Summary report: The impact of service change on doctors’ training

1.1 Context

Service change is an all-pervasive phenomenon within the NHS. Service change is defined by NHS England as any process that affects what NHS services are delivered, including where they are delivered. Service change can be planned or unplanned. Data from General Medical Council (GMC) enhanced monitoring reports and other intelligence suggests that service change can influence the quality of postgraduate training.

This research examined four types of large-scale reconfiguration, both planned and unplanned. Planned service change studied included: (1) an acute hospital reconfiguration involving sites being changed into either ‘hot’ i.e. acute services or ‘cold’ for routine medical care, (2) a Trust/Health Board merger where three geographically located hospitals amalgamated into one single trust with specialist services relocated to particular sites, and (3) a regional reconfiguration where major specialist centres are planned over a wider geographical patch. This study also examined (4) a form of unplanned service change, which was precipitated by the Covid-19 pandemic.

1.2 Purpose

The purpose of this research was to gain an in-depth understanding about how service change impacts on doctors’ training.

Research questions

1. Is doctors’ training being adequately considered within service change?
2. What are the issues that arise during service change in relation to doctors’ training?
3. What impact and risks can service change have on doctors’ training?
4. What types of service change pose the most risk to doctors’ training?
5. How can the GMC pinpoint when/where this is happening?
6. What is best practice when implementing service change in order to protect doctors’ training?

1.3 Methods

This was a large-scale qualitative study interviewing a total of 95 participants. Phase 1 involved interviews with experts: defined as senior leads with responsibility for service change within the NHS, including from educational bodies, and trainee representatives (n=15). Experts provided a strategic and high-level perspective on service change implementation. Phase 2 involved an in-depth examination of the actual impact of service change at three case studies who were undergoing service change, covering eight hospital sites across two UK countries. At these sites Trust/Health Board Leads (n=6), directors, associate directors of medical education and supervisors (n=30), and trainees across all grades (n=44) were interviewed. Research commenced in September 2019 but was halted in March 2020 because of the global pandemic. At the time of cessation, phase 1 had been completed and phase 2 had started with all Trust/Health Board lead interviews being completed, as well as, seven out of a total of 74 interviews with supervisors and trainees. Research restarted in September 2020 and all of the three original case studies agreed to continue to be part of the study. Consequently, the research examined the impact of the pandemic on training as a form of unplanned service change, as well as, continuing to examine the impact of planned service change.
1.4 Main findings

The nature of service change
Service change was defined as a large-scale reconfiguration of services driven by the desire to smooth patient pathways and reduce duplication, through centralisation and integration. Workforce, finances, and variability in patient outcomes were regarded as the main drivers of the planned service change.

Two approaches to the implementation of service change were identified: ‘top-down’ (imposed from above) and ‘bottom-up’ (driven by front line workers) approaches. The implementation of service change was typically perceived of as a ‘top-down’ process and hard to influence, either nationally or locally. There was often an implicit assumption that both knowledge of, and agency in, service change was the ‘territory’ of senior career grades. However, ‘bottom-up’ approaches, when service change was either led by trainees or where training was fully considered in designing change, had positive outcomes for trainee satisfaction, service, and retention. Flattening of hierarchies in unplanned service change resulted in successful trainee-led initiatives which improved frontline care.

The extent to which doctors’ training is being adequately considered within service change
There was an ambition to improve training through reconfiguration and practical benefits could be realised through this process (e.g. new learning opportunities), but the majority view was that training was not fully considered. The dominant organisational need was to provide service and workforce. Whilst top-down approaches were prevalent, there was a consensus that trainees should be involved in the process because it (i) could be an educational experience, (ii) would make them feel valued, and (iii) they had unique insights which would improve service as well as training.

Whilst experts and leaders were highly mindful of service change, there were lower levels of awareness in the supervisors and trainees interviewed. Heightened levels of awareness were present for those where service change was active, i.e. in the merger case study and particularly in unplanned service change. In all types of service change, there was a lack of communication about how service change would affect doctors’ training. In the case study sites where trainees were actively involved in the service change, both trainees and supervisors felt it had led to better training experiences and better service provision.

The issues that arise during service change in relation to the doctors in training
There was a strong sense that service trumped training needs. Increasing the clinical workforce (often achieved through creating new healthcare roles, like physician associates) could relieve the pressure of work but also reduce trainees’ access to training opportunities because of having to compete for clinical experiences and/or supervision. The case study sites aimed to shift from a ‘management-led’ to a ‘clinically-led’ organisation, but the expertise and appetite to lead change was noted to be absent by experts.

The impact and risks service change can have on doctors’ training
All types of service change impacted both positively and negatively on doctors in training with wide ranging ramifications on professional, educational, interpersonal, and personal challenges, many of which are unanticipated and emerge as change proceeds. Service change impacts differentially: by speciality, by training grade, and by site. Impacts identified in this study were as follows:

- **Learning opportunities**: service change had positive and negative impacts on the amount and diversity of clinical exposure. For example, centralisation of services improved clinical case mix at ‘hot’/acute sites and enabled trainees to have more specialist supervision. Reduced learning opportunities occurred from narrowing clinical exposure, due to new models of care which occurred in planned (e.g. telemedicine) and unplanned service change (e.g. clinic experience).
Supervision: service change improved training by increasing access to supervisors at ‘hot’, merged, and reconfigured sites with centralised specialist centres which was particularly beneficial for senior trainees needing specialised supervision. Pandemic related change enhanced supervision too, because consultants delivered most of the front-line care. However, in planned service change, cross-site working and travel could reduce time for supervision or impact the consistency of the supervisor workforce; and when ‘cold’ sites became ‘hotter’, trainees felt vulnerable due to the lack of supervisors at these sites.

Trainee experience: supervisors were unclear as to whether the negative impact of service change alone was responsible for dissatisfaction, and they considered factors like workload playing a role too. However, supervisors did identify that planned service change could improve trainee satisfaction, because supervisors were able to re-organise the way that care was delivered and embed greater supervision.

Workplace relationships: When service change required trainees to work flexibly across Trusts/Health Boards in large, complex organisations, this could decrease trainees’ sense of belonging. Trainees and supervisors also noted moving between sites and departments could interfere with building relationships.

Workload: service change generated additional work. Such as adapting to changes to Trust/Health Board infrastructure, learning to navigate new IT systems/processes, understanding changing clinical pathways, keeping up to date with latest guidance and communication, and rectifying the unintended consequences of service reconfiguration. The workload of supervisors and trainees was affected regardless of the type of change.

Wellbeing and work-life balance: the demands of increased travel upon caring responsibilities impacted negatively on trainees and supervisors. All service change is stressful, but the psychological impact of unplanned service change appeared greater. It did, initially, improve camaraderie and teamwork, but working in intense clinical environments, as well as restrictions on day-to-day life, negatively impacted on wellbeing.

The key risks identified were where service change reduced access to learning opportunities and supervision. Moving trainees to new sites or redeployment to different departments negatively affected relationships with colleagues and familiarity with hospital systems. Medical error was reported to be caused by the additional workload that service change generated, coupled with its impact on wellbeing and work-life balance. There are also long-term risks on recruitment and retention of trainees, making its consideration of critical import.

Types of service change that pose the most risk to doctors’ training

All types of change examined in this study had benefits and risks for training. Below are some examples of how the risks for training varied by type of change, speciality and training grade. There are many more examples in the main report.

Case study A (regional reconfiguration): if foundation doctors were not placed at hospital sites where a major centre was then they may miss exposure to common medical conditions. For example, if they were not at the site where the hyper-acute stroke unit was based then foundation doctors would not experience the presentation and management of patients with coronary vascular accidents. Another feature more prominent in regional reconfigurations was that trainees were often required to move sites to provide care. This meant that they had less strong bonds with staff at the various sites and this coupled with increase travel distanced them from professional and personal support networks.

Case study B (merger): in this reconfiguration specialist services were consolidated to one site rather than being run at each of the three hospitals involved. This impacted more on higher-level speciality trainees because if they were at a site without specialist provision, they could miss important sub-speciality clinical experiences. For example, if particular types of surgery didn’t happen at a particular hospital site then that
would impoverish anaesthetic training because trainees would not gain experience of specific procedures and associated anaesthetic techniques. However, this impact varied by the clinical speciality of the trainee because not all clinical services were reconfigured.

**Case study C (‘hot’ and ‘cold’ reconfiguration):** In this reconfiguration, trainees and supervisors worked across the two hospital sites. This impacted on supervision and rather than a constant supervisor presence on a particular ward, the model of supervision moved to a more on-call mode where different senior staff were present. There were advantages and disadvantages to this change. It increased exposure to different styles of supervision but less constant observation of a trainee by one supervisor could potentially undermine the quality of feedback. ‘Cold’ sites were regarded as being less busy and aimed to permit more time for formal education whereas ‘hot sites’ enabled trainees to see a broader range of clinical cases. Foundation doctors were reported to feel working at ‘cold’ sites as mundane, however, senior trainees had positive experiences from better opportunities to deliver outpatient care.

**Unplanned service change (caused by the pandemic):** In this reconfiguration many staff redeployed to frontline care. For foundation doctors this could be regarded positively with increased exposure to acutely unwell patients as well as very high levels of supervision. For some foundation doctors however this prolonged and rapid redeployment was perceived negatively because they missed essential clinical experience (e.g. missing out on a surgical placement and concerns about missing acute surgical emergencies in the future). For core and higher trainees, the experience varied according to speciality, so for example surgical trainees not redeployed to the front line had increased time for formal learning opportunities, however, this was not the case for medical trainees.

Where service change was wholesale, fast, and the structural changes less bounded (that is, ‘cold’ sites becoming ‘hotter’ as in acute hospital reconfigurations, and green areas becoming red as in unplanned service change), the risks for doctors in training appeared to be greater.

Our analysis of data, pre and during the pandemic revealed similar types of risks associated with unplanned change. However, the unplanned service change amplified the nature of some of those risks. For example, redeployment was a feature in planned and unplanned service change, however the significance of workforce-wide, extended periods of redeployment was exemplified by unplanned service change. Unplanned change also often needs to be implemented rapidly which can result in more unanticipated consequences and additional stress for trainees. Despite this, a ‘bottom-up’ approach involving trainees was more common in unplanned service change which had positive results on training.

During implementation of service change, clinical, organisational and educational governance mechanisms can be used to detect problems, e.g. incident reporting/ the GMC National Training Survey. Soft indicators like sickness absence, occupational health referrals, vacancies in training rotations, and poor morale could also pinpoint risk. However, the variability of risk and the dynamic nature of change means that high-level metrics will not tell the whole story, frequent monitoring of trainees’ and supervisors’ views is also needed during change.

**Best practice when implementing service change in order to protect doctors’ training**

Risk is minimised when organisations have a culture of valuing training and there is active engagement at Board level. Checklists and standard operating procedures could be used to ensure different eventualities are being accounted for and have a clear associated action plan. Support from external agencies with an interest in training helps to set clear parameters about what changes to training is acceptable and helps to maintain this focus during implementation. Involving trainees, who are a fresh pair of eyes, allows a deeper understanding about the ways in which service changes training and the delivery of frontline care. Service change has many opportunities for trainees, but explicit communication is needed to help them understand what these are, as well as how these can benefit their development of both clinical and generic professional capabilities.
1.7 Implications

The research has implications for practice, the way service change is devised, implemented, communicated, and evaluated, as well as, policy.

**Implementation of service change:** the planning of service change is a lengthy process and requires widespread stakeholder engagement. Stakeholder engagement with trainees, supervisors and those responsible for training appears to be absent, and the latter’s subsequent inability to influence service change is problematic at national and local levels. This has implications for policy. External guidance from organisations involved in training could help to prioritise training during change. Greater and earlier involvement of external bodies with a responsibility for training, like the GMC or Deaneries/Health Education England could highlight the key issues that need consideration when implementing change at national and local level. They could also act as conduits for sharing best practice with organisations undergoing reconfiguration.

**Involving trainees in service change:** Ways to engage trainees as partners through, for example, their inclusion on Trust/Health Board committees would facilitate sharing of knowledge about the impact of service change on frontline care and lead to deeper insights about the ways in which service change affects patients and trainees. Furthermore, working with trainees would provide them with useful educational experiences thus preparing them to lead change in the future.

**Communicating and understanding change:** better communication with tailored information detailing the impact of service change on training would reduce uncertainty and anxiety in trainees as well as supervisors. Dialogue with trainees supports positive outcomes through understanding the impact of change on frontline care, and increases their sense of feeling valued.

**Curriculum:** service change requires updating postgraduate curricula caused by changing clinical models of care. Curricula also needs to provide greater coverage of health service structures, managing change, and leadership. Including workplace-based opportunities would proactively engage trainees in change, preparing and empowering the medical workforce for leadership roles.

**Workforce:** there are many immediate impacts on training caused by service change but there are long-term ones too which have a strategic importance for Trusts /Health Boards. This study identified three long terms risks. 1) inadequate exposure to clinical specialities, particularly sub-specialties, was reported to negatively influence trainees future career choices. 2) organisations who did not value trainees were less likely to attract ex-trainees to future consultant posts, thereby negatively impacting on the recruitment and retention of tomorrows’ workforce. 3) the exclusion of trainees in the design and implementation of service change deprives tomorrows’ workforce of the skills it needs to maintain the effectiveness of the NHS.

**Evaluation:** High-level metrics miss risky training environments. Therefore, pinpointing risk with the quality assurance mechanisms that currently exist for routine surveillance is problematic because they will miss important risks. Identifying the risks that occur during change needs new approaches with proactive and supportive methods; one that is mindful of the burden faced by the frontline workforce. Better post-implementation evaluation to assess the ongoing and unanticipated impact of service change on doctors’ training would allow for deeper insights regarding the unintended consequences and support the dissemination of best practice.