Evaluation of the RCP’s Chief Registrar programme

Final report

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# Evaluation of the RCP’s Chief Registrar programme

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Foreword

In 2016 the Royal College of Physicians (RCP) launched a pilot of the chief registrar scheme – a new senior leadership role for doctors in training, supported by a bespoke leadership and management development programme provided by the RCP and Faculty of Medical Leadership and Management. Commissioned by the RCP in 2016, a team from the Health Services Management Centre at the University of Birmingham set out to independently evaluate the impact of the scheme on the chief registrars, the individuals and teams they work with, and their wider organisations. This report summarises the findings of the evaluation.

We are very pleased to see that the evaluation has highlighted the positive impact the chief registrar scheme has had on the chief registrars’ personal and professional development, the engagement and morale of junior doctors, and their contributions to service improvement. These findings reflect and reinforce the stories we have gathered from chief registrars and colleagues over the last year, which gave an early indication of positive outcomes for patients, services and the trainee workforce.

The evaluation demonstrates the importance of developing leadership and management capacity at junior levels. We know that the impact of this extends beyond chief registrars to the whole trainee workforce. By providing a ‘bridge’ role between junior doctors, senior clinical leaders and managers, engagement improves and morale increases, with evidence of positive consequences for patient safety, patient experience and rota management.

As the chief registrar scheme enters its second year, we will use the findings presented in this report to develop and improve the scheme. We will also continue building the picture of impact, particularly regarding the return on investment for organisations, which this evaluation has begun to explore. Chief registrar initiatives that improve patient flow, lead to faster, safer discharge and reduce errors will have a positive impact on downstream costs. Quantifying and gathering further evidence of this impact is therefore a priority.

The role of chief registrar represents an important step in delivering the vision of the RCP’s future hospital report. The RCP’s ultimate goal is to see a chief registrar in every acute hospital, and to have the role fully embedded in the system. The expansion we have seen since the pilot demonstrates substantial and growing interest across the UK. We hope this evaluation demonstrates the benefits to many more individuals and organisations of supporting this important leadership development scheme for trainee doctors: our clinical leaders of tomorrow.

Dr Gerrard Phillips

Immediate Past Vice President, Education and Training, Royal College of Physicians
Evaluation of the RCP’s Chief Registrar programme

1. Key messages

a. The Chief Registrar concept arose from the RCP’s Future Hospital Commission Report (2013). A pilot was run in 2016-17. The University of Birmingham was commissioned in 2016 to evaluate the pilot. The evaluation assessed the first cohort of 21 Chief Registrars in 18 NHS acute organisations via a monthly survey and interviews. There was a high degree of variability of both Chief Registrars and of the contexts in which they worked. Therefore they couldn’t be evaluated as a homogeneous cohort.

b. The programme had a positive effect upon both the Chief Registrars and the individuals with whom they worked.

c. There was very strong evidence of personal leadership development of Chief Registrars. This aspect was more pronounced than organisational development.

d. Roughly half were ‘in programme.’ There appeared to be no adverse effect on clinical training of being a Chief Registrar.

e. Chief Registrars were successful in establishing various engagement strategies with their trainee peers. They also enhanced engagement with senior staff and especially gave voice to clinical issues and junior doctor concerns at senior decision-making discussions. This was sometimes, but not always, related to the fora that were established as part of the agreement implementing the new Junior Doctors’ contract. This was associated with tangible improvements in morale amongst junior doctors.

f. There was no direct evidence of the cost effectiveness of Chief Registrar posts in terms of identifying specific savings that could be attributed to, and would offset the cost of, the posts. This was partly because the actual costs were not clear, and partly because Chief Registrars worked in teams making the individual attribution of contribution difficult. However, it is clear that Chief Registrars made significant impacts in a range of projects that are likely to have contributed to cost savings, through improvements in quality and safety.
g. Quality and service improvement (QI) was a central part of the Chief Registrars’ work. The individual QI skills of Chief Registrars were developed through the bespoke development programme and individual projects. However, perhaps more significant was that many Chief Registrars helped to facilitate QI across teams.

h. Chief Registrars also contributed to a number of projects to improve clinical education and training, at all levels.

i. The RCP’s education and training (development) programme was well regarded by the Chief Registrars. The action learning sets were especially valued. Some of the training modules might benefit from being delivered earlier in the programme.

j. The evaluation has identified areas for future development:
   • The process of embedding Chief Registrars in all NHS acute organisations.
   • The mechanisms for disseminating the learning from the current cohort of Chief Registrars.
   • The ways in which projects are completed and benefits sustained after a Chief Registrar leaves.
   • The on-going development of this group of emergent medical leaders and the support for potential new Chief Registrars.
   • The transparency of costs relating to the Chief Registrar programme.

Professor Mark Exworthy and Iain Snelling
Health Services Management Centre
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September 2017
2. Executive summary

a. Background

- The 2013 RCP Future Hospital Commission Report recommended that the post of Chief Registrar be established in order to “liaise between the junior medical staff working in the Medical Division and the chief of medicine and senior clinical managers responsible for delivery of the service…” [para.3.37]. “This leadership development post would have a key role in planning the workload of medical staff in training, medical education programmes and quality improvement initiatives” [recommendation 7].
- The 2016 Chief Registrar pilot project was shaped by the context of the junior doctor contract dispute and lower reported levels of morale among junior doctors, although the timing was coincidental.
- The aims of the Chief Registrar programme were:
  - To explore the role of Chief Registrar in the Future Hospital;
  - To design a relevant development programme for Chief Registrars;
  - To evaluate the role of Chief Registrars; to assess the benefits to patient care, organisational culture, acute care processes, support for junior doctors and allied healthcare professionals and personal professional development;
  - To develop a replicable business model for the Chief Registrar role to encourage its adoption across the NHS.
- Twenty one Chief Registrars were appointed in 2016, working in 18 acute NHS organisations in England, Wales and Northern Ireland.
b. Aims of the evaluation project

- The aims of the evaluation were:
  - To explore the ways in which Chief Registrars are enacting their role,
  - To assess the effectiveness of the Chief Registrar role, through considering the role of individuals and the contexts in which they work, and
  - To recommend future directions in the Chief Registrar role.

- The variability of the Chief Registrars and the contexts in which they worked shaped the evaluation as a series of natural experiments, rather than one with a control group.

- The Health Services Management Centre (HSMC) at the University of Birmingham undertook the evaluation.

c. Methods

- The study adopted a mixed methods design, comprising a monthly survey to all Chief Registrars, qualitative interviews with Chief Registrars and their role set in 6 case-studies, interviews with other Chief Registrars, and ‘key informant’ interviews.

- Ethics approval was secured from the University of Birmingham’s Humanities and Social Sciences Ethical Review Committee (approved 28 September 2016; reference number 16-0715). Participants were assured of anonymity.

d. Findings

- Chief Registrar: the person
  - Prior experience and leadership interest: The cohort of Chief Registrars was heterogeneous in many ways. Some had a long lasting interest in management and leadership, but others were much earlier in their leadership development. Approximately half the cohort were ‘in programme’ and half were ‘out of programme’ for specialist training. There were also differences in the medical role context of the trainees; some trainees were in medical roles which they described as supernumerary or in a new post that had been created for the Chief Registrar. Prior experience was a significant contribution to knowledge of how a
service could be improved, and a motivator that it could be. However, all had
protected time which was seen as essential.

- **Perceptions of the Chief Registrar role:** There was a continuum between being
  seen as a ‘trainee’ leader making use of a development opportunity, and as a
  member of the medical management team, with some specific leadership roles.
  Although the autonomy of their role was broadly welcomed, it did engender
  some uncertainty. There was also some initial concern about the title of `Chief
  Registrar’, mainly among junior doctors but less so among the Chief Registrars or
  senior medical leaders. This concern mostly dissipated as Chief Registrars
  implemented their roles.

- **Chief Registrar: the role and position**
  - **Defining the Chief Registrar role:** On average Chief Registrars had 53
    hours/month available for Chief Registrar activities, and actually undertook 55
    hours of such work (with some seasonal variation). Just under half Chief Registrar
    time was spent engaging with trainee doctors (25%) and senior medical staff
    (21%) but Chief Registrars also reported working with other clinical and
    managerial groups. This suggests a wider organisational focus than just the
    operations of the Medical Division. Several Chief Registrars struggled to define
    their role, in the early part of their time in post.
  
  - **Selection and appointment of the Chief Registrar:** the appointment process
    seemed to be largely individually-focussed, matching suitable candidates to
    posts. A loose framework was set out by the RCP in which open competition for
    posts was encouraged. So, it was left to local areas to decide how appointments
    should be made.
  
  - **Style of medical leadership:** Chief Registrars adopted an informal, distributed
    leadership style because of their autonomy and the complexity of the issues
    being addressed.
  
  - **Challenging and testing times:** Many reported delays or slow progress in
    projects, or in establishing the role. The time available for the Chief Registrar role
    was a constraint. Individual and organisation factors as well as critical incidents
    challenged them but gave them experience of change management.
Support from senior medical colleagues: There were differences in the type of support that Chief Registrars received from senior colleagues, including encouragement to apply, mentoring/coaching during the post, access to board/executive meetings, and assistance in implementing QI. Despite these differences, most Chief Registrars reported high levels of support from senior medical colleagues, which were seen as essential.

Two Chief Registrars in one organisation: Benefit came from complementary roles and personalities. Sole Chief Registrars working across split sites noted the potential value of multiple post-holders.

- Chief Registrar: activities and projects
  - Overall, Chief Registrars’ roles were organic, evolving in response to individual skills and organisational need.
  - Rotas: Several Chief Registrars reported that rota arrangements were inadequate in their organisation and so managing the rota was an activity which some Chief Registrars felt would naturally fall to them (whether to oversee them or manage the rota themselves). However, taking on responsibility for managing it would be an additional stress, especially when operational pressures were at their greatest. So, few became closely involved in rota management.
  - Medical engagement: Chief Registrars `breathed life’ into junior doctor fora. Medical engagement was improved, though not without a struggle in some instances. Chief Registrars were an informal liaison between junior doctors and senior clinical and non-clinical managers and leaders, which appeared to significantly help to improve engagement, empowerment and morale among junior doctors.
  - Quality improvement projects: The QI projects of Chief Registrars were diverse, reflecting their own interests and/or organisational imperatives. Often, Chief Registrars undertook QI projects themselves and they also engaged other staff in QI, sometimes overseeing QI, becoming a source of advice, and so helping to develop a QI culture. The `definition’ of QI reflected individual Chief Registrars’ focus on clinical issues. Chief Registrars could become synonymous with QI projects, reflecting this style of leadership. The wide range of QI projects revealed a distinction between quality improvement, operational work, and
education focused on service improvement. Chief Registrars summarised some of their achievements in The Future Hospital Chief Registrar scheme 2016/17 yearbook (https://www.rcplondon.ac.uk/projects/outputs/chief-registrar-alumni).

- Examples of specific developments in these three areas included:
  - *Ambulatory care*: one Chief Registrar facilitated a new model of ambulatory care which saw an increase in the numbers of patients treated per month from 12 to 280 without any additional staff costs. Ambulatory care was the focus of a number of Chief Registrars.
  - *On-call rota*. Ensuring rota gaps were covered by engaging with the relevant colleagues to take collective ownership of the issue.
  - *Training*. Organising enhancement to training programmes, for example the development of simulation training, and ensuring that Junior Doctors were able to attend training sessions.
  - *RCP training programme*: About 20% of Chief Registrar time was spent on training activities. Chief Registrars valued highly the training which brought them together as a cohort and especially the action learning sets. However, they suggested changes to its timing and that of some of the modules. They would have valued prior preparation for training, more appropriate timing, and course certification.
  - *Outcomes and impacts*: Difficulties in measuring their impact was widely noted by Chief Registrars and senior medical leaders but significant improvements in service and junior doctor morale were evidence that their impact could be substantial.
  - *Costs and finance of the Chief Registrar post*. Assessing the cost-effectiveness of the Chief Registrar posts was problematic given the opaque costs and the diffuse (and diverse) benefits that were accruing. Local costs of the posts were often perceived as small. However, there was indicative evidence of significant impact in projects that were likely to have contributed to cost savings through quality/service improvement and safety. Short term costs were important to consider in establishing and maintaining posts. A longer-term impact was the benefit on future consultant and medical leadership roles.
Personal development outcomes. The personal development purpose of the Chief Registrar role was emphasised by senior medical leaders. Chief Registrars reported significant learning from their role in relation to ‘learning-by-doing’ which increased their knowledge of NHS structures and increased their confidence and leadership skills, including the confidence not to lead on all initiatives but to encourage other individuals to take action.

e. Discussion

- **Self:** individual Chief Registrars expressed greater self-awareness and understanding of their role as a doctor and medical leader, and the shifting balance between personal and organisational development, and medical leadership and QI. They showed examples of resilience and drive. Their role required protected time and some flexibility in matching individual skills and organisational needs. Chief Registrars’ roles developed over time, shaped mainly by local organisational context and personal factors.

- **Team:** Chief Registrars proved capable of forming and running effective teams and cross-team collaborations, mainly in relation to junior doctors and QI initiatives.

- **Corporate:** Chief Registrars’ experience was distinct from other forms of personal development. They engaged with senior staff, were a bridge between junior and senior staff, and developed an understanding of decision-making. Support from such senior staff was seen as essential to embed Chief Registrars’ roles into the organisation and optimise their effectiveness.

- **System:** Evidence was less apparent but this was not unexpected. There are promising signs that Chief Registrar experiences will provide solid foundations for future medical leadership.

f. Recommendations

As the scheme expands towards 50 Chief Registrars in 2017-2018, we make the following recommendations to the RCP and participating organisations.
RCP:

- Ensure that the education and training programme for Chief Registrars is timed more appropriately to begin at the start of, or perhaps even before the start of, the Chief Registrar year’s appointments. Posts of one year were common and reflected evolving roles which entailed negotiating boundaries of the role, problem solving, maintain enthusiasm, and preparing to leave.

- Investigate the reasons for variations in the uptake of Chief Registrars by region and organisation.

- Monitor the balance in the Chief Registrars’ programme between leadership development, medical engagement and quality improvement so as not to unbalance the work of Chief Registrars in these domains.

- Consider working with other professional bodies to expand the scope of the Chief Registrar programme to other specialties.

- Establish mechanisms which help to sustain the leadership development of Chief Registrars once they have left their post.

- Evaluate a sample of Chief Registrars’ projects 12-24 months after they have left post to assess the sustainability of the projects.

- Consider strategies to enhance recruitment of Chief Registrars, preparing them for their time-limited roles.

- Consider the training implications for future Chief Registrars.

- Clarify the costs and funding of the posts, particularly in the context of the leadership development programme that runs with the scheme.

NHS acute organisations:

- Organisations should develop a clear induction programme so that the role can be clarified as soon as possible from the beginning of each chief registrar position.

- Have a succession plan for Chief Registrars.

- Identify ways of ensuring that the achievements of Chief Registrars in post are sustained and developed in the longer term.
3. Background

a. Future Hospital Programme

- In September 2013, the RCP published the report from the Future Hospital Commission (Royal College of Physicians, 2003). *Future Hospital: Caring for medical patients*, laid out a vision for how hospital services can adapt to meet the needs of patients now and in the future. The Future Hospital Programme was established to implement the Commission’s vision for the future of medical care in hospital and community settings.

b. Chief Registrar

- The Future Hospital Commission recommended that the post of Chief Registrar be established. There would be a “chief of medicine,” whose roles would include monitoring the workload and deployment of non-consultant medical staff, and who would be aided by a “designated trainee doctor” – a “chief resident” (para.3.36).

- The Commission recommended that a Chief Registrar is designated to each NHS acute organisation:

  “The primary role of this individual will be to liaise between the junior medical staff working in the Medical Division and the chief of medicine and senior clinical managers responsible for delivery of the service…” [para.3.37]

  “This leadership development post would have a key role in planning the workload of medical staff in training, medical education programmes and quality improvement initiatives” [recommendation 7].

- The aim of the Future Hospital Chief Registrar project was to lead a pilot of the Chief Registrar role within selected hospitals. The objectives of the Chief Registrar project were:

  i. To explore the role of Chief Registrar, determining the skills, time, and training needed for the role.
ii. To work with the Faculty for Medical Leadership and Management and the RCP Education Department to design a relevant bespoke education and training programme for Chief Registrars, focusing on development of leadership and management skills.

iii. To evaluate the Chief Registrar role to assess the benefits to patient care, organisational culture, professional development, support for junior doctors and allied healthcare professionals and personal professional development.

iv. To develop a replicable business model for the Chief Registrar role to encourage its adoption across the NHS (RCP, *Invitation to tender – evaluation of the RCP Chief Registrar programme*, 2016).


c. **Contextual developments**

- The establishment of Chief Registrars needs to be viewed in the wider context of related development. Among many, three are particularly salient here.

- First, in 2016, there was a contract dispute between junior doctors in England and the government, which resulted in industrial action (Exworthy, 2015). Eventually a new contract was imposed. Amongst its requirements was that each relevant NHS organisation should set up a junior doctors’ forum and appoint a guardian of safe working.

- Second, junior doctors have been reporting lower levels of morale and higher levels of stress in recent years. For example, 44.5% of doctors reported satisfaction with
their workloads in 2016 (compared with 46% in 2014). Likewise, “80% of trainees felt excessive stress because of their job” which can be directly affected by organisational leadership (HEE, 2017). The Royal College of Physicians have also published reports with data on stress and workload. One in four doctors-in-training report that their role has had a serious impact on their mental health, and seven in ten work on a rota with a permanent rota gap (Royal College of Physicians 2016b, 2016c)

- In December 2015, NHS England asked the NHS for 5 year Sustainability and Transformation Plans (STPs), to address the three aims of ‘better health, transformed quality of care delivery, and sustainable finances.’ The ‘footprints’ of these plans were determined locally, and cover all health and social care services. After publication of 44 STPs, the Royal College of Physicians’ response included the view that ‘[t]he principles outlined in the STPs fit well with the recommendations of the RCP’s Future Hospital Commission report and, as such, are fully supported by the RCP’ (Royal College of Physicians, 2016a). That said, STPs have, so far, been relatively poor in development of workforce, education and training (Kotecha, 2017).

d. Profile of Chief Registrars (2016)

- There were 21 participants in the Chief Registrar programme in the first cohort. Start dates varied although all were in 2016; one started in January, eight in April, three in August, and nine in September. Of the 21, 11 were women and 10 were men.
- The Chief Registrars worked in acute organisations across the UK, with the majority in London and the South of England. Using NHS England Regional teams as a framework, Chief Registrars were based in:

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• The cohort of Chief Registrars were drawn from 9 specialties, with the most common being respiratory medicine.

• Three organisations had two Chief Registrars, so 18 NHS acute organisations were involved in the programme. Overall, 5 were Teaching Hospitals, and 13 were District General Hospitals. These organisations represent 11% of the 160 relevant NHS organisations. http://www.nhsconfed.org/resources/key-statistics-on-the-nhs / http://www.wales.nhs.uk/ourservices/directory/Hospitals / http://online.hscni.net/hospitals/health-and-social-care-trusts
4. Evaluation aims

a. This mixed methods study was undertaken by researchers from the Health Services Management Centre (HSMC), University of Birmingham, who have experience in using these methods and in researching medical leadership. The study worked closely with the RCP and individual Chief Registrars, in shaping the evaluation, exploring the findings and in dissemination.

b. Aims

- The aims of the study were:
  i. To explore the ways in which Chief Registrars are enacting their role,
  ii. To assess the effectiveness of the Chief Registrar role on the individual Chief Registrars themselves, their colleagues, their organisations and their patients
  iii. To recommend future directions for the Chief Registrar role.

c. Approach to evaluation

- Given the variability of the Chief Registrars and the contexts in which they worked, the project became a series of natural experiments, rather than one with a control group.
5. Evidence review

a. This section is divided into two parts; the first (5b) is a systematic review of evidence and the second (5c) is an overview of conceptual perspectives which might help explain and interpret the evidence and the study’s emerging findings.

b. Literature review

- Method:
  i. In October 2016, 3 databases were searched (PubMed, ASSIA, ZETOC), using predefined terms: chief registrar, chief resident, medical residency, medical manager, physician executive, chief physician, chief of medicine, head physician, medical leader. To refine the search further, terms which generated more than 30 articles were combined with additional terms: training, leadership, management. Inclusion criteria were: articles had to be published in English, published between 1996 and 2016, and have been peer reviewed (including an abstract).
  ii. The initial search generated 4,203 articles, of which 26 were selected for analysis. These are listed in Appendix A.
  iii. Only 1 of the studies reported evidence from outside the USA (viz. Singapore). Mixed methodologies were common in the evidence retrieved, but with the predominant method being a quantitative survey of attitudes and opinions. A small number of studies used qualitative interviews and case-studies.
  iv. Most evidence derives from the USA where the term Chief Resident is most commonly used. Much of the evidence was drawn from studies which were published between 5 and 10 years ago, with the oldest being published in 1996. This reflects the American development of chief residency.

- Key findings from the literature review:
Chief Residents are selected either by faculty, by peer election or a mix. Elections are suggested to be superior as they facilitate legitimacy with both groups (faculty and peers). Warner et al (2007) found two-thirds were appointed by programme director or training committee.

Chief Residents benefit from a clearly defined role from the outset, a clear mentor and a succession plan.

Most Chief Resident posts operate on an annual cycle, showing a common evolution over each quarter of (i) authorising and negotiating boundaries, (ii) problem solving, (iii) surviving (as the energy and drive dissipates), and (iv) transitioning and preparing to leave (Berg and Huot, 2007).

Most worked as Chief Residents for about 9.5 hours (equivalent to 20%) per week on a 9 to 12 month cycle (Warner et al, 2007). The review found no discussion of the implications for funding or extensions to their training.

Chief Resident duties involve administration, clinical work and education. Chief Residents have responsibilities upwards (to senior management), below (to junior doctors), laterally (with other middle managers/administrators in the hospital), and internally with each other (Berg and Huot, 2007). These responsibilities are ambiguous (especially at the outset) and compete with each other (as most of the work is interrelated). Young et al (1996) suggest that education roles diminish over time as administrative ones expand. More Chief Residents on site help to maintain / enhance the education component. Some see, therefore, Chief Residents as a route into (American) academic medicine.

Chief Residents benefit from protected administration time, a stipend, and being involved in faculty meetings. Over half had protected time.

Both intra and extra organisational training schemes are seen as valuable.

Having more than one Chief Resident in each organisation can cause issues of imbalance of assignments as roles tend to be distributed early and unevenly (Berg and Huot, 2007).

Chief Residents described their leadership style as “participating” (64%) rather than “coaching” (19%) or “delegating” (17%) (Warner et al, 2007). Here, the participating style refers to “a greater emphasis on the
relationships than the end task as it is expected that individuals are already quite aware of their end goal. It does not require that the individual set the course, but rather helps her or him driving towards it. This style of leadership allows followers to make decisions and be in control while the leader facilitates the discussion” (p.274).

x. Chief Residents tend to fill leadership positions and academic positions after they leave their post. This has implications for capacity development of future medical leaders.

c. Chief Registrar and medical professionalism: a conceptual perspective

- To elaborate the findings from the literature review, we present a short account of medical professionalism and in particular, the significance of the Chief Registrar in terms of hybrid medical managers, from the perspective of sociology and organization studies.
- There is a long tradition of investigating the interaction between clinicians and managers in health systems (eg. Exworthy and Halford, 1999; Hunter, 1992). Whilst earlier studies focused on the conflictual relations between doctors and managers, later studies focused on the emergence of medical managers ‘hybrids,’
- Two key distinctions are apparent in explaining medical hybrids: incidental/willing hybrids, and re-stratification.
  i. McGivern et al (2015) distinguished between incidental and willing hybrids. Whilst both are doctors by backgrounds (and may continue to practise), the differences in the way in which they enact their role are significant. Incidental hybrids occupy temporary positions and thereby seek to represent and protect traditional forms of medical professionalism. Willing hybrids see their role as a more strategic position, possibly as a (permanent) career move. Formative roles and experience early in the career can shape whether individuals occupy incidental or willing hybrid roles. Both types of hybrids need to maintain identity with their medical colleagues; the less identity they have, the more their authority over their colleagues might be diminished even though access to organisational resources may be enhanced (Denis and Van Gestel, 2016). To date, no studies have
considered ‘emergent hybrids’ at the formative stages of their career. The evaluation of Chief Registrar is thus a novel contribution in this sphere.

ii. Freidson (1994) noted that the balance within professions between the rank-and-file professionals, a knowledge elite, and a managerial elite is constantly in flux but that this internal cohesion has shown recent signs of fracturing – a process called re-stratification.
6. Methods

a. The project team secured ethics approval from the University of Birmingham’s Humanities and Social Sciences Ethical Review Committee (approved 28 September 2016; reference number 16-0715). Participants in the study were assured of individual and organisational anonymity; pseudonyms are, therefore, used to report findings.

b. The study adopted a mixed methods design, comprising a monthly survey of all Chief Registrars, qualitative interviews with Chief Registrars and their role set (viz. the individuals with whom the individual engaged on an operational and strategic basis) (Exworthy and Robinson, 2001) in 6 case-studies, interviews with other Chief Registrars and key informant interviews. These methods are described below.

c. Monthly survey:
   - All Chief Registrars were asked to complete a short, quantitative monthly survey between September 2016 and April 2017. The survey aimed to explore their perceptions about their recent activities and experiences. Delivered through ‘Bristol online’ (an online survey programme), the survey consisted primarily of closed questions with space for text. The survey aimed to track changes over time and the impact of key events. Brief qualitative data highlighted achievements and any barriers to progress. Overall, a 60% response rate was achieved. 7 Chief Registrars responded 6 or 7 times so there is some good continuity of data from a limited sample. The survey instrument is attached at Appendix B.

d. Case-studies:
   - Six case-studies were selected on the basis of cohort start date, specialty of the Chief Registrar, organisational type, geography, and local contextual factors. The final selection was undertaken in collaboration with the RCP. Two case studies were in London, with 1 each in Wales, Northern Ireland, the Midlands, and the South.
   - Each case-study involved qualitative interviews with the Chief Registrar and their ‘role set’. The exact sample of interviews thus varied between case-studies but might include the Chief Registrar’s mentor, medical director, head of education, and
other junior doctors. The interviews were arranged by the Chief Registrar. They were mostly undertaken face-to-face by Mark Exworthy and Iain Snelling; if individuals were not available in person, interviews were held by phone or skype. On average, each interview lasted approx. 45 minutes. In the 6 case-studies, a total of 6 Chief Registrars and 25 members of their role set (across the Chief Registrars) were interviewed between February and March 2017. In addition, two Chief Registrars (from the original case-study sample) were re-interviewed on the telephone in May and June to update their accounts from the earlier visits. All Chief Registrars not in the case studies were asked for an interview; 9 of the 15 not engaged in a case study were interviewed on the telephone.

- **Chief Registrar interviews** examined their career pathway, their prior awareness of and training for a (potential) leadership role, opportunities and challenges of their role (time, skills etc), professional development opportunities, relations with senior organisational staff, role in supporting junior clinical staff, and achievement in the role (eg. links to patient experience, morale).

- **Interviews with the Chief Registrar role set** examined the organisational culture in which the Chief Registrar was working, the wider impact of the Chief Registrar upon organisational systems and processes including quality improvement (QI) and patient safety, the business modelling to support Chief Registrar implementation, the impact on training of juniors and workforce transformation, the impact of local variations in contract, and the relevance of the Chief Registrar role to patient experience.

- **Key informant interviews:** These interviews were used to enhance the understanding of the case-studies in their wider policy, professional and organisational context (Bowling, 2014). Towards the end of the study, we conducted 2 such interviews with individuals who placed local development in a wider context and which helped interpret the emerging findings. Each interview examined the logic underpinning the medical leadership programmes, the facilitators and barriers to recruitment to leadership programmes, and the challenges of implementing Chief Registrar programmes.

- A total of 44 interviews were conducted in the evaluation.
• Drawing on the ‘framework method’ for analysing qualitative data (Gale et al, 2013), interview transcripts were analysed using a combination of a priori and emergent themes to reveal similarities and differences between individuals and organisations. The triangulation of a variety of data, collected at different time points from multiple individuals, affords a degree of validity to the findings. As we engaged with most Chief Registrars during the study, we have a reasonable degree of confidence in the findings we present in the next section.

• Preliminary findings were presented to an RCP event organised to showcase the achievements of the pilot cohort of Chief Registrars in June 2017.

e. **Secondary data:**

• We gathered documentary evidence relating to other materials from the Chief Registrar programme (such as the Yearbook and recruitment guidance), the Future Hospital Programme and other medical leadership programmes. These data helped to corroborate the other data.
7. Findings

a. The findings are set out in three themes. The first explores issues relating to the individual Chief Registrars, their leadership and management interests and prior experiences, their personal experiences of the Chief Registrar role, and their personal development through the role, including some evaluation of the training programme that was part of the scheme. The second explores the position of the Chief Registrar, how the role was enacted and how the context affected the role. The third section considers issues related to the impact of the Chief Registrar role. This section also examines the projects which the Chief Registrar undertook during their post.

b. Anonymised quotes from respondents are attributed to their role, namely CR: Chief Registrar; MD: medical director; CS: chief of service/clinical director; DE: director of education; JD: junior doctor; SM: senior manager.

c. We start by identifying some contextual differences which shaped the ways in which the Chief Registrars and their role set worked. We explore some of these in subsequent sections.

- Working arrangements for Chief Registrars varied between supernumerary arrangements and working on a full-time rota with a minimum 40% protected time allocated for the Chief Registrar role. This affected the amount of time available as well as the perception of them by other staff.
- About half of the cohort was `in programme’ for specialist training and half was `out of programme’ for specialist training.
- Most Chief Registrars had prior leadership experience although the scale and extent of this varied somewhat.
- The time that Chief Registrars had available for `Chief Registrar’ work was largely similar (as the monthly survey demonstrated). However, the flexibility in time that they had was enhanced by a high degree of autonomy to shape their role. (For more detail see Theme 2, below)
• The level of support from senior staff (especially the medical director) before and during their Chief Registrar post was often high. Such support comprised encouragement to apply for the post, mentoring/coaching during the post by senior medical leaders, access to board / executive meetings, and assistance in implementing improvements. Chief Registrars’ positional power might thus have been weaker as they were reliant on senior support.

• The content and relevance of the RCP/FMLM Chief Registrar training programme was widely appreciated. However, most Chief Registrars suggested that the timing of some of the modules should be altered to facilitate progress, especially for those in the first wave of Chief Registrars (who started in April 2016).

• The size and location of participating organisations was significant. While only three organisations had more than 1 Chief Registrar, many organisations worked over split sites and some Chief Registrars suggested that multiple Chief Registrars would be beneficial in such organisations.

**Theme 1: Chief Registrar – the person**

This theme examines the background of Chief Registrars and the perceptions of the Chief Registrar role.

d. **Prior experience and leadership interests**

• A theme that runs through the evaluation is that, despite clear similarities in medical specialism and stage of training, the group of Chief Registrars was heterogeneous in many ways. For example, a number of Chief Registrars articulated an established interest in management and leadership, with in some cases prior or concurrent developmental opportunities through fellowships, or academic study. Other Chief Registrars were much earlier in their leadership development.

• There were also differences in the medical role context of the trainees. Some trainees were in medical roles which they described as supernumerary, because of the proximity of their post to the end of training, or because a new post had been created for the Chief Registrar. These Chief Registrars were able to work flexibly on their Chief Registrar role, with limited operational pressure. Others, though, did
need to negotiate more difficult operational and cover arrangements, and were less able to work flexibly, which constrained their ability to engage in leadership and management activities if, for example, important meetings were on days which weren’t the designated ‘Chief Registrar days’.

- As Chief Registrars who were out of programme were also working clinically, with a similar allocation of time to the Chief Registrar role, there was no systematic difference between the reported hours available to the role, or the number of hours undertaken. Registrars who were out of programme reported joining the on-call rota, usually with a full rather than a reduced commitment. There were examples of in-programme Chief Registrars being able to negotiate on-call commitments. For example, one agreed more weekend on-calls to reduce on-calls during weekdays. Another started with a full commitment, but then amended it to come off nights, so that out of hours clinical commitments were in the evenings and weekends. In practice it was difficult to see a distinction in the way that the chief registrar role was undertaken between those who were out of programme and those who were in-programme. Two Chief Registrars were less than full time, and at least one in-programme Chief Registrar had the period of overall clinical training extended.

- The ease with which Chief Registrars were able to protect their time was more dependent on local circumstances than whether the role was in programme or out of programme. For example, a trainee who was out of programme said

  “Most of the time I was able to have my non-clinical day. There were some occasions where clinical work impeached on it but I guess that’s to be expected” (CR).

- In the main, Chief Registrars protected time by having dedicated days for their Chief Registrar role. However, this wasn’t always the case. For example, one in programme Chief Registrar said:

  “There were no dedicated days to do it. I’ve taken much more of a blended approach to this, where, for example, there might be a meeting in the afternoon or a meeting at lunchtime I go to, but I’m on the wards. Sometimes, obviously.... I need to block some time in the diary to go somewhere or to get some piece of work done or administration” (CR).
The training context in this case was of a very senior trainee. Having dedicated training days were essential in most cases to maintain the balance between clinical and Chief Registrar roles but were also a constraint if, for example, important meetings were missed because they fell on the ‘wrong’ day.

- So, while it might be expected that out of programme Chief Registrars would have more time and flexibility, local factors were more important. In particular, support from senior leaders was invaluable.

  “[I said] ‘It’s a year out of training. So it doesn't count and the clock stops.’ [Chief Registrar name] was pretty clear, no [name] didn’t want to do that, [name] wanted to make it work and I said ‘OK, you know, it’s going to be tough, it’s a tough year but if that’s what you want then that’s what we’ll do’ and I sort of said ‘we’ll monitor all the training and everything’” (DE).

Indeed, one medical director spoke about how the (out of programme) Chief Registrar in that organisation was getting a higher level of specialist training (than being in programme). With support from senior leaders, Chief Registrars could, thus, enhance their clinical competencies.

  “I’ll expose her to clinics that [name of Chief Registrar] hasn’t done, say [XXX] or certain technical skills which you can’t get done at other hospitals. So we said “Look” you know “we don’t want you doing back-fill the ward registrar” – that’s just terrible, that’s just abuse. It should be “Right, if you want to do the specialist [XXX] service which we’ve got, then do the clinic on a Tuesday. There’s a specialist procedure list on a Monday. Do those. It goes towards your logbook. At least you can say I did these things” which actually lots of trainees would want to do anyway, so [name] gets high level clinical training” (MD).

Whilst this opportunity was not commonly reported by Chief Registrars or their role set, it does indicate the opportunity that could be developed for future Chief Registrars.

- A key theme in the interviews was that Chief Registrars were able to bring ideas from elsewhere. The peripatetic nature of their role has been reflected in the literature on the contribution of junior doctors to service improvement (Ibrahim et al, 2013), and
in our interviews, we heard that prior experience from elsewhere was, for some, a significant contribution to both knowledge of how a service could be improved, and a motivator that it could be.

“[I have] take[n] a lead on developing an electronic take list. So that started from an idea ....... I worked somewhere else where we did this type of way of working” (CR).

e. Perceptions of the Chief Registrar role

- These differences had some implications for the way in which the Chief Registrars both perceived themselves and were perceived by others, on a continuum between being seen as a ‘trainee’ leader making use of a development opportunity, and as a member of the medical management team, with some specific leadership roles.

- Some initial concern was expressed about the title of ‘Chief Registrar.’ For some, this implied an uncertainty about the role and fear of a sense of mockery about it. The initial apprehensions is apparent in these quotes:

  “I’d worked in the hospital so I knew a lot of the junior doctors anyway and I think there was a lot of uncertainty with regards to what a Chief Registrar was. There was a lot of mocking the title and no-one really knew what my role was” (CR).

  “It’s quite embarrassing at first to introduce yourself as the Chief Registrar because everyone’s like ‘who? What?’” (CR).

  “People tease you. Generally it’s good hearted humour, but I think, and certainly talking from the other Chief Registrars, I think universally we all felt very uncomfortable introducing ourselves as Chief Registrar at the start” (CR).

  “The clinical leadership role - I guess there’s a perception that you’re just a waste of time” (CR).

- Junior doctors were wary of the term; for example, one thought that “it just sounds like someone who’s like the boss of all the registrars” (JD).

- However, over time, the uncertainty about the title moderated among Chief Registrars. Some became comfortable in using the term whilst others continued to avoid it.
“Initially, I was reluctant to own the Chief Registrar brand. [Laughing] But, actually, increasingly so, I realised that it opens many doors, and, because it is a branding, it’s not something that people think about any more [than] that” (CR).

“I tried to keep it a very low profile with the juniors, I must say” (CR).

- Senior staff supported the use of the title. For them, it was largely about the authority which the title conferred upon the role.
  
  “The role has to have some authority and I deliberately wanted [the Chief Registrar] to use the title” (MD).
  
  “The actual term of Chief Registrar gave [name of Chief Registrar] a certain amount of kudos in a sense” (MD).

- Across our interviewees, Chief Registrars had significant autonomy about the areas they wished to concentrate on which, in some cases, caused some uncertainty, particularly in the early months of the post.
  
  “So it’s not been completely plain sailing here, I’ll be completely honest, there are people who’ve sort of said, you know, ‘what, [Chief Registrar] gets two days a week off’ and it’s like ‘no it’s not two days a week off’ (DE).

- Instances of a clear role awaiting the new Chief Registrar were rare. Pragmatic, local approaches were commonly adopted, with Chief Registrar roles being fashioned between the incumbent, and senior medical leaders.
  
  “It’s been a learning thing for us because the way [the Chief Registrar] was described it was pretty soft about its role... The role – it’s completely new – and trying to make it of benefit both for us and for [Chief Registrar] and try and work out, and that’s taken quite a while” (MD).
  
  “This was a new idea. It’s embryonic and I think there is a lot to be said for things developing organically and then iterating towards a definable role that could then be rolled out... In other words I think the vagueness of the initial description was quite inspired. Allowing a little bit of flexibility and a little bit of imagination on the parts of those starting off” (CS).

- This seems to imply that there was, in the organisations studied, an emphasis on providing a training opportunity rather than creating medical leadership capacity
required for a specific issue or area determined by local need for medical leadership in education, service improvement or for operational issues. However, we often heard that both of these objectives were important. Whilst the Chief Registrar role was often seen as both trainee and ‘medical manager’, this finding has implications for the recruitment of future Chief Registrars and their sponsors. Future Chief Registrars and their role set will need to be aware of this tension and be equipped to handle the inevitable comprises that arise as results.

**Theme 2: Chief Registrar – the role and position**

*f. Defining the Chief Registrar role*

- The Chief Registrar position is a senior trainee as it straddles the boundary between junior and senior doctors. Chief Registrars are likely to have one eye on consultant jobs and may (theoretically) be less likely to be disruptive. On the other hand, they are experienced enough to identify issues for improvement and have the authority to influence others.

- Nonetheless, Chief Registrars admitted that their experience of leadership and their knowledge of organisational decision-making were often limited. The Chief Registrar role was thus a learning curve in these areas.

- The Future Hospital Commission report highlighted three areas for Chief Registrar work:

  “This leadership development post would have a key role in planning the workload of medical staff in training, medical education programmes and quality improvement initiatives”.

These three categories were used in the monthly survey to ask each month what percentage in each category the Chief Registrar had focussed on. Chief Registrars gave most attention to service improvement issues (47%) followed by educational issues (27%), operational issues (20%) and others (7%). Operational issues peaked in December, as several Chief Registrars reported becoming engaged in ‘winter pressure’ and rota issues.

- Chief Registrars have had an average 53 hours per month available for their leadership roles, and have undertaken an average 55 hours of Chief Registrar-related
work in the role. This includes training which accounted for 20% of time. December and January both saw reduced hours devoted to the Chief Registrar role, with a number of participants reporting operational pressures as the reason. However, the quantitative data suggest that the reduction in training was most significant: the total available hours reduced by 11 on average in December and January, while the time for training reduced by 12 hours.

- The survey also asked Chief Registrars to quantify who they were engaging with in their role. Just under half Chief Registrar time was spent engaging with trainee doctors (25%) and senior medical staff (21%). However, Chief Registrars also report working with other groups of clinical and managerial staff. This suggests a wider organisational focus for Chief Registrars than simply the operations of the Medical Division.

- There is, though, considerable variation between Chief Registrars’ experiences. The table below shows means, maxima and minima for the 7 Chief Registrars who have completed 6 or 7 monthly surveys.

<table>
<thead>
<tr>
<th>Mean hours/month engaging with:</th>
<th>Mean</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainees</td>
<td>8.7</td>
<td>13.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Senior Medical Staff</td>
<td>5.0</td>
<td>8.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Other Clinical Staff</td>
<td>3.8</td>
<td>6.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Other Clinical Staff Management</td>
<td>3.6</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>General Management staff</td>
<td>4.1</td>
<td>10.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Executive staff</td>
<td>2.9</td>
<td>5.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Other staff in the organisation</td>
<td>2.1</td>
<td>3.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Other staff outside the organisation</td>
<td>2.4</td>
<td>3.6</td>
<td>0.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of time working on:</th>
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<tbody>
<tr>
<td>Educational issues</td>
<td>26.7</td>
<td>39.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Operational issues</td>
<td>19.7</td>
<td>57.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Service improvement</td>
<td>46.5</td>
<td>65.7</td>
<td>22.9</td>
</tr>
</tbody>
</table>
• Several Chief Registrars spoke of the struggle to define their role. The autonomy and latitude that had been given was welcome to some extent but for some, this amplified a sense of uncertainty.

  “A lot of the time, I suppose the first few months of the role I couldn’t justify my existence... I mean I really struggled” (CR).

  “I think when [name of Chief Registrar] first started, no-one knew what the Chief Registrar role is” (DE).

• A number of trainees felt that the early months of their posts were not as productive as they might have been, which reflects the findings of Berg and Huot’s (2007) study (see 5b). A period of about 3-4 months was commonly cited as the time needed to settle into their role and define their purpose and project. This denotes a need for preparatory work for future Chief Registrars before they take up their post, which the RCP has acknowledged. Since the Chief Registrar was a new role, there was a period of engaging with others to introduce and explain the role. Some felt that the expectations of the role were not entirely clear, either in the organisation or from the Royal College of Physicians.

  “So when I first read through I wasn’t sure what exactly the job meant because there was no job description there” (CR).

  The role was “a little unclear from the RCP’s point of view and then it acquired greater ‘unclarity’ as it devolved upon the organisations” (CS).

For the early joiners of the programme (in January and April 2016), the training events came in the latter part of their Chief Registrar year, rather than at the beginning.

g. Selection and appointment of the Chief Registrar

• Senior staff described the selection and appointment of the Chief Registrar in their organisation. Many had known or worked with the Chief Registrar before and they all spoke of the personal qualities that Chief Registrars should ideally have. One
The chief of service described how the individual’s qualities made the person uniquely suitable for the post:

“Actually I could only think of one individual who would be suitable for it... It would have been different if we had three or four” (CS).

However, prior knowledge of the individual may have had some negative effects:

“One of the criticisms of us as an organisation is that, because of [name’s] personality, we’d probably initially give [the Chief Registrar] too much to do” (MD).

- Largely as a result, the appointment process seemed to be individually-focused, matching suitable candidates to posts. The recruitment documentation did, however, state that “Appointment to the post of chief registrar should be done through an open and competitive process” (RCP, ‘The Chief Registrar: clinical leaders for today and tomorrow’, 2017).

**h. Style of medical leadership**

- In undertaking a leadership role for trainees, there were some differences between Chief Registrars in terms of who their ‘constituency’ was, which seemed to vary on two dimensions. Firstly, this was evident in terms of whether the role should extend beyond the medical (physician) organisations into other specialties. Second, there was a question as to whether the role primarily related to registrars or to all junior doctors.

  “For the projects I was involved in, it was very much about clinical work between multiple specialties” (CR).

- Chief Registrars tended to adopt an informal, distributed leadership style, rather than more transactional or transformational ones (Tweedie et al, 2017). Several factors were identified to account for this.

- First, as succinctly explained by one of the Chief Registrars:

  “There’s probably only limited stuff I can do as a trainee, you know, who’s here for a year and is not full time to this.” (CR).

This sense of limit to the role combined with the autonomy granted in establishing it seemed to facilitate and reinforce a leadership style that was distributive and
developmental. There was little mention in interviews of short term pressures or preoccupation with targets which might have provided a context for directive leadership (Storey and Holti, 2013). Chief Registrars were often conscious that the role was new and came with very little position power, in still being a trainee. In at least one case, the expectations of the role by the organisation were not clear, seeing it as a representative role:

“I’ll be asked to go to things as the representative of the junior doctors .... I’m not, you know - they didn’t vote for me” (CR).

- Second, a number of Chief Registrars found the nature of the changes they were engaged with required broad consensus with key stakeholders, perhaps somewhat against their expectations:

“It’s probably me being a little naïve but, ...., even something simple like the triage system was just a lot of hard work in the beginning, you know, once you got the right people on-board it became much easier, but it’s just knowing how to do that and knowing who to ask” (CR).

The perspective on leadership was backed up by their role set.

“It’s no good sending a super aggressive person into a tricky negotiation... because that ain’t going to work” (DE).

“We were dealing with somebody who was not a clock watcher or one who was sparing on their time and energies for [the organisation]” (CS).

i. Challenging and testing times.

- All Chief Registrars spoke of the challenges that they faced during their year.

“I think I would describe it as being sort of a year of highs and lows” (CR).

- In the survey, we asked whether Chief Registrars had experienced setbacks. Many reported delays or slow progress in starting / running projects, or in establishing the role and facilities. Time available for the Chief Registrar role was a constraint, especially where there had been absence for study leave. Across all data, these testing times were broadly divided into two categories: individual and organisational.

- Interviews revealed that Chief Registrars often found their role to be daunting as it could be isolating from colleagues/peers, temporarily separated from clinical work
and/or ill-defined. Sometimes, this ‘loneliness’ was shaped by their (relative) naivety in implementing change and in leadership.

“There were times when you felt a little bit out of your depth and therefore it was quite daunting at times because we were trying desperately to achieve something that you saw as very important” (CR).

- This had an impact on Chief Registrars’ own morale.

“I think my morale’s gone up and down throughout the year as well because at times I found it quite disheartening” (CR).

- Organisationally, Chief Registrars faced several issues which challenged their role and skills. Whilst Chief Registrars gained skills in negotiation, they also faced the (common) challenge of implementing change in a multi-professional environment. For some, this had a significant impact.

“I think I got a lot of backlash from that [service improvement project] for weeks and weeks and I had to keep my head down at that point and hide if I saw somebody walking down the corridor” (CR).

- For others, it made them appreciate the scale of the challenge and the timescale involved in bringing about change; for example, one Chief Registrar noted staff’s resistance to change.

“I think I struggled at times feeling the resistance out there, so you want to try and move something forward and you just feel this huge wave of resistance or this huge lull in morale that people just can’t be bothered!” (CR).

- Beyond these issues, Chief Registrars described how key incidents were pivotal during the year.

“I went to quite an important board meeting and all the consultants were there and then the Medical Director asked for my opinion and I think that had a lot of importance. I think that was critical because he valued my opinion” (CR).

“And this [issue] went on and on and until that day when I decided enough was enough, I was going to actually clean the room .... So I took hospital bags ..... and filled them with blood bottles and equipment .....so I done it once and then I’d come back and done it a second time. On the third journey, I was
physically then pinned down by two senior nurses who stood either side of me and they said how much more equipment was I going to actually take” (CR).

“I certainly didn’t want to change my emails or my anything to represent it [Chief Registrar role] and it was interesting because it was the medical director who eventually just changed it for me... I thought ‘oh, It’s true.’ That does help you when you’re sending emails to heads of department and service heads” (CR).

j. Support from senior medical colleagues

• There were differences in the support that Chief Registrars received from senior colleagues, mainly in the type of support rather than level of it. All interviewees reported that they were well supported, often crucially.

“The only reason why it’s effective is you have a Medical Director and [a Chief of Medicine]. So probably as far as clinical, as far as hierarchy, they’re the two most important people in the hospital and if they champion you, then I think you will do well... With those two, it made a massive difference” (CR).

• Some expressed the support they had in applying for the Chief Registrar post. Some had very senior support and mentoring by senior executives, including a Chief Executive and Medical Directors. For others, the support was more local, embedded in the clinical team of the organisation or the projects that the Chief Registrar was working on. These three forms of support are highlighted in the following paragraphs.

• First, prior support from senior staff was crucial in persuading Chief Registrars to apply when otherwise they might not have done so.

“The medical director said ‘look, you know, would this not be a great thing for [the organisation]’ and they were just ‘do whatever you need to get onto this post’” (CR).

• Second, the support from mentors in the Chief Registrar’s organisation was widely welcomed as guiding and coaching them through the organisation’s decision-making. Such support was forthcoming. However, non-medical support was less apparent in general.
“I had the Deputy Medical Director who was absolutely excellent and I couldn’t have asked for a better mentor. So I had monthly meetings with her. She’s obviously extremely experienced and has done a lot of coaching work and various other bits and bobs during her career, so there was an extremely supportive relationship from my perspective” (CR).

- Third, Chief Registrars recognised that they needed support from senior staff to implement some of the QI projects and medical engagement activities they were undertaking.

  “For the projects I was involved in, it was very much about clinical work between multiple specialties, so actually having the ear of the medical director and, you know, having him feed me projects, ideas as well was very helpful because he can coordinate all of that” (CR).

k. Two Chief Registrars in one organisation

- Only three organisations had two Chief Registrars during the evaluation period. Although an assessment of the combined impact was not formally a part of the evaluation, we did observe the ways in which their roles interacted. Much of the perceived benefit came from their complementary roles and personalities. These interactions related to different roles:

  “But also we [were] quite good at playing tag so sometimes we’d do the good cop bad cop” (CR).

  “[Other Chief Registrar] came on then we almost had a bit of a bonding two days and we kind of came up with a list of all the projects and sort of divided them amongst each other” (CR).

- Generally, the organisation allowed them to develop their own programme, usually relating to the site where they mostly worked.

  “Each of our acute sites has a Chief Registrar. And they’ve been received very well in two elements. One is that actually they both do a bit of on call... But two, they’ve been allowed to do some projects and QI projects and for the individuals, certainly for [other Chief Registrar] on this site you know, and [CR-ii] to a lesser, they’re getting exposure to chiefs of service” (MD).
• Interestingly, Chief Registrars who worked on their own in an organisation but who worked on split sites or who worked in large organisations also noted the potential value of two Chief Registrars.

  “I would hope this time it should be somebody purely from [site B], to take over from me, which will be better. Or have one on each site, because I think it’s harder to manage both sites at the same time when there’s one person, if you are in the clinical zone as well” (CR).

Theme 3: Chief Registrar – activities and projects

• In this section, we explore the primary activities and projects which the Chief Registrars undertook as well as views on outcomes of the programme (in terms of both what Chief Registrars achieved, and what personal learning they achieved). These activities are divided into: rota, medical engagement, QI projects and the RCP training programme, outcomes and impacts, costs and finance, and personal development outcomes.

• Many reported how the focus of their work was “organic” (CR).

  “There’s a pragmatic element so it’s actually [name] is being freed up to do that. So [name] has some time in the week to do these things and actually go and create meetings and have discussions and try and talk to juniors and consultants” (MD).

• Others had more definite ideas; for example:

  “What I wanted this to be was more of an apprenticeship type role where I go to the boards and I kind of have problems that come up on each board that are given to me to solve in that way” (CR).

I. Rotas

• Several Chief Registrars reported that rota arrangements were inadequate in their organisation; “quite chaotic” as one described it (CR). Managing the rota was an activity which some Chief Registrars felt would naturally fall to them. Assuming that managing the rota would be included in the ‘operational’ category for activity, there
is no evidence that the rota became a concern that overwhelmed other activity. For example, the Chief Registrar with the highest average percentage of operational issues didn’t mention rotas in monthly returns. The monthly survey return qualitative data did give some examples of short term rota pressures, for example:

“….trying to cover a 25% depleted SHO workforce with the same amount of doctors... inevitably took a lot of criticism. I spent time on recruiting doctors for this gap, actively arranging meetings to convince doctors to work here” (CR).

- Rota pressures also impacted on some Chief Registrars as it required them to cover unfilled gaps.

“Ongoing element of quality improvement suffered this month due to clinical commitments and filling rota gaps” (CR).

“Rota issues as always - having to fill in for unexpected absences” (CR).

- Rather more Chief Registrars than those reporting difficulties with rotas were able to avoid such pressure. For example:

“I specifically stayed away from the rota. I didn’t want to be in charge of the rota” (CR).

- One Chief Registrar had already had experience of managing the rota prior to the start of their post. However, taking on responsibility for managing it was, therefore, an additional stress, especially when operational pressures were at their greatest.

- Given the state of contractual negotiations on the junior doctor contract in 2016, it was inevitable that Chief Registrars needed to liaise carefully with juniors on rota management. One Chief Registrar reported that implementation of an emergency rota was possible in that organisation. This led the Chief Registrar to call a meeting to resolve the situation.

“And I put it to the trainees during this ... meeting that either we had a rota that we knew, that was implemented on us, we would have no say in our study leave, no say in our annual leave, no say in the days that we were going to have off, maybe not want those days off after all. Or we have a say in our lives, these are our lives, this is our NHS, this is what we do, these are our patients and actually share. So maximum two or three additional shifts each
...from now until the end of the crisis... And they said ‘that’s fine’. Everybody just signed their name against the one [rota] that they could do” (CR).

- By contrast, the approach taken by another Chief Registrar was more routine.

“I suppose if there are rota gaps, you know, I would often take the lead in saying, ‘Can we meet to see who’s covering tonight?’ or whatever” (CR).

- For the role set, the rota was somewhat of a distraction from issues more relevant to the Chief Registrar.

“I can see that some particular hospitals might regard it as very much an operational clinical commitment- and be like ‘you’re going to sort out all the rotas, you’re going to deliver that’ and I personally think that would be a mistake, I don’t believe that that’s how I would want to run it... I want to see very much more a balance of how do you try and engage with all the requirements of the junior doctors and I would leave very much the running [of] the operational side to the clinical divisions” (MD).

- In a similar vein, another medical director concluded that “Even part of me would be tempted to say the pastoral side has been perhaps even more important than the clinical side” (MD).

j. Medical engagement

- Here, we refer to the relations between Chief Registrars and junior doctors (on the one hand) and senior medical leaders (on the other).

- The 2016 junior doctor contract required that each provider organisation have a junior doctor forum. Whilst the Chief Registrar often took the lead in facilitating this, a number of other forms of medical engagement were undertaken. Chief Registrars were able to ‘breathe life’ into these fora and generally make them successful. More widely, medical engagement was improved, although not without a “struggle” as “tensions were already running very high” among juniors (CR).

- In some cases, the state of relations between the organisation and juniors was poor and the Chief Registrar was seen as the mechanism by which it could be improved.

“When I came into the [organisation], it was struggling. They asked me for a role like this [junior doctor forum] because they had years and years of poor
feedback from the deanery and they were under the equivalent of special measures as far as training and to the point where the deanery was threatening to take away their junior doctors” (CR).

- The fora could have turned into a “whinge fest” (CR). Some Chief Registrars reported positive developments regarding medical engagement but only after a period of time (cf. Berg and Huot, 2007).
  
  “So it took us a couple of months for that kind of thing to settle in. But by the end of it we definitely felt like we were a liaison” (CR).

- Chief Registrars also acted as an informal liaison between juniors and seniors within the organisation. This ‘bridge’ role allowed a two-way flow of information which was welcomed on all sides. To some extent, this bridge role would need to be maintained in future but, as one Chief Registrar reported, forms of medical engagement had been re-set through the actions of Chief Registrars.

  “We’ve had the feedback since [leaving the Chief Registrar role] that they’ve [junior and senior doctors] missed that kind of bridge even though actually they’re perfectly capable of talking to seniors themselves... They have someone to kind of voice whatever it is was the problem and then give them answers, slash options” (CR).

- Invariably, senior staff welcomed the ‘bridge’ role that Chief Registrars played between the junior doctors and themselves, although this reliance on a single individual may become problematic if relations between senior and junior staff worsened.

  “[The Chief Registrar] is my key conduit now between us [senior managers] and the junior doctors really” (SM).

- Moreover, the benefits of positive medical engagement were, some claimed, having wider benefits for the Chief Registrar’s other activities.

  “That’s [the forum] quite a big focus definitely and I think that was part of the reason we started to be to get a bit more credibility” (CR).

In this particular organisation, this was aided by the formation of ‘registrars’ breakfast club’ which ran weekly on alternate sites. Credibility was enhanced, for
example, by minuted meetings, demonstrating the subsequent actions and the formation of smaller divisional networks.

“So that was a platform for all of them to speak up, because you are amongst friends, they knew that OK and I had that level of confidence or they had confidence in me rather, that I wouldn’t say anybody’s names ‘like this is what this person has said’... So if I was to show one of my minutes of the meeting on the registrar side, it only said the group, part of the group discussed this, the group came up with this idea” (CR).

“So what we did first was to create a network, so there’s a registrar [in] oncology, anaesthetics and surgery... and we formed a little group and each person goes to a board meeting, there’s a [person] designated to kind of be that junior doctor liaison from the senior management and the juniors” (CR).

Junior and senior staff echoed these benefits:

“I think the first stage is acknowledgement and being listened to and I definitely think that’s happened” (JD).

“I’ve noticed increased engagement and it’s definitely brought down barriers in terms of being able to communicate with them” (CS).

- Indeed, the benefit was more than just communication and liaison but also to expose the Chief Registrar to the decision-making systems and processes of the organisation; for example:

“So we’ve tried to get [name of chief Registrar] to come to our management board... where the chiefs of service, the associate directors who work with the chiefs and the executives who actually do the doing of the hospital, meet on a monthly basis” (MD).

This and other examples had wider benefits in terms of engaging and empowering junior doctors within the whole organisation.

“So nearly all our boards in the hospital have junior doctor representatives and the chief registrar is again integral, intimately part of helping to ease that. I believe that we are at the forefront in involving junior doctors in every part of the mechanism of running a very big hospital” (MD).

- Over time, face-to-face meetings were less common as engagement took more electronic forms. However, face-to-face meetings were still valued.
“Methods of communication are a bit different as well, so it used to be a notice board, the doctor’s mess, informal meetings, but now there’s so many more people. It’s online, WhatsApp groups” (CR).

k. Quality improvement projects

- The QI projects undertaken by Chief Registrars were wide-ranging, reflecting the variety identified elsewhere in the report. Often, Chief Registrars reported being involved with several projects whilst a few focused on only one.
  
  “I've ended up getting quite a lot of projects, or improvement within the actual division and the nice thing is that now if anyone is interested in doing quality improvement,… they come and find me” (CR).

- A number of Chief Registrars were able to engage trainees in developing service improvement projects, either directly or through working with other junior doctors with a specific interest in service improvement. For example:
  
  “I've also encouraged other junior doctors to .... own projects, to set up simulation training in one of the hospitals as well - recognition and management of sepsis and that has been very well received” (CR).

- In some cases, the existing culture of the organisation supported the engagement of junior doctors in quality and safety improvement. One organisation, for example, had developed a Junior Doctors’ Safety Board.

- The ‘definition’ of QI which Chief Registrars seemed to adopt reflect their focus on operational service improvement. Few mentioned a specific approach or methodology in their QI work. Much of their work centred on organisational change and implementation. (This might reflect a lack of fidelity to QI methods, as seen elsewhere (Dixon-Woods and Martin, 2016)). Equally, it would be premature to state whether these QI projects had been ‘successful’ or ‘sustainable.’

- There is a danger that Chief Registrars (in general) could become too closely linked to QI projects if this is their primary function and/or their form of medical leadership becomes synonymous with QI. Whilst this was not fully apparent in this study, it is worth clarifying in future.
“I do feel like the quality improvement team here have really taken the CR role as part of their team” (CR).

That said, some Chief Registrars became a generic source of QI advice and some were involved in developing a ‘QI culture’ in the organisation; this could have longer-term benefits. For example, one organisation had set up a:

“…New system where there would be cases presented of, you know, clinical incidents, serious untoward incidents. A junior doctor would get allocated to one. They will then participate in that investigation with a Senior Manager; they’ll learn how to do an investigation then they will also learn how to you know [do] the probing in and out of clinically what happened, then they’ll understand why it’s happened then they come and present that to a group of Junior Doctors” (CR).

- The list of QI activities and projects (below) is extracted from the monthly survey returns of the Chief Registrars. It provides a broad summary, rather than an exhaustive list, of the projects in which Chief Registrars were involved. It reflects the distinction between quality improvement, operational work, and education with an emphasis on service improvement.

<table>
<thead>
<tr>
<th>Examples of QI activities and projects undertaken by Chief Registrars (some by more than one Chief Registrar):</th>
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<tbody>
<tr>
<td>• Establishing QI Forum and teaching programme</td>
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<td>• Arranging and chairing Grand Round programme</td>
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<tr>
<td>• Implementing a new rota and addressing rota gaps</td>
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<tr>
<td>• Improving hospital discharges at weekend</td>
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<td>• E-system for ‘take lists’ and ‘review lists’</td>
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<td>• Establishing an ambulatory care unit</td>
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<td>• Electronic discharge system</td>
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<td>• Handover arrangements</td>
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<td>• Hospital at night</td>
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<td>• Pathway development</td>
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<td>• Introducing simulation training</td>
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- Evaluation of staffing to reduce agency spend
- Operational planning including predictive analysis
- Supporting BBC documentary
- Setting up intranet page for junior doctors
- Coaching and mentoring trainees
- Improving ward rounds
- Acute hospital at home
- “100% days” for 4 hours A&E target, when specific measures were taken to achieve high performance in order to learn about possible improvements
- Improving NEWS policy and escalation of high scores
- Working with undergraduate teaching and assessment
- Junior doctors’ medical newsletter
- Engagement with organisation’s Innovation and Quality Improvement hub and strategy
- Establishing ‘Medical Mess’ meetings
- Improving ward round note keeping
- Developing ‘ceiling of treatment’ procedures
- Involvement in Deanery/GMC/CQC visits
- Improving flow by matching medical hours to demand
- Liaising with GPs regarding medical admissions
- Improving mental health liaison services
- Addressing feedback for Junior Doctors’ surveys
- Roll out of e-prescribing
- Setting up a new Healthcare Informatics group

I. **RCP training programme**

- According to data from the monthly survey, approximately 20% time has been spent on training activities. Training was not specifically defined but relates mainly to the RCP/FMLM programme or Chief Registrars. At least two Chief Registrars were
undertaking other development in leadership alongside the Chief Registrar programme. Training was reduced in December and January.

- Comments about the training programme were divided into content and timing.
- In terms of content, the programme was widely appreciated and valued. At one level, the content filled key gaps in understanding.
  
  “The Chief Registrar RCP days have been very useful... because at the start of the year, I confess I didn’t really understand a lot about the wider management context of the NHS, certainly in terms of the financial structure, that was very new to me” (CR).
  
  “I think certainly with the teamwork aspect, it gave me a better understanding of how to work within a team, how to understand other personalities within a team” (CR).

- An associated benefit was the networks of Chief Registrars which was formed at these sessions and which developed further online.
  
  “I really enjoyed all the training days - actually I think they were really positive and it was a really nice opportunity for us to get together with the bigger group” (CR).
  
  “You learn a lot from other people who are interested in the same thing, whenever I get together with the other Chief Registrars, I mean, it’s fascinating hearing other things that are going on and other ideas and, you know, so that’s a great resource” (CR).

- The overall variety of the training was welcomed but in particular, the action learning sets were highly valued as a:
  
  “structured conversation with everybody about what we were doing while we were doing a bit of a free for all” (CR).

- The speakers were well regarded in terms of quality and variety.
  
  “But the people who are delivering the teaching and the training I think that’s possibly where the Royal College has really got a winner. So they've selected people who we identify with and see ourselves almost emulating” (CR).

- Regarding timing, some parts of the programme were delivered several months into their post.
“It was almost a bit like, for the first couple of sessions, well it’s all, this is great, I really like this but this is too late. I’ve already made these mistakes” (CR).

“It wasn’t quite as bad for me because I started later than everyone else, but I think some of it [training] came a bit too late and it was still really interesting but you kind of thought ‘oh I could have done with this a bit nearer the beginning’” (CR).

- In terms of future training programmes, the Chief Registrars highlighted the value of prior preparation for the training, a more appropriate timing of events and activities, and the value of certification for such training (linking with post-graduate certificates which some Chief Registrars had undertaken).

m. Outcomes and impacts

- An evaluation at a single point in time would not necessarily identify specific outcomes from Chief Registrar activities and nor is the timing of the study suitable to assess the outcomes and impact of this ‘workforce intervention.’ As stated earlier, each of the 21 Chief Registrars was a form of natural experiment, working in their own context and against their own criteria for ‘success.’ However, some Chief Registrars did assess the impact of their interventions. These did not isolate their own contribution per se but the impact of the service improvement overall.

- The difficulties of assessing their impact was noted by all Chief Registrars; for example:
  
  “It’s very difficult to define and to put down on a piece of paper really, the whole experience and to attempt to kind of quantify it in the way we deal with evidence normally is really difficult” (CR).

  “So most of the things I’ve looked at I don’t think have immediate tangible financial benefits or that it is very easy to analyse types of benefits” (CR).

  “I won’t be able to do a graph on what’s happened there and after” (CR).

  “I guess I suppose - in being able to show what difference it’s made after a year probably is not. It’s very difficult to show that time. It’s a culture change which probably is actually what is mainly going to make the difference” (CR).
• These comments do point, however, to some important considerations for broader assessment of the Chief Registrar role. For example, morale of junior doctors is measured regularly through the GMC’s National Training Survey. As the Chief Registrar programme expands, the pattern of association between Chief Registrar and morale might be observable. Likewise, cultural change (towards a more engaged junior doctor workforce) is a longer-term aspiration. The development of a framework or ‘logic model’ could identify the discrete individual interventions which the Chief Registrar programme would need to undertake to achieve such change (Hartley, 2016).

• Nonetheless, some specific outcomes were cited by Chief Registrars; these examples are illustrative.
  
i. Ambulatory care:
   ▪ “We took ambulatory care from seeing ten patients a month and.... So I spent a lot of time changing our rota so we can staff the ambulatory care and our doctors got a better experience with all the different types of teaching and training and our data from ambulatory care is really impressive. Now we’re seeing about 280 patients a month as opposed to 12 patients a month. And our biggest success story is that we haven’t used any more staff, we’ve actually used the same number of staff, but we do things completely differently.” (CR).
   ▪ “[What] I have been working on is a PEA pathway which is Pulmonary Embolism and Ambulatory care” (CR).

ii. Cardiology:
   ▪ “So we formed a little group and we worked together to actually come up with criteria for monitored beds. So we came up with a guideline which is an A4 size poster and it is actually helping now” (CR).

iii. Miscellaneous impacts:
   ▪ “I was never expecting a dramatic improvement, and there has been a significant improvement in whether they’re feeling valued or not, it’s gone to 40% ‘not valued’, from 90% ‘not valued’, so there’s still aims to do and I’ve also done a survey of which consultant gave the best board round and that consultant will get a bottle of champagne, so rather than negatives,
trying to promote improvement that way. So that’s one measure of a culture shift” (CR).

- Overall, a successor Chief Registrar in a particular organisation would be an additional measure of the (perceived) positive impact of Chief Registrars. However, whilst some expressed positive comments, organisations were constrained by financial pressures.

  “So our mentor, who we see on a monthly basis, has said on a number of occasions that they’ve found it all very successful with you and actually that’s already driven them to make sure that we’ve got the Chief Registrar post ongoing in subsequent years” (CR).

  “I think some places just decided they couldn’t afford it” (CR).

n. Costs and finance of the Chief Registrar post

- Studies of the cost-effectiveness (or its cognate terms such as cost utility, cost benefit etc) of similar positions were not apparent in the literature (see above).

- The cost-effectiveness of the Chief Registrar posts was problematic given the opaque costs and the diffuse (and diverse) benefits that were accruing. As a result, there was no direct evidence of cost effectiveness in terms of, say, specific savings that could be attributed to, and would offset the costs of, the posts. Costs were not clearly specified or identified by organisations. Moreover, the approach of the Chief Registrars had deliberately been to work in teams which made individual attribution of costs and benefits difficult.

- Whilst Chief Registrars had limited insights into questions of cost and finance, senior members of their role set did. All recognised that costs were crucial, given the wider financial health of the NHS.

  “So finances are absolutely crucial, they’re very crucial as to whether or not we continue with this programme or not” (CS).

  “So we may not run the chief registrar for next year.... It’s not because we [don’t] want to support it but because we are making decisions about what we want to cut back on” (MD).
• However, it is clear that Chief Registrars made significant impacts in a range of projects that are likely to have contributed to cost savings, through improvements in quality and safety. For some senior staff, the costs of a part-time post were small compared with organisational budgets:

“One person in [an organisation] this size that employs thousands of people I think it’s a drop in the ocean” (MD).

“With a hospital with a turnover of £[XX] a year, it’s a pretty small price to pay” (MD).

• Overall, the benefits of the Chief Registrar were not proven but rather assumed, either that they had been or would be achieved in time.

“I think you know we’d be supportive because I think there has been output, I think, in the duration of the programme, I think if you’d have asked me this question six months down the line I think there’d be more hard intelligence to say look actually yeah this has helped us let’s carry on with this” (CS).

“I would fight tooth and nail to keep it. I absolutely believe that it is important. Personally, I think for the investment that has been theoretically made by somebody, I think we’ve probably got way more than our money’s worth. I mean, [name of Chief Registrar] has worked way over what [name] could have done” (MD).

“Well, the fact is that this has not been a financial burden to [organisation] particularly. I think he’s done most of this over and above the day job” (CS).

• Such apparent cost-benefit assumptions may reflect an atypical cohort of Chief Registrars. Expansion of the scheme may alter not only the assumptions being made by senior (medical) leaders but also the commitment of the Chief Registrars themselves.

o. Personal development outcomes

• While making significant contributions to leadership and service improvement, The Chief Registrar posts are also development posts. In our case study sites, this was emphasised by senior medical leaders:
“It gives the NHS a fantastic opportunity to capture the young leader and to ...
...develop and let them grow” (MD).

- In these ‘role set’ interviews, the training purpose of the role was a stronger theme than the leadership and service improvement role. For example, one clinical director said that:
  “...the leadership in [the organisation] is also a positive although it's a learning role ...they are leaders for the future ...more than they are leaders for now I think” (CD).

- Some senior medical leaders explored the idea of ‘exposing’ Chief Registrars to a wide range of experiences, and in one case at least there was a view that this exposure might have been enhanced. However, the emphasis from both senior medical leaders and Chief Registrars was clearly on learning through undertaking a genuine leadership role. So, for example, one clinical director said that:
  “So I think that the trainees themselves get as much out of it as they... put in. So if they throw themselves into it and get, and understand that actually they have, not quite free reign, ....then I think that that will enable them to gain life skills that they’re going to need in the future” (CR).

- One Chief Registrar developed this theme of learning by doing rather than by observation:
  “So I ended up going to all the meetings but then I just realised I spent all day in meetings and then once I had some ideas, I very quickly stopped going to the meetings, because I thought right I can just get on with these things now” (CR).

- Across the data, there was a strong theme that Chief Registrars reported significant learning from their role. There was a cumulative effect over the year:
  “I definitely didn’t start the role being a perfect leader or having lots of knowledge and abilities in quality improvement but as the year has gone on, ... I've gradually been learning more and more” (CR).

- The issue of the availability of time as a key enabler of leadership and learning was widely acknowledged. This related to individual projects where, in some cases, there was a realisation of the complexity of leading a process of change rather than just
implementing a change. For example, one Chief Registrar explained learning about:

“...the things you have to do in order to effect change, the things you have to put into place first and people you have to speak to, the people you have to get on-board with change” (CR).

- Time was also important to reflect ‘on action’, particularly in the context of the opportunity to learn by doing (including making mistakes). Some of the ‘testing moments’ that were described earlier were recognised as significant learning events, particularly those which involved some unexpected reaction, such as disagreements with a colleague about change. Talking of a difficult communication with a colleague, one Chief Registrar said that it was a salutary experience:

“I think I grew up a bit at that time! And it took a bit not to just go ‘hold on, do you not realise I’m trying to help’” (CR).

- In describing outcomes of their learning, there were two themes that were noteworthy. The first was in the structures and process in the NHS:

“In terms of the world or the environment of NHS management, before I started I knew absolutely nothing and it just seemed to be a new language and I think I still have a lot to learn but I’m getting to grips with how the NHS works” (CR).

- The second learning outcome, and the strongest theme, concerned the relational aspects of leadership and management. This included having the confidence to engage with colleagues, stating a viewpoint, and also the confidence not to lead on every initiative but to encourage colleagues to take action themselves. A number of Chief Registrars acknowledged that, although the programme is seen as developing medical leaders of the future, there was also learning that would enhance their clinical consultant roles in future.
8. Discussion

a. The Chief Registrar programme needs to be set in the context of the Future Hospital Commission Report and the recent introduction of Sustainability and Transformation Plans (STPs). The Commission envisaged the role as a ‘development’ post and that the “primary role of this individual will be to liaise between the junior medical staff working in the medical division and the chief of medicine and senior clinical mangers responsible for delivery of the service” (Royal College of Physicians, 2013; 37). Three key areas identified in the role are key:

- “planning the workload of medical staff in training,
- medical education programmes, and
- quality improvement initiatives.”

b. The Chief Registrar role is part of a ‘new organisational approach’ which includes a chief of medicine, a Chief Clinical Information Officer and clearer organisational accountability to deliver redesigned processes for managing medical patients, both in the hospital and the community. ‘Reconfiguration will almost certainly be needed’ (p.9). Making the changes envisaged in the Future Hospital Commission Report will be a long term undertaking and the contribution and impact of Chief Registrars (in this study) were not explicitly stated as contributing to these changes.

c. This context is recognised in the Job Description for the Chief Registrar post which is produced by the RCP. There is flexibility in the post and not a clearly specific role: the “Chief Registrar will be responsible for contributing to one or more” of the activities identified. In our interviews, we heard little about the Future Hospital Commission Report, or of being part of a strategic change programme. Rather, we heard of significant autonomy in establishing and carrying out the role, and variation in the range of activities and accountabilities of the Chief Registrars.

d. In particular we identified two dimensions along which the roles of Chief Registrar varied, in terms of their emphasis: (on the one hand) between roles which are more clearly orientated to service improvement (including quality improvement), working on
a range of specific projects, well integrated into the organisation’s service improvement processes inside and outside the Medical Division or its equivalent, and (on the other) roles which were more focussed on more general leadership roles with junior doctors, both within the division and across the organisation, depending largely on context. In these leadership roles, we saw Chief Registrars bringing their own styles and priorities for attention, coming especially from the junior doctor body.

e. Chief Registrars occupied roles which, on the one hand, were seen as development posts, the primary aim of which was to support the development of the individual, and, on the other hand, which were substantial leadership roles with clearer expectations, especially by the Chief Registrars themselves, of a significant contribution to the leadership capacity of the Medical Division or equivalent. These roles prioritised relationships with trainee doctors. A particular feature was that Chief Registrars developed an informal team of colleagues within the trainee doctor body to encourage engagement and improvement. Thus, engagement became lateral/horizontal as well as vertical.

f. These distinctions give rise to 4 categories of Chief Registrar role, which are descriptively presented in the diagram below. We identified Chief Registrars that seemed to fit in all four categories, at some part of their Chief Registrar role. As noted above, many Chief Registrars took some time to become established in the role, and so there is likely to have been movement between quadrants over the period of the role. The preliminary evidence from this study suggests there different skills and competencies are required in each quadrant for these hybrid medical leaders the transition between quadrants would merit further investigation.
The experience of the first cohort of Chief Registrars matches the framework of the FMLM standards for medical professionals (2016) based upon, self, team, corporate and system.

i. Certainly, individual Chief Registrars expressed greater self-awareness and understanding of their role as a doctor and as a medical leader. They demonstrated numerous examples of resilience, drive and energy, as indicated by the FMLM.

ii. With regard to teams, they proved capable of forming and running effective teams and cross-team collaborations, mainly in relation to junior doctors and QI initiatives.

iii. At the corporate level, the experience of Chief Registrars was especially significant and was distinctive from other forms of personal / practice development that they or their colleagues might have undertaken. Engagement with senior staff, especially the medical director and/or chief of service, was extremely beneficial in acting as a bridge between junior and senior staff, but also in understanding better forms of organisational decision-making and governance. Specific quality and service improvements were also evident at the corporate level.
iv. Evidence of change at the system level was less apparent in the data. This was to be expected given the Chief Registrars’ remit and role, and at their stage of career. However, there are promising signs that Chief Registrars’ experiences will provide solid foundations for future medical leadership, should they pursue their career in this direction.

h. An alternative way of viewing these findings is through a framework of personal development comprising skills, values and behaviours.
   i. **Skills:** Chief Registrars were given plenty of opportunity at enacting their role through their activities. Skills in negotiation (e.g. in junior doctor fora) and in undertaking QI projects were developed. Dedicated time to develop such skills was crucial.
   ii. **Values:** prior interest in and experience of leadership was valuable though not essential. Values were espoused and shaped in the RCP training programme. This process was complemented by Chief Registrars modelling values of senior (medical) leaders. Senior staff were thus crucial in coaching and mentoring Chief Registrars.
   iii. **Behaviours:** we were less able to observe these and as a result, there was a reliance on secondary sources. However, evidence from the role sets suggests that Chief Registrars did develop behaviours associated with distributed leadership (Fitzgerald et al, 2013).

i. One indicator of the impact of Chief Registrars would be the intention of organisations to appoint successive Chief Registrars. Most organisations participating in the current scheme have appointed or plan to re-appoint a Chief Registrar. As of summer 2017, some organisations are still in the recruitment phase and others are planning to appoint. Some organisations have advertised for a post but not been able to fill it, have candidates on maternity leave, or have current Chief Registrars in post until 2018. Therefore, this intention to re-appoint does suggest that, in most organisations, the position of Chief Registrar has become embedded.

j. The focus of this evaluation was upon the Chief Registrars. However, a counter-factual approach is also insightful. It is hard to discern from these data what would have happened to these Chief Registrars and their organisations if the programme had not taken place. Evidence of control groups or other organisations (without Chief Registrars)
was not part of this evaluation. However, it is worth estimating what might have been the contribution of other initiatives. There are a growing number of medical leadership opportunities and some coordination of these with the Chief Registrar programme would be worthwhile. Crucial to such comparison is the unique on-going clinical role of Chief Registrars whilst developing medical leadership skills and experience.

k. Conceptually, Chief Registrars are `emergent hybrids’. Much of the evidence of hybrid medical managers relates to senior staff (such as medical directors)(eg. McGivern et al, 2015). This programme represents a significant shift to instil a cadre of medical leadership at more junior levels. Therefore, the distinction is not simply between managers and doctors, but also between consultants and junior doctors.

l. There was a clear emphasis on improving services through medical leadership embedded in the clinical processes that were being improved. There was evidence of the use of ‘quality improvement’ tools and techniques (for example, process mapping, PDSA cycles, etc) but this was not a strong theme, and was influenced by organisational context rather than the individual choice of Chief Registrars. Relational leadership skills including communicating with colleagues, negotiation, and working with disagreement were highlighted in personal development accounts. Chief Registrars derived personal and positional authority from being both a trainee, with ongoing clinical commitment, and a senior clinician with an appointed role, but without formal managerial power. This is the place from which distributed leadership can flourish (Fitzgerald et al, 2013).
9. Conclusions

a. The evaluation of the Chief Registrar programme paints a picture of a group of medical leaders with a shared positive outlook, and commitment to improving services through engaging with colleagues, both managerial and clinical.

b. From the point of view of personal development, it was clear from the interviews of both Chief Registrars and others that significant development had taken place, and that this development is likely to be translated into future medical leadership whether in formal leadership posts, or more generally in clinical practice.

c. Evaluating the impact of the programme on services and organisations is more difficult because of the variation in roles that the Chief Registrars developed. The 2016/2017 Future Hospital Chief Registrar yearbook gives personal reflections on achievements by 19 of the Chief Registrars. It is clear from these reflections, and from the accounts we heard, that each Chief Registrar did make significant contributions to service improvement (with patient safety and costs benefits), education provision, or trainee doctor engagement and involvement (including improved morale).

d. Perhaps the key contribution of the first year Chief Registrar scheme is to have laid the foundation of future years’ schemes as progress towards the Future Hospital Commission’s vision of a Chief Registrar in every hospital is achieved. The Commission’s vision required a number of significant changes in organisational structures and processes. The establishment of the Chief Registrar is one of those changes. While each individual Chief Registrar and their employing organisations have been able to shape the role according to local context, it seems important for the future development of the role that the link with other changes in implementing the Future Hospital vision is not overlooked.

e. The recommendations of this evaluation make some contribution to the future development of the Chief Registrar role.
10. Recommendations

a. The RCP should ensure that the education and training (development) programme for Chief Registrar should be timed more appropriately to begin at the start of (or perhaps even before the start of) the Chief Registrar year’s appointments. Consideration ought to be given to changing the order of some of the modules to enable the Chief Registrars to “hit the ground running.” As the cohort grows, there may be some element of regional organisation in the development programme, particularly for action learning sets which may be particularly valued.

b. The RCP should investigate the regional patterns in the take up of Chief Registrars by organisation, so that this can be addressed for future cohorts. Similarly, understanding the reasons why organisations re-appoint (or not) to a Chief Registrar role is important. Such reasons may not simply relate to the individual person but the (organisational and clinical) context within which the Chief Registrar would work.

c. The RCP should monitor the balance in the Chief Registrar programme between leadership, medical engagement and quality improvement so as not to unbalance the work of Chief Registrars in these domains.

d. The RCP should consider working with other professional bodies to expand the scope of the Chief Registrar programme to other specialties.

e. The RCP should support mechanisms which help to sustain the leadership development of Chief Registrars once they have left their post. This might be in the form of supporting a network of chief Registrar alumni or an annual event for all Chief Registrars (past and present), for example.

f. The RCP should evaluate a sample of Chief Registrars’ projects 12-24 months after they have left post to assess the sustainability of the projects.

g. The RCP should consider enhancing recruitment strategies for Chief Registrars. This might involve improved on-line material for prospective Chief Registrars, online activities for medical students and junior doctors via FMLM, and activities for local medical leaders to actively seek potential candidates.
h. The RCP should clarify the costs and funding of the posts (which vary according to the role description and whether Chief Registrars are in or out of programme). This clarification is pertinent in the context of the leadership development programme that is associated with the scheme (which is funded by the RCP). As the programme expands, the cost issue needs to be clarified and made more transparent.

i. Organisations should develop a clear induction programme so that the role can be clarified as soon as possible from the beginning of each chief registrar position.

j. Organisations should have a succession plan for Chief Registrar. This might involve a clearer specification of the projects for the incoming Chief Registrar (in order to ensure projects come to fruition and are longer lasting). This needs to be balanced with the autonomy of Chief Registrar to focus on current or local challenges.

k. Organisations should identify ways of ensuring that the achievements of Chief Registrars in post can be continued to fruition and be longer lasting.
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Appendix A: Bibliography of literature search results


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Appendix B: Monthly survey

Page 1: Introduction

Many thanks for your engagement with the Chief Registrars evaluation. After this page, there are two pages of questions, the first predominantly quantitative, and the second qualitative.

This survey asks questions about your CR role in [Month]. If possible, please complete the survey by [return date]. It should take no more than 10 minutes to complete, but as much qualitative data as possible would be very helpful. It is recognised that some of the questions ask difficult questions to quantify activity but please give your best estimates.

1. What is your participant number? [Required]

2. Please state what general time allowance you have for your Chief Registrar duties (If you have answered this before and the same answer applies you can leave the answer blank)

3. Please state and explain if appropriate the total number of hours available for your CR duties in October, taking into account any absences or unavailability (for example annual leave, sick leave, cover)
Page 2: Activities in the past month.

4. The table below asks for time taken in communicating with a number of different groups of colleagues. Please give an estimate of the time spent in October on these activities, including any indirect additional time in the category – for example reading emails before composing a reply, or looking up a specific document. Other general hours spent researching and reading on aspects of your CR role would be included in question 5 below. Please enter the number of hours in appropriate cells.

<table>
<thead>
<tr>
<th></th>
<th>Discussion (formal and informal)</th>
<th>Other communication (including email)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainee doctors</td>
<td></td>
<td></td>
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<tr>
<td>Senior medical staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other clinical staff</td>
<td></td>
<td></td>
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<tr>
<td>Other clinical staff management</td>
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<tr>
<td>General Management staff</td>
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<tr>
<td>Executive level staff</td>
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<tr>
<td>Other staff within the organisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleagues outside the organisation</td>
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<td></td>
</tr>
</tbody>
</table>

5. How many hours did you spend in October in reading/researching aspects of the role in addition to these ‘contact’ hours.


6. How many hours did you spend in October in an RCP or other training event related your CR role.


Please check the total number of hours given in questions 4, 5, and 6 against the number of hours available for your CR role in September that you gave in question 3. If actual hours are more than the allowance in hours, it will signify you have undertaken additional hours.

7. Please estimate the percentage of time devoted to the following issues in your CR role in October.

<table>
<thead>
<tr>
<th>% of CR time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational issues</td>
</tr>
<tr>
<td>Operational issues (including rotas)</td>
</tr>
<tr>
<td>Service improvement issues</td>
</tr>
<tr>
<td>Others (please explain below)</td>
</tr>
</tbody>
</table>

7.a. Please elaborate if you have used the 'others' category.


Page 3: Issues, achievements, setbacks

8. Please give a brief account of the major issues you were working on in [MONTH].


9. What were your achievements?


10. Have you had any setbacks or issues which didn’t go as well as you’d hoped?


Page 4: Many thanks for your participation.

Many thanks for completing the survey. Please do not hesitate to contact us if there is anything in your responses, or in the evaluation generally, that you’d like to discuss.

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