

# Medical Education Training Research Innovation in Clinical care



## Innovation – Developing the future leaders of the NHS through educational leadership fellowship programmes

Running Head: Simulation fellows as future leaders

Dr. Jivendra Gosai<sup>1</sup>, Dr. Davinder Singh<sup>2</sup>, Dr. Makani Purva<sup>3</sup>

1. Hull Institute of Learning and Simulation, Hull Royal Infirmary, Anlaby Road, Hull, HU3 2JZ

2. Department of Cardiovascular Science, University of Sheffield, Beech Hill Road, Sheffield, S10 2RX

3. Consultant in Anaesthetics, Hull Royal Infirmary, Anlaby Road, Hull, HU3 2JZ

### Declaration

JG, DS and MP have all made substantial contributions to the conception, writing and editing of this work. All have reviewed the final manuscript and have approved it.

The authors declare no conflict of interest, external funding or support in any form from any external agency for this work.

We have obtained written permission from the NHS leadership academy to reproduce sections of the Clinical Leadership Competency Framework in this manuscript.

Please note that 5 images are submitted in addition to this text manuscript in JPEG format in accordance with submission guidelines. They have been labelled Figure 1-5 within the text.

### Notes on contributors

Jivendra Gosai is a Cardiology Specialty Trainee in Yorkshire and Humber, currently out of programme as a simulation and leadership fellow.

Davinder Singh is a Specialty Trainee Paediatrics in Yorkshire and Humber, currently out of programme as a simulation and leadership fellow.

Makani Purva is a consultant in Anaesthetics at Hull and East Yorkshire NHS. She is Director of Medical Education at the trust, and has responsibility for supervision of the simulation fellows based here.

### Abstract

Specialty training for doctors requires the acquisition of many skills and processes to progress to consultant grade. In addition to the clinical skills and knowledge required of the specialty as prescribed by training curricula, there is a growing appreciation of the role that leadership competencies play, and the potential detriment to practice and patient safety that can arise when they are lacking.

The Yorkshire and Humber region developed an initiative enabling those in higher specialty training posts (ST3 and above level) to spend a period developing leadership skills. Key amongst these are projects to further develop the simulation facilities in the region and create sustainable activities within them.

The nature and role of these programmes is discussed, the key differences between these and more traditional educational fellowships,

# Medical Education Training Research Innovation in Clinical care



and how the aims and outcomes align with the Clinical Leadership Competency Framework (CLCF). It is envisaged that alumni of these programmes will continue to utilise their newly developed leadership skills into their ongoing careers, not only as educators, but more importantly they will have a positive effect on their clinical and managerial roles as well.

## Practice Points

1. Setting up and managing simulation programmes requires both educational and leadership skills
2. Specialty training programmes provide excellent clinical knowledge and procedural skills but may be lacking in leadership development
3. Leadership fellowships in simulation provide an excellent platform for trainees to develop leadership skills in accordance with published curricula

## Introduction

The term leadership has risen in prominence in recent years when applied to clinical practice. The Francis report into excess mortality at Mid Staffordshire NHS Trust cited a failure of "leadership" at all levels as one of the key failings identified at the trust, resulting in professional disengagement, a loss of focus on safe patient care and a lack of clinical governance, resulting in inappropriate prioritisation. It is apparent from these findings, and others that a lack of leadership does not simply mean poor performance by those who are employed as

managers, but also comprises a fundamental role for clinical staff delivering patient care at all levels. Good leadership can be demonstrated in situations as small in scale as the routine ward round to medical emergencies and department or organisation level running<sup>(1,-4)</sup>.

Postgraduate medical curricula are well placed to equip trainees with the essential clinical knowledge and skills required to progress to consultant practice. Some consideration of leadership competencies is made, but clinical training is given the majority of focus. Due to the fact that trainee doctors rotate through different hospitals and departments, they may gain useful insights into variations in practice but have limited opportunity to take on formal leadership projects and roles. The level and type of leadership experience obtained will be dependent on the trainee seeking out and actively pursuing opportunities. Effecting change may be challenging in a department in which the trainee is working with senior colleagues who are well established and may have responsibility for their assessment<sup>(5,6)</sup>.

Educational fellowships and programmes have been in existence for at least the last decade. The primary focus is to develop teaching experience, usually within a University medical school environment and in the context of an established curriculum and programme structure. A good example of this is the anatomy demonstrator posts which have historically been taken up by surgeons in training keen to improve their

# Medical Education Training Research Innovation in Clinical care



anatomical knowledge and basic surgical skills<sup>(7,8)</sup>.

## **Simulation and educational leadership**

In recent years, there has been a sharp rise in the use of simulation based learning in healthcare professional education. There have been a number of drivers for this, but amongst the most influential have been an increased focus on quality and patient safety, reductions in working hours leading to a reduction in clinical exposure during training and improved technology allowing creation of clinical environments and scenarios with greater fidelity. There has been substantial investment in facilities and equipment to make use of this technology but formal curricula and programmes to support this are yet to be developed<sup>(9,10)</sup>.

As an educational modality, simulation differs from traditional methods of delivering teaching in the demands on faculty to deliver it. Creation of analogues of the clinical world can be a complex and time consuming process, with a level of intricacy of planning not usually associated with delivering education. Faculty members, in addition to being clinical experts in their area of interest, need experience of delivering simulation and debriefing and a comprehensive understanding of how to teach human factors. To expose all trainees in a group to simulation is more resource intensive than comparable applications of traditional teaching methods<sup>(11)</sup>.

## **Making a difference with leadership fellows**

Many within the medical community are sceptical about the role of simulation in postgraduate training. Given the resource implications required and the current paucity of evidence to demonstrate improvement in patient outcomes, as well as the training and practice required to deliver simulation as an educator, it can be challenging to recruit and retain faculty for these programmes<sup>(12-14)</sup>.

Leadership fellows were appointed to help manage this shift in the way education is delivered. The intention is to attract clinicians from all of the major specialties, ideally placed to understand the clinical and training requirements of their specialty, and develop a network of skilled educators in simulation with the goal of developing simulation activity around the region. In addition this would parallel a process of developing leadership skills to the fellows.

The programme includes a postgraduate certificate or equivalent in a University course with a defined leadership component. This will ensure a solid theoretical grounding in leadership and management theory, and an understanding of the principles of current leadership styles in use.

## **Alignment of the role with an established leadership curriculum**

In total 21 leadership fellows, drawn from hospital specialty training programmes, have been attached to the Hull Institute of Learning and Simulation (HILS). The majority of these posts have been for 12

# Medical Education Training Research Innovation in Clinical care



months full time equivalent, although some flexibility has been required. Fellows have also been attached to other centres in the region.

To determine whether the programme is meeting its aims from the point of view of the fellows, the work and scope of the role was assessed against the CLCF, published by the NHS Leadership Academy. This consists of five domains, each with four elements. For each element, descriptors are provided which detail competencies expected at three levels (student, practitioner and experienced practitioner)<sup>(15)</sup>.

For each element of the CLCF, both the example job description and also the actual actions performed by fellows past and present were assessed against the CLCF. It was considered that the fellowship should as a minimum equip the fellow with the ability to meet the competencies required of a practitioner; but that it is desirable that they are on track to meet those expected of an experienced practitioner. Tangible activities were considered, and analysed to determine whether they align with the CLCF. For example one of the key drivers for simulation programmes is patient safety and fellows are encouraged to use existing clinical governance material such as data from audit and untoward incidents to identify training needs and system weaknesses. This links closely with priorities identified at department, organisation and national levels. **Figures 1-5** demonstrate the specific examples mapped to the CLCF. Indicators of

the expected competence for an experienced practitioner are being met across all five domains of the CLCF during the fellowship programme, often in several different forms. Whilst individual projects and programmes will vary in their content, the generic leadership skills gained are common to all backed up by the academic component. By mapping the leadership curriculum to activities simulation fellows carry out during their placement, it is intended to demonstrate that the fellowship programme offers opportunities for trainees interested in developing their leadership skills.

The authors also believe that the fellowship programme meets many of the key development qualities outlined in the newly published Healthcare Leadership Model<sup>(16)</sup>.

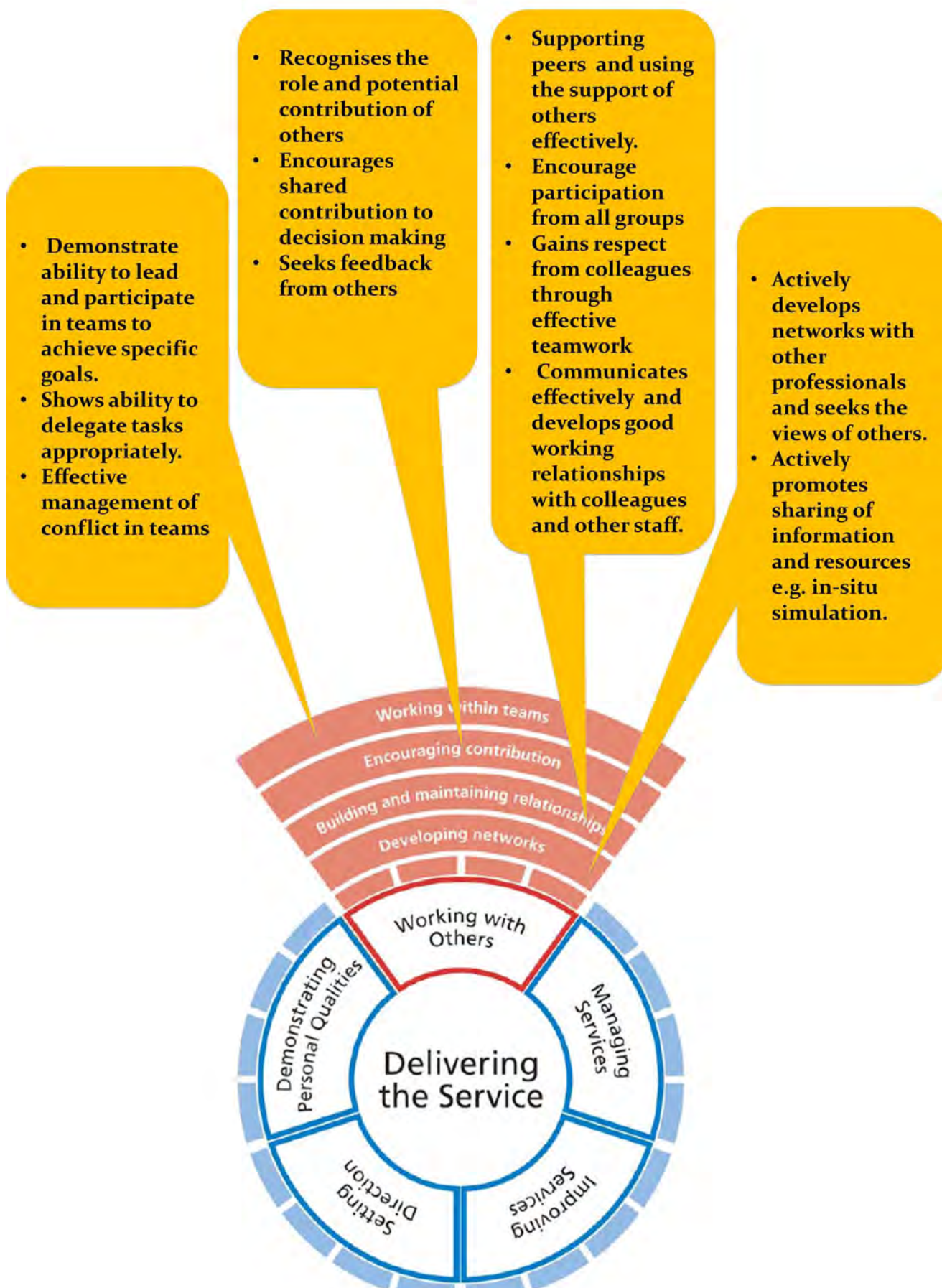


# Medical Education Training Research Innovation in Clinical care



**Fig. 1: Demonstrating personal qualities**  
 (Image courtesy NHS Leadership Academy)

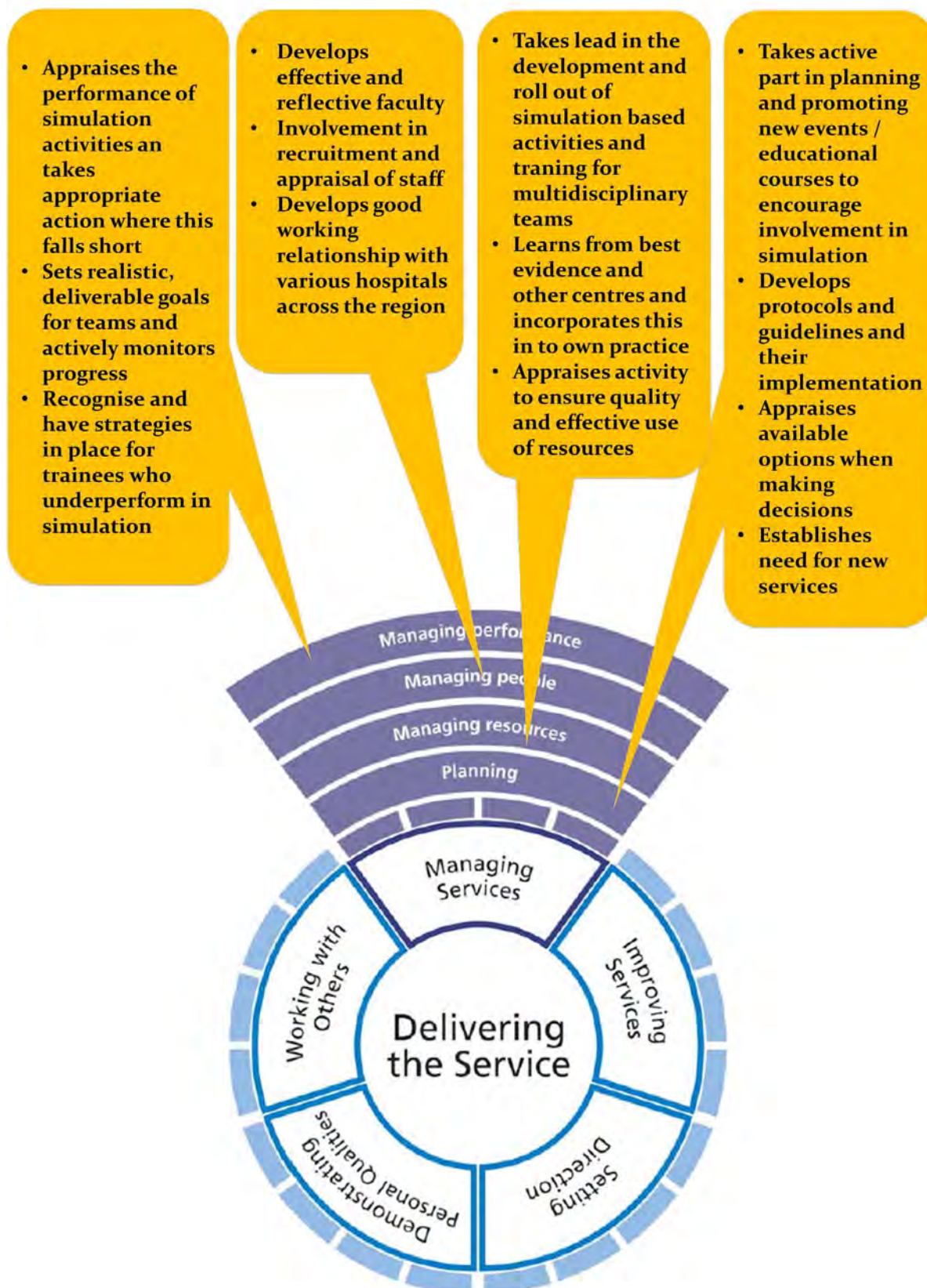
# Medical Education Training Research Innovation in Clinical care



**Fig.2: Working with others (Image courtesy NHS Leadership Academy)**



# Medical Education Training Research Innovation in Clinical care



**Fig.3: Managing services (Image courtesy NHS Leadership Academy)**

# Medical Education Training Research Innovation in Clinical care



**Fig.4: Improving services (Image courtesy NHS Leadership Academy)**



# Medical Education Training Research Innovation in Clinical care



**Fig.5: Setting direction (Image courtesy NHS Leadership Academy)**

# Medical Education Training Research Innovation in Clinical care



## Discussion

The development of simulation activity in the Yorkshire and Humber region has presented a valuable opportunity to develop the leadership role. In contrast with other educational fellowship programmes, which immerse the fellow in teaching an established programme with a primary focus on enhancing teaching skills, this opportunity is focussed on developing the leadership skills of the fellow through a combination of formal taught programme and project work which immerses them in the development of a service (in this case simulation).

Collaboration with a variety of services and professional groups is required, not all of whom will be initially engaged with simulation either through unfamiliarity or negative previous learning experiences<sup>(17-19)</sup>.

Opportunities like dealing with serious untoward incidents (SUI) and identifying latent risks through in situ simulation helps further developing their leadership skills by working in partnership with other services and departments locally and regionally.

Key skills which may not be acquired during the course of clinical training can be developed through this programme, including management of region-wide complex projects involving multiple stakeholders, development of networks and promoting the use of simulation to individuals who may be sceptical<sup>(20)</sup>.

Many of the skills acquired are generic skills which will be carried forward into the fellow's ongoing career as a consultant in

their specialty regardless of whether they continue to deliver simulation activity. Gaining an understanding of the non-clinical structures and processes which exist within the NHS, and how services are commissioned and funded, as well as high level access to committees at trust and region level will instil confidence in the fellow when faced with these situations in future. In particular, project management and the development of the interpersonal skills required of a leadership role such as delegation, team working and dealing with conflict and individuals with performance issues come to the fore during the fellowship programme<sup>(2, 21, 22)</sup>.

## Conclusions

Postgraduate medical training is well structured to equip trainees with the clinical knowledge and skills which they require for practice, but the acquisition of advanced leadership skills is less well covered. Health Education Yorkshire and Humber have set up an extensive leadership fellowship programme. Many of these are focussed on the development and management of simulation based medical education.

The role of the simulation and leadership fellow was examined with reference to an acknowledged leadership curriculum for healthcare professionals. The fellowship programme is well placed to equip them with the leadership competencies defined by the CLCF, and the fellow can be expected to operate at a level associated with an experienced practitioner on completion



# Medical Education Training Research Innovation in Clinical care



of the programme. The skills gained are transferable and should enable these trainees to go on to positions of leadership.

## **Acknowledgement**

We would like to acknowledge Dr Alan Nobbs and the NHS Leadership Academy who have granted permission for us to reproduce parts of the Clinical Leadership Competency

Framework for this publication.

## **Declarations**

Drs Gosai and Singh are both currently employed in the role of Leadership and Management Fellow by the Health Education Yorkshire and Humber with a focus on simulation development. Dr Purva serves as a supervisor to fellows in this programme based in Hull.

# Medical Education Training Research Innovation in Clinical care



## References

1. R. Francis, "Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry Executive summary," London, 2013.
2. R. Bohmer, "The instrumental value of medical leadership: Engaging doctors in improving services," The King's Fund, London, 2012.
3. C. J. Dine, J. M. Kahn, B. S. Abella, D. a Asch, and J. a Shea, "Key elements of clinical physician leadership at an academic medical center," *J. Grad. Med. Educ.*, vol. 3, pp. 31–6, 2011.
4. S. B. Issenberg, W. C. McGaghie, I. R. Hart, J. W. Mayer, J. M. Felner, E. R. Petrusa, R. a Waugh, D. D. Brown, R. R. Safford, I. H. Gessner, D. L. Gordon, and G. a Ewy, "Simulation technology for health care professional skills training and assessment.," *JAMA*, vol. 282, no. 9, pp. 861–6, Sep. 1999.
5. O. J. Warren and R. Carnall, "Medical leadership: why it's important, what is required, and how we develop it.," *Postgrad. Med. J.*, vol. 87, pp. 27–32, 2011.
6. A. Edler, M. Adamshick, R. Fanning, and N. Piro, "Leadership lessons from military education for postgraduate medical curricular improvement," *Clin. Teach.*, vol. 7, pp. 26–31, 2010.
7. N. S. Searle, C. J. Hatem, L. Perkowski, and L. Wilkerson, "Why invest in an educational fellowship program?," *Acad. Med.*, vol. 81, pp. 936–940, 2006.
8. D. Furmedge, A. Verma, K. Iwata, R. Belcher, E. Ntatsaki, L.-J. Smith, G. Myers, S. Bennett, and A. Sturrock, "The rise of clinical teaching fellowships," *BMJ Careers*, 2013. [Online]. Available: <http://careers.bmj.com/careers/advice/view-article.html?id=20014362>. [Accessed: 01-Oct-2014].
9. R. Aggarwal and A. W. Darzi, "Simulation to enhance patient safety: why aren't we there yet?," *Chest*, vol. 140, pp. 854–8, 2011.
10. J. Temple, "Time for Training," London, 2010.
11. S. B. Issenberg, W. C. McGaghie, I. R. Hart, J. W. Mayer, J. M. Felner, E. R. Petrusa, R. a Waugh, D. D. Brown, R. R. Safford, I. H. Gessner, D. L. Gordon, and G. a Ewy, "Simulation technology for health care professional skills training and assessment.," *JAMA*, vol. 282, no. 9, pp. 861–6, Sep. 1999.
12. D. M. Gaba, "The future vision of simulation in healthcare.," *Simul. Healthc.*, vol. 2, pp. 126–135, 2007.
13. K. Hessler and H. Ritchie, "Recruitment and retention of novice faculty.," *J. Nurs. Educ.*, vol. 45, pp. 150–154, 2006.
14. A. L. Jones and M. Hegge, "Simulation and Faculty Time Investment," *Clin. Simul. Nurs.*, vol. 4, no. 2, pp. e5–e9, 2008.
15. NHS Leadership Academy, "Clinical Leadership Competency Framework," Leeds, 2011.
16. NHS Leadership Academy, "Healthcare Leadership Model," Leeds, 2013.
17. A. Ziv, S. D. Small, P. Root, and A. Wolpe, "Patient safety and simulation-based medical education.," *Med. Teach.*, vol. 22, pp. 489–495, 2000.
18. E. Salas, K. A. Wilson, E. H. Lazzara, H. King, J. Augenstein, D. Robinson, and D. J. Birnbach, "Simulation-Based Training for Patient Safety: 10 Principles That Matter," *J. Patient Saf.*, vol. 4, no. 1, pp. 3–8, 2008.
19. M. Rall and P. Dieckmann, "Simulation and patient safety: The use of simulation to enhance patient safety on a systems level," *Curr. Anaesth. Crit. Care*, vol. 16, pp. 273–281, 2005.
20. P. J. H. Schoemaker, S. Krupp, and S. Howland, "Strategic leadership: the essential skills.," *Harvard business review*, vol. 91, Boston, pp. 131–4, 147, 2013.
21. S. Moll, Y. Ahmed-little, B. Brown, H. Abdalla, and E. Owen, "Emerging clinical leadership development in the NHS," *Br. J. Healthc. Manag.*, vol. 17, pp. 481–485, 2011.
22. I. Gowan, "Encouraging a new kind of leadership," *Br. J. Healthc. Manag.*, vol. 17, pp. 108–112, 2011.