to be a very good approach for LFI at a national level, but through its set-up as a national body HSIB will most likely have limited impact on local processes for organisational learning.

2 Rationale for Learning from Everyday Work

How can adopting a RE perspective help to support organisations with their learning processes? A detailed critique of LFI was published in one of the contributions to the special issue in *Safety Science* (Sujan et al., 2017), and in this section only a couple of key arguments are summarised. Put simply, the core argument is that LFI with its focus on events that have gone wrong learns about the wrong things (or gives only a partial and skewed account) and tends to generate a limited set of interventions that often do not "stick" because they neglect the social and informal aspects of the learning process.

The LFI process kicks in when an incident happens. By definition, something has gone wrong, and the search for root causes and contributory factors begins. Maybe an elderly patient deteriorated at home and came to harm after they had been seen by an ambulance crew who had decided the patient would not need to be taken to the hospital. Simplifying for argument's sake, the LFI approach would try to understand what contributed to this adverse event, and then suggest interventions to prevent it from happening again. Maybe the clinical skills of the paramedics were not sufficient, and they require additional training. Maybe the paramedics were unsure or unaware of the applicable protocols, and so these could be updated and disseminated to all paramedics. Maybe there could be more training.

What is missing here is an appreciation of how paramedics make these kinds of difficult decisions. Frequently, there are other patients in the community who also require an ambulance, and paramedics need to make a trade-off whether to take a patient to hospital or whether to attend to the next emergency. Hospital emergency departments are busy places, and taking patients needlessly contributes to overcrowding and puts patients at risk. Again, a trade-off is necessary. Are there supporting services available in the local community? If so, it might be safer to leave the patient at home than to take them to an already busy emergency department. A RE approach aims to understand precisely such everyday trade-offs and adaptations. The purpose of learning then changes from a search of what went wrong and how it might be prevented, to what kinds of trade-offs and adaptations clinicians make and how these might be supported. The nature of interventions from a RE perspective needs to change from barriers that target specific failure sequences (e.g. protocols and training) to broader approaches that enhance the ability to anticipate, to adapt, to monitor and to learn (the resilience "cornerstones" or resilience abilities) (Hollnagel, 2010). It can be done, for example, by fostering trust and relationships as facilitators and enablers of adaptation; or by promoting psychological safety as a mechanism for bridging the gap between work-as-imagined and work-as-done.

A corollary to this shift in focus from incidents to everyday work is that organisational learning in healthcare needs to become more social and democratic. Incident reporting systems and root cause analyses are usually owned and overseen by risk management departments or patient safety officers, with little ownership by frontline healthcare workers. However, in practice, many of the actual improvements take place in less formal settings, such as lunchtime working groups or interdepartmental teams that have formed temporarily around a common improvement objective (Sujan, 2015). In other areas of the literature, the importance of such informal communities of practice has been recognised and documented (Wenger & Snyder, 2000). Staff also need to have sufficient psychological safety to speak up and create learning in dialogue through constructive criticism of ideas and views, quite unrelated to serious incidents.

Healthcare organisations have largely failed to embrace such efforts as part of their strategies for harnessing learning and improving patient safety. Organisational learning in healthcare is still limited by the dichotomy between formal risk management efforts aimed at bringing work-as-done in line with work-as-imagined, and informal frontline efforts directed at improving everyday clinical work. RE appreciates these latter efforts and aims to embed them within the organisational learning strategy.

3 A Resilience Engineering Approach

A specific example of an approach to organisational learning in healthcare based on RE thinking is the Proactive Risk Monitoring (PRIMO) approach (Sujan, 2012). The key characteristics of PRIMO are summarised in Table 1.

Table 1 Characteristics of the PRIMO approach to organisational learning

Hassle narratives	Information about work-as-done (i.e. the tensions and contradictions, which staff experience, and the trade-offs and adaptations they make) are identified empirically based on the qualitative analysis of narratives describing problems in the work environment submitted by staff.
Participation and feedback	In order to overcome the known barriers to conventional incident reporting, staff participation is encouraged through the submission of free-text narratives. Regular feedback to staff is emphasised.
Long-term and short-term improvements	In order to maintain staff participation and to combat participation fatigue, fast and visible improvements (“quick wins”) to the local work environment are an important part of the PRIMO strategy that complements its longer-term aim of strengthening resilience abilities.
Staff ownership	PRIMO recognises that organisational learning is a social and participatory process. It emphasises staff ownership of improvement interventions.

4 Hassle Narratives: Capturing Work-as-Done

On the surface, PRIMO is a very simple approach based on eliciting narratives about everyday work from frontline staff. In principle, this could be done through interviews, where staff are asked to describe their everyday work, or by observing practice supported by RE tools such as the Functional Resonance Analysis Method (FRAM) (Hollnagel, 2012). These are excellent methods for research as well as for specific improvement projects, but they can also be very time-consuming, and might not be sustainable as routine practice within an ordinary healthcare setting. An alternative way of getting at information about work-as-done is by asking staff to write down narratives and stories, which can then be analysed. People will require some guidance or a "hook" to get them started. In PRIMO, this hook is the notion of hassle. Staff are asked to write about something that caused them problems during their work over the past week or that made them think or approach aspects of work differently. In some of the hospitals where this approach was adopted, it also became known as "hassle reporting". Learning from hassle is a complement to the mandatory investigation of serious adverse events. When something goes wrong, and a patient is harmed, there are issues around responsibility, accountability and blame that need to be carefully navigated. On the other hand, people experience hassles on a daily basis, and they are usually more than happy to share their hassles with people who are willing to listen. Importantly, though, analysis of hassle narratives provides useful insights into work-as-done. When people report hassles in their narratives, they frequently do not simply stop at saying things such as "*we were short of staff…*". Instead, the narratives typically continue with an account of what happened next, *"…and then I told other departments to expect delays, and I rearranged workflows…*". In this way, elicitation of hassle narratives is an excellent and very simple way of gaining deeper insights into the daily tensions and contradictions that people face (the hassles), and the trade-offs and adaptations they make. A brief example is shown below.

Example of a Hassle Narrative from a Pharmacy Setting:
"*The lead technician made me aware that the CT scanner had been down and there were 37 patients waiting for an appointment, if the scanner was fixed later today, we may see an impact. This would increase the workload on an already busy day. I told the lead clinician that I'd chase this up with [the Clinical Director] to find out if there was anything we could do to prepare for this*".

The hassle narrative provides an example of how a technician and a pharmacist create shared awareness of a problem to support anticipation of potential follow-on implications, and how these might be best dealt with. From a RE perspective, potential solutions might focus on identifying and strengthening ways of supporting the creation of shared awareness and corresponding information flows. This contrasts with more traditional interventions that might focus on increasing the reliability of the CT scanner.

5 Participation and Feedback: Overcoming the Barriers

The literature on learning from incidents describes numerous barriers to reporting, including lack of feedback, difficult incident reporting forms and systems, and lack of time (Benn et al., 2009; Lawton & Parker, 2002; Macrae, 2015). PRIMO addresses these barriers by encouraging staff participation and feedback. PRIMO aims to make it as simple as possible to contribute safety information, to give ownership over improvements to staff, and to focus on both short-term as well as long-term improvements. As opposed to structured incident report forms that force the user to adhere to a specific reporting format, hassle narratives can be submitted in people's own styles without the need for a structured form or template. They can be submitted in different formats, for example, electronically via a web platform, via email, or as a written piece of paper for those who do not have easy access to computers at work. While there is normally a designated PRIMO lead who will collect the hassle narratives and have a first look at them for themes (or to de-identify sensitive issues), this lead person is a member of staff within the specific unit or department rather than an (more or less) anonymous analyst within the risk management department. After the initial analysis, feedback is given to staff in team and departmental meetings, where issues can be discussed further.

6 Long-Term and Short-Term Improvements: Combating Participation Fatigue

A major weakness of current incident reporting systems is that they produce little actual change (Shojania, 2008). The perceived lack of learning and absence of relevance to the local work environment may have a detrimental impact on the willingness of staff to contribute to incident reporting (Firth-Cozens et al., 2004; Shojania, 2008). The result is that over time less and less useful information is generated from incident reporting systems as staff settle into a pattern of reporting only that which they know needs to be reported for bureaucratic and governance reasons. This means that the same things get reported over and over again (e.g. patient falls), but no new information becomes available, and no learning takes place (Macrae, 2015).

PRIMO addresses this participation fatigue by encouraging staff to focus not only on strategic longer-term improvements, but *also* on "quick wins", that is, fairly simple improvements that can be made within a short period of time. Quite obviously, quick wins (or low-hanging fruits) are seldomly the answer to complex problems. This has been well documented in the literature. It has been recognised that many of the numerous and well-intentioned local quality improvement projects do not result in sustainable improvements, and that they might be ineffective of addressing problems at a systems level (Dixon-Woods & Pronovost, 2016; Illingworth, 2015). Many stubborn issues require understanding of dependencies across departmental boundaries and can be addressed only through collaboration and more

fundamental change at the organisational or institutional level. Why, then, the focus on the simple improvements, the quick wins? It is in the nature of longer-term improvements that they take months or longer to get off the ground. In the meantime, staff who contributed safety information typically see no changes within their local work environment. This is where the importance of these quick wins in PRIMO comes in, because they contribute to generating the momentum and the positive culture that is required for putting in place sustainable longer-term improvements. Even small local changes, such as having designated spaces for equipment that often goes missing, can make significant contributions towards maintaining staff engagement while strategic longer-term interventions are designed, implemented and evaluated.

7 Staff Ownership: Making Learning a Social Process

Ownership for organisational learning frequently is allocated to a department, for example, the risk management or clinical governance department. These departments collect, analyse and distribute safety information. Accordingly, learning from incidents has been described and criticised as focusing narrowly on dissemination of safety information without proper consideration of professional practice (Margaryan et al., 2017). Several writers have suggested that organisations need to reframe learning as a social and participative process that facilitates informal ownership of improvements, and collective sensemaking and reflection (Lukic et al., 2012; Macrae, 2015; Stanton et al., 2017).

PRIMO aims to support the social infrastructure for learning by fostering staff ownership and supporting communities of practice (Wenger & Snyder, 2000). A crucial element of PRIMO is that improvement interventions are not imposed from outside, but are generated within local meetings, and responsibility and authority for leading on specific improvements are given to staff volunteers who are closely associated with the particular process or pathway under consideration. In this way, learning can occur within the department and is directly linked to clinical practice.

Building communities of practice can be supported in various ways. Frequently, communities of practice arise spontaneously around lunchtime working groups of enthusiastic individuals working collaboratively on issues of common interest, which often cross departmental boundaries. Another approach to support communities of practice within PRIMO might be the use an electronic platform with social media functions to collect and discuss hassle narratives (see Fig. 1 for an anonymised example populated with information from a pharmacy study site).

The PRIMO approach is based on these four principles described above, but it is not enshrined further in prescriptive implementation details. This is because every department is different and will have different preferences and requirements. PRIMO can be adopted in different ways as long as the main principles are maintained.

Fig. 1 Web interface for PRIMO

8 Case Studies

PRIMO Evaluation Study The PRIMO approach was developed in collaboration with one hospital as part of the Safer Clinical Systems programme (funded by the Health Foundation, a UK charity). Following the successful pilot study, the approach was then rolled out within 10 hospitals, two of which were selected for in-depth study and evaluation of the approach. The hospitals were provided with an introduction to the approach during a workshop. The two evaluation sites were visited on a

monthly basis over the course of the 18-months study. During these meetings, the researcher acted as a critical friend and advisor, but project teams were free to implement and use the approach in a way that seemed most applicable and fruitful in their environment. The reason for taking this approach was twofold. On the one hand, it was recognised that learning from hassle would need to be tailored to the specific setting. On the other hand, it seemed prudent to test whether such an approach could function without close supervision by an external expert, that is, whether non-specialists could own and run the approach.

Study Sites The two evaluation study sites were English NHS hospitals. PRIMO was implemented in the Radiology department of the first hospital (site A), and in the Surgical Emergency Admissions Unit (SEAU) at the second hospital (site B). The two departments were chosen to reflect different characteristics: on the one hand a highly structured diagnostic services environment, and on the other hand a busy and dynamic ward environment that provides emergency services also during the night-time.

The radiology department at site A consists of the main X-ray department and a number of specialist modalities such as CT (computed tomography), MRI (magnetic resonance imaging) and nuclear medicine. The whole department employs approximately 90 staff. Some of these are employed part time. The roles within the department range from clerical, radiographic assistant, assistant practitioners, radiographers, specialist radiographers, advanced practitioners and consultants.

For the purpose of the study, the focus was on the main X-ray department, rather than the specialist modalities. Within the main X-ray department, there are four general rooms with a fast throughput of patients ranging from fully mobile to immobile, seriously ill patients. Referrals come from a wide range of areas, including A&E, GPs, outpatient clinics and hospital wards. There are also two specialist rooms where interventional procedures are performed. Throughout a typical working day, approximately 350 examinations are performed.

The SEAU at site B is part of the Emergency Assessment Unit (EAU), which houses also medical emergency assessment services. There are 24 beds available on EAU. EAU has a large team of medical, surgical, nursing, clerical and housekeeping staff. Referrals come from a wide range of areas, including ED, GPs, and outpatient clinics. There are between 600–800 admissions to SEAU per month. Doctors working in SEAU are not based on the ward, but are there on a rotational basis during their on-call period.

Data Collection and Analysis Data were collected from the individuals closely involved at each site, and from interviews with a wider range of staff. During the study, the implementation lead at each site kept an implementation diary. After the implementation period, in-depth interviews were conducted with members of the implementation teams (see Table 2). The implementation diaries and the interviews were analysed qualitatively through Thematic Analysis to identify what was done, any barriers and obstacles encountered, and successes achieved.

Table 2 Interview participants from the implementation teams

Study site	Role	Participant ID
A	Head of Radiology	A/IL-01
A	Radiographer (Implementation Lead)	A/IL-02
B	Surgical Trainee (Implementation Lead)	B/IL-01
B	Research Nurse	B/IL-02
B	Staff Nurse (PRIMO champion)	B/IL-03
B	Junior Doctor	B/IL-04

Table 3 Interview participants by phase and role (site A)

Pre-intervention		Post-intervention	
ID	Role	ID	Role
A01	Radiology Assistant	A10	Radiographer
A02	Radiographer	A11	Senior Radiographer
A03	Assistant Practitioner	A12	Assistant Practitioner
A04	Radiographer	A13	Radiographer
A05	Assistant Practitioner	A14	Radiographer
A06	Radiographer	A15	Radiographer
A07	Radiology Assistant	A16	Assistant Practitioner
A08	Medical Secretary	A17	Radiographer
A09	Radiographer		

Table 4 Interview participants by phase and role (site B)

Pre-intervention		Post-intervention	
ID	Role	ID	Role
B01	Ward Sister	B11	Healthcare Assistant
B02	Matron	B12	Staff Nurse
B03	Acute Care Practitioner	B13	Healthcare Assistant
B04	Clinical Educator	B14	Staff Nurse
B05	Foundation Year 1 Doctor	B15	Foundation Year 1 Doctor
B06	Foundation Year 2 Doctor	B16	Foundation Year 2 Doctor
B07	Foundation Year 2 Doctor	B17	Ward Sister
B08	Foundation Year 1 Doctor	B18	Staff Nurse
B09	Staff Nurse		
B10	Healthcare Assistant		

Semi-structured interviews with staff prior to the implementation of PRIMO and after the implementation period were undertaken to describe their safety-related attitudes and behaviours, and to determine any changes over the study period (see Table 3 and Table 4).

9 Learning: Practical and Social

Both study sites identified and implemented a range of improvement interventions. Many of these interventions addressed the reported hassles directly. For example, in response to missing and misplaced equipment in X-ray investigation rooms, an intervention based on lean thinking was developed to improve housekeeping. Similarly, on the surgical emergency admissions unit, drip stands went frequently missing as colleagues from other wards borrowed these and never returned them. A colour-coding scheme was devised to allow easy identification of drip stands that belong to the admissions unit. Arguably, such improvement interventions are not ground-breaking nor specific to RE. However, they empower people to contribute to improvements in their work environment, and they provide visible feedback that staff ideas and concerns are taken seriously.

The more profound impact of PRIMO was on the frequently neglected social and informal aspects of learning. The PRIMO approach to understanding and learning from work-as-done provided a vehicle to staff to discuss, share ideas and – importantly – engage with colleagues across departmental boundaries. For example, one of the main strategic improvement activities in the radiology site was around addressing the communication with theatres requesting radiographers to support ongoing surgery with mobile imaging equipment. This communication is time-critical and was felt to be difficult. Requests for radiographers often come in at short notice and are frequently not coordinated as they can originate from different specialities. As a result, the main radiology department might be left without appropriate cover and without appropriate supervision arrangements for junior members of staff. There might also be delays in performing the imaging in the theatre because there is only a limited number of mobile machines available, and this can cause delays in surgery and affect patient outcomes. Communication across departmental boundaries in a hospital is never an easy matter to address due to differing priorities and unclear allocation of responsibility. However, with the evidence generated from the analysis, the radiology team felt well prepared to initiate a dialogue with the theatre manager to raise awareness of this issue. Subsequently, an electronic booking diary and a standard operating procedure for booking the mobile imaging equipment were developed. This was supported by an interdepartmental working group – a community of practice – which was established specifically for this purpose.

10 Conclusion

There is broad agreement that organisational learning in healthcare is a key mechanism for improving patient safety, but at the same time frustrations with existing approaches based predominantly on learning from incidents are running high, fuelled by lack of progress and staff disengagement with learning processes. This chapter argued that current LFI processes in healthcare focus their learning on the

wrong things (i.e. things that go wrong), and that they neglect the social dimensions of learning.

The chapter described an approach to learning based on RE principles that focuses on everyday work, and some of the learning that was generated as a result of running this approach in study hospitals was presented. Looking only at the practical and more tangible improvements, such as improved housekeeping, colour coding of equipment, an electronic booking diary, and a standard operating procedure, one might ask how this moves beyond existing approaches. This is a valid question, but there is a danger that one approaches learning based on RE with the same expectations and measures as one would use to assess LFI. In LFI as applied in healthcare settings, the development and implementation of such practical improvements (or safety barriers) are, in many cases, the only purpose. Within RE, the focus is on resilience abilities, and the impact on the social dimension of learning is, arguably, more important than the specific improvement interventions. Hence, we need to consider whether and how an organisation's abilities to anticipate, to adapt, to monitor and to learn have been affected. In this chapter, it was argued and attempted to demonstrate that the proposed RE approach to learning from everyday work has stimulated staff participation in the learning process, has created ownership for learning among staff, and has furthered the formation of communities of practice that are able to build relationships and dialogue to improve patient safety.

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