



**Improvement**  
**Imperial College**  
London



*National Institute for*  
*Health Research*

# The Fifth Annual NIHR Imperial Patient Safety Translational Research Centre Symposium

Co-hosted by the NIHR Imperial PSTRC and NHS Improvement



Thursday 9th November 2017  
Royal Academy of Engineering

## Event Programme





# Foreword



I am pleased to welcome you to the Royal Academy of Engineering for the Fifth Annual NIHR Imperial Patient Safety Translational Research Centre Symposium. It's an become an annual tradition and one that I look forward to immensely every year. At its core, the event is an opportunity for us - the NIHR Imperial PSTRC - to share with the community, what we've been doing over the past year and what we will be doing, in the hopes of uniting those who are passionate about improving patient safety.

The aim of the Imperial PSTRC is to leverage research findings and embed them in healthcare practice to reduce harm and deliver safer care. We work along six research themes to address critical challenges in patient safety. Collectively these themes will address safety at the patient level to improve diagnostics and avoid deterioration, and at the systems level to improve care across the continuum, while partnering with patients and ensuring value for money.

I am especially looking forward to this year's event because unlike previous years, we are partnering with NHS Improvement to reach new audiences. It's also been an important year for us, given the renewal of our funding from the National

Institute for Health Research (NIHR) in early 2017. In the same cycle, two other excellent Centres were funded and this event marks the first time that all three NIHR PSTRCs will come together and share the vision for translational patient safety in the English NHS for the next five years.

We will also hear from important leaders in the global patient safety arena, including Professor Robert Wachter, the chair of the National Advisory Group on Health Information Technology in England; Keith Conradi, Chief Investigator of the Healthcare Safety Investigation Branch; and many more across academia, front-line service provision and policy.

Thank you for joining us for what promises to be a very interesting discussion and I hope what you will hear and see today will energise you to join us as we continue our exciting journey to improve the safety of care.

Note that the event will host a live Twitter feed and you are encouraged to join the debate using the hashtag #ImperialPSTRC2017 in your tweets.

**Professor the Lord Ara Darzi**  
Director, The NIHR Imperial PSTRC



The NHS is under unprecedented pressure. Increased demand, challenges to patient flow, an ageing population, ever-mounting complexity of treatments and a host of other factors all play their part. Yet within this context we are committed to ensuring the NHS is the safest healthcare system in the world.

This isn't hyperbole. The strengths of the NHS – universal access, free at the point of need, accountable to the public, committed to continuous improvement – mean this is a realistic ambition. Partly, this is due to our ability to combine world-class healthcare with world class research. The Patient Safety Translational Research Centres (PSTRCs) are an invaluable engine for innovation and improvement. They help put the NHS at the vanguard of improving safety and other aspects of healthcare quality.

We recently published NHS Improvement's Approach to Patient Safety. This describes the work we are doing to support the NHS to be the safest healthcare system in the world. The areas of focus for the PSTRCs are mirrored in our work; medication safety, incident reporting, case record review, investigation and learning, patient involvement in patient safety, and better supporting our staff to name a few. We commission the Patient Safety Collaborative programme, delivered via Academic Health Science Networks such as Imperial College Health Partners, precisely because of their unique ability to access academic innovation to support healthcare providers to improve.

In the four years since the Francis and Berwick reports we have made good progress in encouraging a continuous learning and improvement approach in the NHS. The next five years require us to redouble those efforts and work with our colleagues in PSTRCs and elsewhere to develop the solutions to the challenges we face.

**Dr Kathy McLean**  
Executive Medical Director, NHS Improvement



# Symposium Agenda

**9:30 - 9:55** REGISTRATION

**9:55 - 10:00** Introduction and welcome

Professor the Lord Ara Darzi, Director, The NIHR Imperial PSTRC

**10:00 - 10:30** Keynote

The Rt Hon Jeremy Hunt MP, Secretary of State for Health

**10:30 - 10:35** Chair's intro

Shaun Lintern, Senior Patient Safety Correspondent, Health Service Journal (HSJ)

**10:35 - 11:00** The resilient leader

Wiley 'Chip' Souba, Professor of Surgery and Professor of Medical Education at the Geisel School of Medicine, Dartmouth College

**11:00 - 11:15** TEA AND COFFEE BREAK

**11:15 - 11:45** Patient safety in the NHS

Dr Kathy McLean, Executive Medical Director, NHS Improvement

**11:45 - 12:30** Research priorities in patient safety for the next five years and the central role of patients

- Sir Nick Partridge, Former Chair of INVOLVE
- Professor the Lord Ara Darzi, Director, NIHR Imperial PSTRC
- Professor Rebecca Lawton, Director, NIHR Yorkshire and Humber PSTRC
- Professor Stephen Campbell, Director, NIHR Greater Manchester PSTRC

**12:30 - 13:30** LUNCH BREAK

**13:30 - 14:00** Investigations in healthcare

Keith Conradi, Chief Investigator, Healthcare Safety Investigation Branch

**14:00 - 14:45** Safety cultures in the next five years

- Shaun Lintern, Senior Patient Safety Correspondent, HSJ
- Dr Suzette Woodward, Campaign Director, Sign Up to Safety!
- Professor Nick Black, Professor of Health Service Research, London School of Hygiene and Tropical Medicine

**14:45 - 15:00** TEA AND COFFEE BREAK

**15:00 - 15:30** The digitization of healthcare: how it makes patient safety better... and worse

Professor Robert Wachter, Professor and Chair of the Department of Medicine, University of California

**15:30 - 16:15** Patients, carers, staff and the public: co-creation in research, service improvement and policy

- Dr Mike Durkin, Senior Advisor for Patient Safety Policy and Leadership, Imperial College London
- Sandra Jayacodi, Patient representative from the NIHR Imperial PSTRC Research Partners Group
- Charity Gondwe, Carer representative from the NIHR Imperial PSTRC Research Partners Group
- Joanna Fisher, Deputy Divisional Director Nursing – Surgery, Cancer & Cardiovascular, Imperial College Healthcare NHS Trust
- Claire Marshall, Experience of Care Professional Lead, NHS England

**16:15 - 16:20** Closing remarks

Professor the Lord Ara Darzi

**16:20 - 17:00** DRINKS RECEPTION, CANAPES & POSTERS (sponsored by NIHR Imperial PSTRC)

# Speaker biographies



**Professor the Lord Ara Darzi of Denham**  
PC KBE FRS FMedSci HonFREng

Professor the Lord Ara Darzi is the Director of the NIHR Imperial Patient Safety Translational Research Centre (NIHR Imperial PSTRC) and the Institute of Global Health Innovation at Imperial College London. He also holds the Paul Hamlyn Chair of Surgery at Imperial College London. He is a Consultant Surgeon at Imperial College Healthcare NHS Trust and the Royal Marsden NHS Trust.



**Shaun Lintern**  
Senior Patient Safety Correspondent, Health Service Journal (HSJ)

Shaun is HSJ's Senior Patient Safety Correspondent as well as covering the NHS workforce and mental health services. He also covers the NHS in parts of the West and East Midlands as well as Cheshire and the Wirral and parts of South Yorkshire and Sheffield. He has been a journalist for 14 years, and helped expose the Mid Staffordshire care scandal while working as a local reporter in the West Midlands. He attended most days of the Francis inquiry, and also gave evidence as a witness.



**Wiley 'Chip' Souba**  
Professor of Surgery and Professor of Medical Education at the Geisel School of Medicine, Dartmouth College

Wiley 'Chip' Souba is Professor of Surgery and Professor of Medical Education at the Geisel School of Medicine at Dartmouth. He is also an adjunct faculty member of the Tuck School of Business.



**Dr Kathy McLean**  
Executive Medical Director, NHS Improvement

Dr Kathy McLean is NHS Improvement's Executive Medical Director and was previously Medical Director at the NHS Trust Development Authority for 3 years. Prior to this she was the Clinical Transitions Director working with Sir Bruce Keogh building the NHS Commissioning Board, now NHS England. Her work has focussed on improving quality by building in clinical leadership and expertise across the system, including development of clinical networks and senates, and she was also a leading member of the NHS Future Forum.



**Sir Nick Partridge**  
Former Chair of INVOLVE

Sir Nick Partridge is a leading British healthcare and HIV/AIDS activist. He worked for the Terrence Higgins Trust from 1985 to 2013 and was appointed its Chief Executive in 1991. He was the Chair of INVOLVE from 1999 to 2011 and Deputy Chair of NHS Digital from 2013 to 2017. He is currently Chair of the Clinical Priorities Advisory Group at NHS England and a member of the Understanding Patient Safety steering committee.



**Professor Rebecca Lawton**  
Director, NIHR Yorkshire and Humber PSTRC

Rebecca Lawton is Professor in Psychology of Healthcare at the University of Leeds. Rebecca is lead for the Yorkshire Quality and Safety Research Group and the Director of the Yorkshire and Humber Patient Safety Translational Research Centre. Rebecca is also academic director for the AHSN Improvement Academy in Yorkshire and Humber and she leads a programme of research on evidence based transformation within the NHS as part of the Yorkshire and Humber CLAHRC.



**Professor Stephen Campbell**  
Director, NIHR Greater Manchester PSTRC

Stephen Campbell is Professor of Primary Care Research in the Centre for Primary Care at The University of Manchester. He is Director of the NIHR Greater Manchester Patient Safety Translational Research Centre. He is a health services researcher who focuses on patient safety and quality of care in primary care and in the transitions of care between and within health services.



**Keith Conradi**  
Chief Investigator, Healthcare Safety Investigation Branch

Keith is the first Chief Investigator of the UK's newly formed Healthcare Safety Investigation Branch. Previous to this, he was the Chief Inspector of Air Accidents of the UK's Air Accidents Investigation Branch (AAIB) between 2010 and 2016. Keith Conradi joined the AAIB in 2002 directly from Virgin Atlantic where he flew the Airbus A340 and A320 aircraft.





**Dr Suzette Woodward**  
Campaign Director, Sign Up to Safety!

Suzette is a paediatric intensive care nurse who has specialised in patient safety for the last 20 years - former board director at the NPSA and NHS Resolution she is currently the director of the national campaign, sign up to safety. Suzette has a doctorate in patient safety implementation and a Masters in clinical risk. She is author of 'rethinking patient safety' which details what it takes to build a safety culture in healthcare.



**Professor Nick Black**  
Professor of Health Service Research, London School of Hygiene and Tropical Medicine

Nick Black is a Professor of Health Services Research at the London School of Hygiene and Tropical Medicine. He joined LSHTM in 1985 and was promoted to a Chair in Health Services Research in 1995. His main research interests are methods of assessing the quality of care (particularly in the field of surgery and critical care), patient-reported outcomes and, recently, dementia care. In 2017 he was knighted for services to health care research.



**Professor Robert Wachter**  
Professor and Chair of the Department of Medicine, University of California

Robert is Professor and Chair of the Department of Medicine at the University of California, San Francisco, where he is the Holly Smith Distinguished Professor in Science and Medicine and the Benioff Endowed Chair in Hospital Medicine.



**Dr Mike Durkin**  
Senior Advisor for Patient Safety Policy and Leadership, Imperial College London

Dr Mike Durkin was NHS National Director of Patient Safety from 2012 to 2017. He is a Non-executive Director at NHS Resolution and Chair of the Management Board of the NICE/Royal College of Physicians National Clinical Guideline Centre.







### **Sandra Jayacodi**

Patient representative from the PSTRC Research Partners Group

Sandra is the part of the NIHR Imperial PSTRC Patient and Public Involvement and Engagement (PPIE) Advisory Board and the Research Partners Group. Sandra works for East London Foundation Trust as a Service User Research Advisor for the Synchrony Music Therapy Research Study. Sandra is a trustee for Mind in Harrow and is a research fellow of the Northwest London CLAHRC.



### **Charity Gondwe**

Carer representative from the PSTRC Research Partners Group

Charity Gondwe is a member of the NIHR Imperial PSTRC Research Partners Group. She has worked in the education sector for over 16 years and currently works as an Outreach Worker for families with children with additional needs. Charity is a parent and foster carer for children with long term conditions and her passion is involving young people and carers in decisions for improved quality of life.



### **Claire Marshall**

Experience of Care Lead, NHS England

Claire Marshall is the Experience of Care Lead in the Patient Experience Team at NHS England. Claire joined NHS England in August 2017 on a 12 month secondment from Frimley Health NHS Foundation Trust where she is Head of Patient Experience. She has spent her 23 year career in acute hospitals services as a Physiotherapist.



### **Joanna Fisher**

Deputy Director of Nursing, Imperial College Healthcare NHS Trust

Joanna Fisher is the Deputy Divisional Director Nursing – Surgery, Cancer & Cardiovascular at Imperial College Healthcare NHS Trust. Jo has a clinical background in emergency nursing and has held a variety of nursing management and leadership roles in both acute and community organisations. Jo has recently completed a Quality Improvement Fellowship.





# Poster sessions

## Poster 1

Barrow, Emily (Clinical Research Fellow)

Archer, Stephanie (Research Fellow)

Long, Susannah (Clinical Lecturer)

Darzi, Ara (Professor)

NIHR Imperial PSTRC

### Putting the patient in patient safety: co-designing the patient experience of safety

#### Background

Patient safety is predominantly approached with a clinical lens. However, the patient perspective of patient safety is different; they focus on the experience of feeling safe. This work aimed to bring abstract and theoretical understandings of the patient perspective into everyday practice, by developing a practical product for making patients feel safe when they are in hospital.

#### Methods

The study used accelerated experience-based co-design in a one-day workshop involving patients and healthcare professionals with experience of elective surgery. Nominal group technique and a World Café approach was used to define patient safety from the patient perspective, using data from previous research and the patients' own experiences.

#### Results

Participants defined eight values that described what mattered to patients to feel safe in hospital and the associated behaviours that would bring those values to life. The values were: cleaning and infection control, confidence in staff, human relationships, infrastructure for reporting concerns, supporting me to support myself, partnership throughout my care, communication, and environment and facilities. These were collectively defined as the 'Foundations of Safe Care.'

#### Conclusion

'The Foundations of Safe Care' is a unique co-designed product that focuses on the patient perspective of patient safety, specifically the experience of feeling safe. It adds a new dimension to patient safety, shifting towards a new paradigm that values the perspectives of all those involved. It brings the patient perspective into day-to-day clinical practice, encouraging healthcare professionals to think about what is important for patients to not only be safe, but also feel safe.



## Poster 2

Martine Nurek (Research Associate)<sup>1</sup>

Miguel Vadillo (Senior Research Fellow)<sup>2</sup>

Olga Kostopoulou (Reader)<sup>1</sup>

(1) Department of Surgery and Cancer, Division of Surgery, Imperial College London

(2) Departamento de Psicología Basica, Universidad Autonoma de Madrid

### The role of pre-decisional information distortion in misdiagnosis

#### Background

Physicians are found to interpret patient information in a way that favours their leading diagnostic hypothesis ('pre-decisional information distortion'). No study has investigated the contribution of information distortion to misdiagnosis.

#### Methods

We constructed two patient cases. Each case consisted of a brief introduction (demographic details, risk factors, health complaint) and 18-19 'cues' (symptoms, signs, investigations). Each case offered two competing diagnoses: one common and non-serious, the other more rare and serious (muscle injury vs. heart disease; IBS vs. colorectal cancer). The serious diagnosis could not be excluded given the information available per case, thus the cases warranted referral to secondary care. We presented 148 GPs with one of the two cases, at random. After reading the patient introduction, participants were asked to choose one of the two diagnoses. They then selected cues, arranged as labelled buttons on an information board. When a cue was revealed, participants evaluated it in relation to each diagnosis (0='no support', 10='strong support') and updated their diagnostic choice. When they felt ready, they made a final diagnostic choice. We measured information distortion (i.e., the extent to which cue evaluations differed from those of a control group) and assessed its contribution to the final choice of diagnosis via mediation analysis.

#### Results

Initial choice of diagnosis (non-serious vs. serious) predicted final choice (OR=4.78,  $P<0.001$ ). Information distortion mediated this relationship: an initial non-serious diagnosis was associated with information distortion to support it, which in turn increased the odds of a non-serious final diagnosis. Final diagnosis predicted management (OR=0.01,  $P<0.001$ ): physicians who gave a non-serious final diagnosis were significantly less likely to refer.

#### Conclusions

Our findings shed light on some of the cognitive causes of diagnostic error that can impact patients. Initial diagnostic hypotheses are important, but the interpretation of subsequent information may be more so.



## Poster 3

Hall, Louise  
Johnson, Judith  
Watt, Ian  
Tsipa, Anastasia  
O'Connor, Daryl

*University of Leeds, Bradford Institute for Health Research (Yorkshire and Humber Patient Safety Translational Research Centre)*

### Healthcare staff wellbeing, burnout, and patient safety: A systematic review

#### Objective

To determine whether there is an association between healthcare professionals' wellbeing and burnout, with patient safety.

#### Design

Systematic research review

#### Data sources

PsychInfo, Medline, Embase, and Scopus were searched, along with reference lists of eligible articles.

#### Eligibility criteria for selecting studies

Quantitative, empirical studies that included i) either a measure of wellbeing or burnout, and ii) patient safety, in healthcare staff populations.

#### Results

Forty-six studies were identified. Sixteen out of the 27 studies that measured wellbeing found a significant correlation between poor wellbeing and worse patient safety, with six additional studies finding an association with some but not all scales used, and one study finding a significant association but in the opposite direction to the majority of studies. Twenty-one out of the 30 studies that measured burnout found a significant association between burnout and patient safety, whilst a further four studies found an association between one or more (but not all) subscales of the burnout measures employed, and patient safety.

#### Conclusion

Poor wellbeing and moderate to high levels of burnout are associated, in the majority of studies reviewed, with poor patient safety outcomes such as medical errors, however the lack of prospective studies reduces the ability to determine causality. Further prospective studies, research in primary care, conducted within the UK, and a clearer definition of healthcare staff wellbeing are needed.

#### Implications

This review illustrates the need for healthcare organisations to consider improving employees' mental health as well as creating safer work environments when planning interventions to improve patient safety.



## Poster 4

**Naresh Serou**

*Clinical Practice Educator, Operating theatres St Marys Hospital, Imperial College Healthcare NHS Trust*

*Lecturer, College of Nursing, Midwifery and Health Care, University of West London*

*PhD Student, Faculty of Medical Sciences Newcastle University*

### **Systematic review of psychological, emotional and behavioural impacts of surgical incidents on operating theatre staff and related safety concerns.**

#### **Background**

Adverse surgical incidents affect both patients and health professionals. This study sought to explore the effect of surgical incidents on operating theatre staff and their subsequent behaviours.

#### **Methods**

Eligible studies were primary research or reviews that focused on the effect of incidents on operating theatre staff in primary, secondary or tertiary care settings. MEDLINE, Embase, CINALH and PsycINFO were searched. A data extraction form was used to capture pertinent information from included studies and the Critical Appraisal Skills Programme (CASP) tool to appraise their quality. PRISMA-P reporting guidelines were followed and the review is registered with PROSPERO.

#### **Results**

A total of 3918 articles were identified, with 667 duplicates removed and 3230 excluded at the title, abstract and full-text stages. Of 21 included articles, eight focused on the impact of surgical incidents on surgeons and anaesthetists. Only two involved theatre nurses and theatre technicians. Five key themes emerged: the emotional impact on health professionals, organization culture and support, individual coping strategies, learning from surgical complications and recommended changes to practice.

#### **Conclusion**

Health professionals suffered emotional distress and often changed their behaviour following a surgical incident. Both organizations and individual clinicians can do a great deal to support staff in the aftermath of serious incidents. Future research is needed to explore whether the impact of surgical complications differs amongst the wider operating theatre team.



## Poster 5

Boiko O. (Research Associate)  
Edwards M.(Clinical Fellow)  
Zschaler S. (Senior Lecturer)  
Miles S. (Reader)  
Hayes C. (Research Associate)  
Rafferty AM. (Professor)

*King's College London*

### Streamlining processes versus engendering social capital: insights from the qualitative study of hospital staff's views on managing the ED patient flow

#### Background

Managing the patient flow via emergency pathway proved to be one of the highly contentious issues for patient safety in the NHS. The current study examines how the patient flow is organised and maintained in an ED undergoing improvement and what barriers and possibilities for change are perceived as the most salient by the hospital staff.

#### Method

The study utilises a qualitative case study methodology and involves 19 semi-structured interviews with clinicians, managers and support staff sharing their perspectives on the patient flow via A&E pathway in one of London's tertiary hospitals.

#### Results

The analysis of staff's views suggests that the patient flow is enabled by four activity systems: streamlining ED decision-making, managing performance, coordinating admission processes and capacity planning. Different blockages to the flow are identified as associated with each system, some related to working practices and resources others to attitudes and cross-functional interactions between hospital professionals.

#### Conclusion

To achieve more efficient and safer flow, initiatives that tackle both processes and organisational culture needs to be integrated in healthcare systems that require high customisation. Improvement efforts are likely to be more efficient if based on the in-depth knowledge of major barriers to flow management.





## Poster 6

Benn, Jonathan  
Burnett, Susan  
D'Lima, Danielle  
Dawson, Paul  
Charles, Katherine  
Aylin, Paul

*Imperial College London*

### The institutional response to mortality alerts: an evaluative framework

#### Objectives

In the UK, considerable investment has been made in mortality surveillance and alerting systems. There is currently a lack of understanding concerning the ways in which organisations are using mortality data and alerts, and the extent to which these responses are effective at promoting organisational learning and quality improvement. This study set out to develop an evaluative framework for institutional capability, to effectively respond to mortality alerts.

#### Methods

65 qualitative interviews with senior mortality and clinical leads were conducted across 11 UK providers, selected based upon their receipt of alerts in either Sepsis or AMI. In order to validate the emerging framework, interviews and a focus group were conducted with data service provider representatives and regulatory bodies.

#### Results

An evaluative framework was developed consisting of nine key thematic areas. These include structures and processes to support mortality governance, use of information, mortality review and local improvement as well as broader influences such as the organisational culture, senior leadership and external environment. The presence of key committees, roles and processes for effective mortality governance was identified as important as well as effective organisational use of mortality data to detect and respond to signals proactively. Issues associated with the accuracy of mortality coding were raised by interviewees and the robustness and frequency of mortality review contributed to an organisation's capacity to learn from alerts and translate findings into local actions for improvement. Interviewees emphasised the role of the regulator in encouraging organisations to respond to mortality alerts and coaching the organisational response.

#### Conclusion

Achieving an optimal response to a mortality alert is a complex institutional process that draws upon a variety of interrelated internal organisational and external factors. The evaluative framework produced as a result of this study can be used as a practical tool to better support health care provider organisations in using and responding to mortality alerts to improve patient safety.

## Poster 7

Jheeta, Seetal

Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust Lead  
Pharmacist, Medication Safety Research

Franklin, Bryony Dean

Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust; Research  
Department of Practice and Policy, UCL School of Pharmacy  
Director, Centre for Medication Safety and Service Quality; Professor of Medication Safety

### The impact of an inpatient electronic prescribing system on prescribing error causation: a qualitative evaluation in an English hospital

#### Background

Few studies have applied a systems approach to understanding prescribing error causation in the hospital electronic prescribing (EP) context. A comprehensive understanding of underlying causes is essential for developing effective interventions to improve prescribing safety. Our objectives were to explore prescribers' perspectives of the causes of errors occurring with EP and to make recommendations to maximise benefits and minimise risks.

#### Methods

In 2016, we interviewed twenty-five purposively sampled prescribers involved in prescribing errors about their causes and views about EP. Semi-structured interviews were audio-recorded, transcribed verbatim and thematically analysed against a framework based on Reason's accident causation model.

#### Results

Active failures included slips due to incorrect selection from drop-down lists and rule-based mistakes due to over-reliance on default prescribing suggestions or failing to check for duplications. Use of EP was specifically linked to error-producing conditions at the level of individual, team, task, environment and technology. Three groups of latent conditions were identified: the EP system's functionality and design; the organisation's decisions around EP implementation and use; and prescribing behaviours in the context of EP.

#### Conclusion

New findings about error aetiology with EP included changes in prescribing responsibilities, individuals' behaviours and learning needs, and the altered physical prescribing environment. EP vendors should focus on interface design and usability issues, acknowledging the wider healthcare environment in which such software is used. Hospital organisations should address infrastructure and training issues and provide guidance around prescribing responsibilities.





## Poster 8

Garfield S<sub>1,2</sub> (research pharmacist), Bell H<sub>1</sub> (senior pharmacy technician), Nathan C<sub>1</sub> (senior lead pharmacist), Ritchie L<sub>1</sub> (quality improvement fellow), Backhouse A<sub>1</sub> (quality Improvement lead), Reynolds S<sub>1</sub> (senior lead pharmacist), Husson F<sub>1</sub> (patient representative). Boucher C<sub>1</sub> (carer representative), Lloyd J<sub>1</sub> (patient representative), Taylor A<sub>1</sub>, (patient representative), Franklin BD<sub>1</sub> (executive lead pharmacist)

*1= Imperial College Healthcare NHS Trust, 2= UCL School of Pharmacy*

### Increasing self-administration of medicines in an acute hospital

#### Background

Increasing inpatient self-administration of medication reduces dose omissions and may increase safe medication management after discharge. However, in a preliminary survey, we found that while 44% of 100 inpatients reported that they would like to administer their own medicines while in hospital, only 20% reported that they had done so. We aimed to make self-administration more available to patients who wanted it.

#### Method

We carried out a failure, modes and effects analysis, collected baseline data on four wards and carried out observations. Following this assessment, we focused on raising patient awareness of self-administration and changing the patient assessment process. We developed new patient information leaflets and posters, and a doctor's assessment form, using Plan-Do-Study-Act cycles. We then piloted the new materials on three wards; the fourth withdrew due to staff shortages. Following collection of baseline data we continued to collect weekly data that we analysed using p charts. We carried out semi-structured interviews with healthcare professionals; these were transcribed verbatim and analysed thematically.

#### Results

We found that the proportion of patients who wished to self-administer who reported that they were able to do so significantly increased from 41% (of 155 patients) to 66% (of 118 patients), despite a period when the hospital was over capacity. Healthcare professionals reported that the project had raised their awareness of self-administration and expressed a preference for multidisciplinary input into the assessment process.

#### Conclusions

Raising awareness of self-administration can greatly increase the proportion of patients who wish to self-administer who actually do so.



## Poster 9

R. Baxter\* 1, 2, N. Taylor2, 3, I. Kellar1, 2, R. Lawton1, 2

1 Yorkshire Quality and Safety Research group / Yorkshire and Humber PSTRC, Bradford Institute for Health Research, Bradford

2 School of Psychology, University of Leeds, Leeds

3 Cancer Research Division, Cancer Council, NSW, Australia

### Background

'Positive deviance' is an asset based improvement approach which seeks to learn from those who demonstrate exceptional performance despite facing similar constraints as others. This study applies the approach to generate hypotheses about how staff on positively deviant elderly medical wards deliver exceptionally safe patient care.

### Method

Eight elderly medical wards within Northern England were selected for their exceptional (positively deviant, n=4) and above average (comparison, n=4) performances on the NHS Safety Thermometer data. Multi-disciplinary staff focus groups explored how safe patient care is delivered at ward level. All data were analysed thematically to create a framework of abstract behaviours and concrete strategies that enabled high performance. Differences between positively deviant and comparison wards were then identified to generate hypotheses about the specific behaviours and strategies that facilitate positive deviance.

### Results

This presentation will focus on the abstract behaviours that facilitate positive deviance at ward level. These related to staff relationships, integrating multidisciplinary ward teams, staffing, and ward culture. Some of the concrete strategies that staff used to achieve these abstract behaviours will be highlighted. For example, a daily 'safety briefing' that involved all staff regardless of their grade engendered a multidisciplinary approach, emphasised everyone's role in maintaining safety, and facilitated staff knowing one another.

### Conclusions

Findings highlight the positively deviant behaviours that are hypothesised to facilitate exceptionally safe patient care at ward level and the concrete, practical strategies that staff use to achieve them. Testing and spreading these to similar wards may help generate improvements in patient safety.



## Poster 10

D'Lima, Danielle., Bottle, Alex., & Benn, Jonathan (presenting author).  
Imperial College London

### A mixed methods investigation of the efficacy of organisational level feedback from incident reporting

#### Objectives

Dissemination of data from incident reporting systems does not always result in improvement in systems and professional practice. Our aim was to understand the effectiveness of organisational level feedback from incident reporting systems and to extract the characteristics and mechanisms by which it leads to improvement.

#### Methods

A survey was circulated to registered users of the UK National Reporting and Learning System (NRLS). The survey was designed with reference to existing research on the characteristics of effective feedback for incident reporting and contained both quantitative and qualitative items. To help interpret the survey data, qualitative data from interviews with 17 international safety science experts both internal and external to healthcare was analysed drawing upon the principles of grounded theory.

#### Results

The survey had 320 respondents representing 49% of healthcare providers in the UK. 75% of respondents indicated that both doctor and nursing groups never used institutional feedback from the NRLS. 40% of respondents indicated that risk managers engage with feedback at least monthly. Respondents expressed agreement that feedback helps them to understand the strength of their reporting culture compared to others. However, they disagreed that the data provides them with timely information that has a sufficient level of detail and specificity to respond rapidly to patient safety issues. Interviewees reported a range of perceptions and experiences of effective feedback from incident reporting. Eight concepts for effective feedback emerged from the qualitative dataset.

#### Conclusion

Current organisational level feedback from incident reporting systems generally meets benchmarking needs and enables monitoring of data quality by healthcare providers. It is more likely to influence safety culture rather than effectively support improvement in systems and professional practice. This is due to a lack of detail and timeliness to ensure sufficient relevance and specificity for information to be adapted and disseminated throughout the organisation and may explain the perceived lack of engagement with clinical staff members.





The NIHR Imperial Patient Safety Translational Research Centre (NIHR Imperial PSTRC) is a collaboration between Imperial College London and Imperial College Healthcare NHS Trust

#### Get in touch

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Visit our website at  
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**Join the debate**  
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