# Leading Innovation and Improvement

## #INFLUENCEME: AN INVESTIGATION INTO SOCIAL MEDIA HEALTH INFLUENCERS AND THE IMPACT THEY HAVE ON THEIR FOLLOWERS

1Ayomide Ayorinde, 1Alex Compton, 1Chen Liu, 1Alistair Ludley, 1Nikisha Patel, 1Joseph Rose, 2Faiz Shaikh, 1Imperial College London, UK; 2Brighton and Sussex Medical School, UK

10.1136/leader-2019-FMLM.47

Social Media Health Influencers (SMHIs) can be defined at the most basic level as those who influence their followers’ perspectives by posting online health-related content. SMHI followers are individuals who watch, take advice from or subscribe to an SMHI.

This study aimed to investigate SMHIs’ effect on their followers and explore the responsibilities of SMHIs in the online space and their capacity to enhance health education.

Primary data collection involved surveying individuals to understand the effect of SMHIs. Furthermore, the research team launched the National Collaborative for Health and Social Media (NCHSM), which aims to facilitate future research and raise awareness about issues surrounding social media and health. The NCHSM hosted #InfluenceMe: The Responsibility of Online Social Power in Wellbeing, where a panel of SMHIs discussed the challenges of operating responsibly on social media.

Of the sample surveyed (n=206), 68 participants were identified as SMHI followers. 63% of SMHI followers reported changing a decision or action due to SMHIs, suggesting SMHIs may influence followers’ health-related decisions or actions. Key differences between followers that changed behaviours based on SMHI advice and those that did not included the number of SMHIs followed and how often health content was viewed. Followers were also keen for healthcare organisations to use SMHIs in health education. However, the #InfluenceMe event suggested that healthcare leaders (e.g. senior Healthcare Professionals) are needed to verify SMHIs and ensure their social media content is accurate.

SMHIs appear to have an impact on their followers’ behaviours. In order to elicit positive behaviour changes in followers, SMHIs must create accurate content and act responsibly online. Healthcare leaders have the potential to verify SMHIs so that their involvement in health education is optimal. Healthcare leaders themselves also have potential to act as SMHIs in today’s digital age.

## A TRAINEE LED QUALITY IMPROVEMENT PROJECT TO INCREASE SATISFACTION OF JUNIOR DOCTORS IN A HIGH VOLUME NEUROSURGICAL UNIT

Chris McKinnon, Joseph Wood, Rory Piper, Ursula Schulz, Claire Pulford, Deva S Jayaretna and Jane Halliday. John Radcliffe Hospital, Oxford University Hospitals NHS Foundation Trust, Headley Way, Oxford, OX3 9DU, UK

10.1136/leader-2019-FMLM.49

The Department of Neurosurgery in Oxford University Hospitals NHS Foundation Trust is a tertiary referral centre which treats approximately 1500 neurosurgery inpatients per year. Feedback from junior doctors in the General Medical Council (GMC) National Training Survey 2018 revealed low rates of trainee satisfaction.

To investigate the underlying cause, an anonymous online questionnaire was designed which collected data on various aspects of junior doctors’ experience in the department.

Questionnaire responses from 12 out of 16 junior doctors identified problems with frequent overtime work, excessive administrative tasks, lack of protected training opportunities and variable levels of senior supervision on the ward. To reduce overtime working, the rota was redesigned to improve staffing levels in afternoons/evenings and a formal handover meeting was introduced. A departmental teaching programme with weekly seminars on the management of neurosurgical conditions and neuroanatomy was developed. This was supported by the introduction of a neurosurgery curriculum aimed specifically at junior doctors. The role of a ‘Ward Registrar’ was enhanced to provide...
structured support, supervision and training to junior doctors.

This project has highlighted the value of a local questionnaire in seeking anonymised, honest feedback from junior doctors and encouraging engagement in the QI process. We anticipate that the frequent turnover of junior doctors in the department will pose a challenge for the project. It is therefore being linked to formal quality improvement training and a local peer support hub to ensure sustainability. Low levels of trainee satisfaction are likely to be multifactorial in nature and can be effectively investigated with a structured online questionnaire. By identifying key areas of concern at a local level, targeted QI projects can be designed and led by trainees, with an overall improvement in satisfaction, working hours and training opportunities.

50 AN ADVICE LEAFLET TO HELP JUNIOR DOCTORS IN ED MANAGE SHIFT-WORK ASSOCIATED FATIGUE

1Louis Flander, 2Laura Cottey. 1Intercalating Medical Student, University of Plymouth Peninsula School of Medicine and Dentistry (UK); 2ED Academic Clinical Fellow, University Hospitals Plymouth NHS Trust (UK)

Background There are many physical, mental and social complications of fatigue associated with working shifts. Emergency Medicine is experiencing a crisis within the UK with a low recruitment rate and a high attrition rate. 24-hour Emergency Department (ED) provision requires doctors to work long, often unsociable shift patterns, at risk of becoming unsustainable. Junior doctors are vulnerable to this, and thus to suffering the aforementioned complications of fatigue. This further contributes to attrition, perpetuating the workforce problem.

Objectives

• Increased awareness amongst junior doctors and other important stakeholders of the effects of shift-work related fatigue.
• Junior doctors to be enabled to better manage fatigue associated with shift-work through sleep hygiene.

Methods Work was conducted within the ED at Derriford Hospital, University Hospitals Plymouth NHS Trust. Local wellbeing research was reviewed, establishing that ED staff had a high ‘need-for-recovery’ score compared to respondents in the validation study working jobs classed as ‘stressful’. National Emergency Medicine Trainee Association surveys of 2015 and 2017 highlight key concerns for trainees as fatigue, workload and rota scheduling. These findings were contextualised through consultation with the Junior Doctors Representative Committee and ED Wellbeing Committee.

A printed advice leaflet was created, containing basic sleep science, highlighting potential complications of shift-work, and giving advice on how to manage shift-work associated fatigue. The leaflet was peer-reviewed, then disseminated to ED junior doctors.

Impact From feedback received, this leaflet has raised awareness of shift-work related fatigue. Recipients are better equipped to manage fatigue whilst working shifts and have tools to practice sleep hygiene.

Further measurement of improvement will involve an anonymised questionnaire and analysis of the Junior Doctor component of the imminent ED staff survey.

51 AN OBSERVATIONAL STUDY EVALUATING THE IMPROVEMENT IN PERFORMANCE OF INPATIENT GASTROENTEROLOGY SERVICES FOLLOWING THE IMPLEMENTATION OF A TRANSFORMATION PLAN

1Suraj Pathak*, 2Ajay Verma. 1Department of Cardiovascular Sciences and National Institute for Health Research Leicester Biomedical Research Unit in Cardiovascular Medicine, University of Leicester, Glenfield Hospital, UK; 2Kettering General Hospital NHS FT, Kettering, UK

Introduction The incumbent arrangements were on Deene C Ward (DCW), 29 patients under the care of three Consultants doing twice weekly ward rounds (WR) not prospectively covered, newly admitted and unwell patients reviewed by any WR as a safety net arrangement.

This was transformed to a Digestive Diseases Unit (DDU), bed base reduced from 29 beds (3 side rooms, 3 x 6 bedded bays, a 5 bedded bay & a 3 bedded bay), to 20 beds, by reducing 6 bedded bays to 4 beds, and converting the 3 bedded bay to a nurse-led Gastroenterology Treatment Area (GTA) for day-case ambulatory patients. This facilitated the introduction of a Consultant of the Week (CorW) model.

The CorW, for 2 weeks (prospectively covered), is responsible for daily DDU WRs of all 20 patients under their care, review of in-patient (IP) referrals, in-reach into urgent care wards, and support of GTA. There is minimal outpatient (OP) commitment. Outcomes were analysed at 12 months to assess the impact on patient care.

Methods A retrospective observational study was conducted to benchmark and evaluate changes in consultant-led care. Statistical analysis was performed using Microsoft Excel.

Conclusion The reconfiguration of Gastroenterology IP services has been a great success. A reduction in bed base (which many at management level were reticent about) has facilitated a CorW model of care to be implemented. The IP service is now SAFER compliant. Length of stay has significantly reduced by 26.2%. Weekly discharges per bed, and Consultant reviews, has significantly increased by 34.2% & 84.1% respectively. In addition, GTA treats >90 patients per month, generating income, preventing admissions, facilitating earlier discharges, and freeing capacity in the main hospital ambulatory unit. This reconfiguration shows that a CorW model of care is optimal, successful, and SAFER compliant, even if a bed base reduction is required to facilitate this.

52 ARTIFICIAL INTELLIGENCE FOR HUMANITARIAN ACTION: AN INTERDISCIPLINARY APPROACH TO COMMUNICABLE DISEASES IN REFUGEES

1R Jarjal*, 2T Kells, 3N Yue Lin, 4A Mason-Mackay, 5K Sharma. 1NHS UK; 2Tech Futures Lab, New Zealand; 3Aderant, New Zealand; 4University of Auckland, New Zealand; 5Crunch and Flourish, New Zealand; 6Mission Ready HQ, New Zealand

The ‘Ora’ platform was developed alongside clinicians in a collaborative effort, winning the Microsoft ‘Artificial Intelligence (AI) for Good’ challenge with an AI powered tool for humanitarian crises. Geographically-tagged social media sentiment analysis is proposed as an increasingly validated metric for rapidly modelling disease incidence – supported by