NIHR | Yorkshire and Humber Patient Safety Translational Research Centre

# Spring 2019 Newsletter

## NIHR Yorkshire and Humber Patient Safety Translational Research Centre

Welcome to our Spring 2019 newsletter. This edition showcases our new 'Second Victim' website, which provides information for healthcare staff who may have experienced error. We describe our work on cancer risk assessment tools and also highlight two of our PhD students working within the Patient Involvement in Patient Safety research theme. We bring you up to date with two events we have recently run: the inaugural PSTRC PhD Network Forum, which brought together PhD students and staff from across the three NIHR Patient Safety Translational Research Centre Networks; and our Safety Innovation Challenge event which sought to engage with healthcare staff and academics from different disciplines to explore current patient safety challenges.

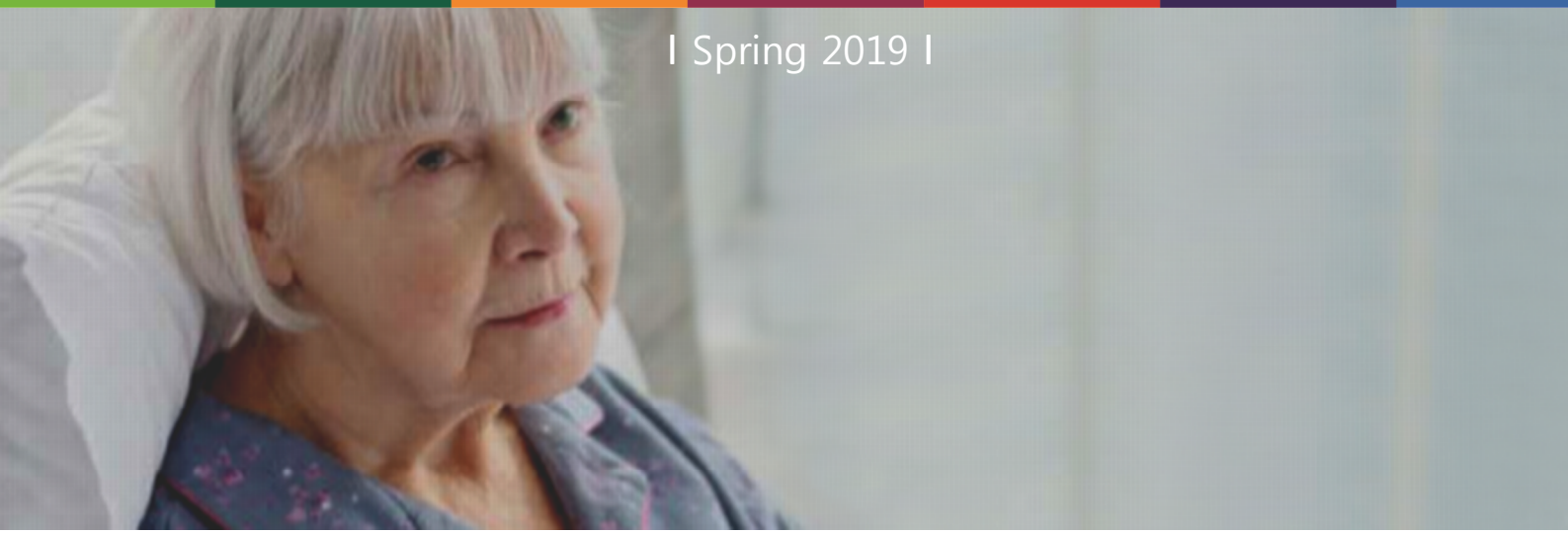
If you have any questions or feedback about any of the updates in this newsletter you can contact us by emailing pstrc@bthft.nhs.uk

**STOP PRESS – APPLY BY 26 APRIL 2019**

We have five exciting new funded PhD opportunities for exceptional candidates. For more information see our website www.yhpstrc.org or contact Beth Fylan b.fylan@bradford.ac.uk

Our PhD projects are at the cutting edge of patient safety research and will focus on:

1. The role of community pharmacists in developing and implementing deprescribing initiatives in primary care.
2. Enhancing feedback for ambulance service staff to promote workforce wellbeing and patient safety.
3. Sociotechnical evaluation of digital innovations for patient safety.
4. Reducing inappropriate admissions to hospital: Understanding and enhancing tolerance of uncertainty amongst staff and patients.
5. 'Patient work-as-imagined' versus 'patient work-as-done': How do patients and families 'reach in' to support the resilience of cancer care pathways?



# THE PSTRC PHD NETWORK FORUM

By Siobhan McHugh, PhD student

I recently attended the inaugural NIHR Patient Safety Translational Research Centre PhD Network Forum held in Leeds. The event brought together PhD students, researchers and theme leads from across the three PSTRCs for a day of presentations and discussion. This provided an opportunity to network with fellow students and develop contacts across the PSTRC network.

The introductory presentation was delivered by Professor Rebecca Lawton, Director of the Yorkshire and Humber PSTRC. Rebecca discussed her PhD journey, and how her PhD shaped her future career, providing excellent advice to the PhD fellows present about where their PhD could lead. Following this were two concurrent sessions in which PhD students presented their work. The two morning sessions saw projects focusing on supporting workforce development and wellbeing to promote patient safety, and the management, investigation and economic impact of adverse events and complaints. Students and expert panels of academic staff had thoughtful discussions and students were given guidance and advice on specific elements of PhD projects and planned studies.

Following a short break, Karen Fernando of the NIHR Academy joined us to talk about potential funding opportunities through the NIHR Academy post-PhD.


We were also joined by Professor Rachel Elliot of Greater Manchester PSTRC who gave an extremely informative presentation on the methodological challenges faced when exploring the economics of patient safety.

The networking lunch provided extra opportunity for students to present their work, with PhD fellows presenting posters further demonstrating the range of projects spanning the PSTRC PhD network. These included exploration of how staff respond to online patient feedback focusing on Care Opinion (Lauren Ramsey; YH PSTRC), the mapping of drug related problems among hospitalised children in the UK (Adam Sutherland; GM PSTRC), and understanding the barriers and facilitators of implementing NICE guidelines for self-harm (Jessica Leather; GM PSTRC).


Following lunch, PhD students delivered presentations in two further concurrent sessions exploring the involvement and engagement of patients for patient safety, and supporting safety across time and healthcare settings. To read the student abstracts for all oral and poster presentations please see http://yhpstrc.org/about-the-pstrc/events. Dr Caroline Sanders of Greater Manchester PSTRC gave an insightful presentation on the involvement of marginalised groups in patient safety research. Professor Rebecca Lawton also provided some excellent advice on how to maximise the impact of our research. The PhD Network Forum was closed by Professor Stephen Campbell, Director of the Greater Manchester PSTRC, who discussed some thought-provoking 'top tips' for PhD fellows at all stages of their PhD journey.

The inaugural PhD Network Forum provided an invaluable insight into the range of projects and expertise across the PSTRC network, and a supportive environment in which to discuss our PhD projects and seek advice from experts and colleagues across the network. I found it extremely valuable as a final year student to receive constructive and thoughtful questions about my project, and the PhD Network Forum has provided an excellent opportunity for myself, and other students, to develop links and collaboration across the PSTRC network.

# MEET OUR PHD STUDENTS

**In this article we meet two of our PhD students working within the Patient Involvement in Patient Safety theme, to find out more about their research and what they hope to achieve.**

## Lauren Ramsey

**Email:** L.ramsey@leeds.ac.uk
**Twitter:** @Laurenpramsey
**PhD start date:** October 2017
**Supervisors:** Dr Jane O'Hara, Professor Rebecca Lawton, Dr Laura Sheard, Dr James Munro

### What is your PhD about?

NHS policy highlights the important and unique perspective of patients, and the potential value of their feedback in informing improvements to care. In light of this, the healthcare service is increasingly collecting feedback from patients, with collection often being mandated across many aspects of care. Additionally, patients are increasingly reporting their healthcare experiences online. Despite this, recent research suggests that there is not enough being done with patient feedback to inform meaningful change. Therefore, the aim of this PhD is to explore how staff use and respond to online patient feedback to inform improvements to the quality and safety of care in a hospital setting.

### What drew you to study this topic within the Yorkshire and Humber PSTRC?

From my previous roles, I had developed an interest in both patient-centred care, and the role of digital health technologies in alleviating pressures on the NHS. This project appealed to both of these interests and explored a timely issue. I was particularly interested in researching online patient feedback as I felt that placing feedback in the public domain added a layer of complexity in terms of both responding to the feedback, and using it to inform meaningful change.

### What contribution do you hope your PhD research will make to improve patient safety?

As online patient feedback is a relatively unexplored area of research in patient safety, I hope that the studies within my PhD will provide valuable insight around better using this readily available feedback to inform meaningful improvements to the way that care is delivered.

### What has been your proudest moment so far?

It would have to be recruiting the first NHS trust to take part in my study. A lot of hard work had gone into refining the protocol, applying for ethics and preparing the study documentation. It was a big milestone to speak to NHS staff who worked with online patient feedback in their roles who were interested to get involved in the study.

### What one piece of advice would you give to new PhD students?

Write as much as you can as often as you can. At the beginning of the PhD I read lots of papers. I found it really helpful to keep detailed notes from each paper I read, usually in the form of an extended abstract. That way, when it came to writing up my systematic literature review and the introductions to studies, I could go back to my notes and pull together the information I needed, avoiding having to dig out or re-read papers.

# Mary Smith

**Email:** hcmls@leeds.ac.uk
**Twitter:** @MLSmith96
**PhD start date:** October 2018
**Supervisors:** Professor John Baker, Dr Jane O'Hara

### What is your PhD about?

My PhD will focus on the experience of individuals when they raise concerns about their mental health in-patient care and treatment. I am interested in finding out how people feel they are listened to, what is their experience of providing feedback on their care – are they heard, do they feel valued, do they feel listened to? Are they treated with dignity and respect? What is the outcome of their feedback? Are our services listening, and if so what is the impact of that listening – do we learn lessons, do we change?

### What drew you to study this topic within the Yorkshire and Humber PSTRC?

As an experienced mental health professional I recognise that our services sometimes don't meet expected standards – we can fall short of offering safe, quality services. There continues to be many studies that detail negative experiences for people who access our mental health wards. I was drawn to this topic as I believe there are significant lessons still to be learnt in the way we listen to people – yes we collect and collate feedback and yes we have systems for complaints and concerns – but do they have an impact? Is it worth the trouble of complaining, or do people feel even more marginalised, stigmatised when they raise a concern?

### What contribution do you hope your PhD research will make to improve patient safety?

By effectively listening to individuals, by hearing their stories and by examining our own failings in responding effectively, I believe we can improve the interactions on mental health wards, improve how we work together with people who use services and in turn improve their care experience. My own practice experience has led me to recognise that sometimes care isn't safe or good enough and I believe we need to understand individual experiences if we are to improve quality of care and safety for everyone who uses our services.

### What has been your proudest moment so far?

Being accepted onto this PhD programme! I am so very proud to be using research to work to develop and improve an area of service I am passionate about. In terms of my proudest 'work moment' it must be in developing effective social work practice in a mental health trust; working with people who use services to ensure the services we offered were effective and impactful.

### What one piece of advice would you give to new PhD students?

I am very new at this so wouldn't want to offer much advice beyond keep reading – just when I think I have a good overview of the research 'out there' I keep finding more studies! Also recognise it's going to be a long three years, good luck and enjoy the experience.

## SPOTLIGHT ON CANCER RISK ASSESSMENT TOOLS

As the old adage goes 'A stitch in time, saves nine'. The idea that it is better to deal with problems early is also true when treating cancer, with people faring much better the sooner they are diagnosed. But how can we spot cancer before it becomes a major problem?

Willie Hamilton and colleagues designed cancer risk assessment tools, or Cancer RATs, to guide investigations and referrals by predicting a cancer diagnosis (http://tinyurl.com/y5fn5ln5). Many cancer risk assessment tools have been developed that cross-reference symptoms which, on their own, wouldn't strongly indicate cancer (Hamilton, 2009). Patients with moderate-to-high risk of an impending cancer diagnosis are assessed and, in the worst cases, can be reassured by knowing they are getting a head start on treatment.

Cancer risk assessment tools often consider only a handful of symptoms and don't always consider other factors like demographics or lifestyle. The increased ease with which clinicians' and patients' information can be collected and collated provides for a more thorough record of patients' health. Leveraging this information within patients' electronic health records is likely to help in the development of smarter risk assessment tools. These Smart Cancer RATs will not only be better at predicting impending diagnoses but will also be more helpful and easy for clinicians and patients to use. For example, they will keep false alarms to a minimum so as not to cause unnecessary anxiety for patients or unnecessary use of resources.

Our Digital Innovations research theme is developing the next wave of these Smart Cancer RATs by incorporating clinician knowledge with state-of-the-art artificial intelligence methods. We're involving users of the assessment tools in the design of our methods and building on large, UK-wide research into indicators of cancer risk.

Patient safety covers every part of a patient's journey and cancer risk assessment tools are helping by spotting problems early for smoother transitions through care and reducing the need for more serious treatment.

Hamilton, W. (2009). The CAPER studies: Five case-control studies aimed at identifying and quantifying the risk of cancer in symptomatic primary care patients. British Journal of Cancer, 101(S2), S80–S86.

| Constipation | Diarrhoea | Rectal bleeding | Loss of weight | Abdominal pain | Abdominal tenderness | Abnormal rectal exam | Haemoglobin 10-13 g/dl | Haemoglobin <10 g/dl | |
|---|---|---|---|---|---|---|---|---|---|
| 0.42 | 0.94 | 2.40 | 1.20 | 1.10 | 1.10 | 1.50 | 0.97 | 2.3 | PPV as a single symptom |
| 0.81 | 1.10 | 2.40 | 3.00 | 1.50 | 1.70 | 2.60 | 1.20 | 2.60 | Constipation |
| | 1.50 | 3.40 | 3.10 | 1.90 | 2.40 | 11.00 | 2.20 | 2.90 | Diarrhoea |
| | | 6.80 | 4.70 | 3.10 | 4.50 | 8.50 | 3.60 | 3.20 | Rectal bleeding |
| | | | 1.40 | 3.40 | 6.40 | 7.40 | 1.30 | 4.70 | Loss of weight |

**Adapted from Hamilton et al., 2013**

Hamilton, W., Green, T., Martins, T., Elliott, K., Rubin, G., & Macleod, U. (2013). Evaluation of risk assessment tools for suspected cancer in general practice: A cohort study. *British Journal of General Practice*, *63*(606), 30–36

### Contact our researchers

If you have any questions about our cancer risk assessment research, please contact:

Ciarán McInerney, PhD.
c.mcinerney@leeds.ac.uk





## A resource to help the 'Second Victims' of patient safety incidents

By: Gillian Janes, Iona Elborough-Whitehouse, Rebecca Lawton

In January Yorkshire and Humber PSTRC launched its support resource website for 'second victims' of patient safety incidents, who are healthcare professionals affected by their involvement in an incident or error. Up to 50% of healthcare workers are affected (Wu & Steckelberg 2012). Support for second victims is lacking, creating the potential for: '…a vicious cycle of adverse events, burnout, poor care, and more adverse events.' (Pratt et al 2012).

Using existing evidence on the development of effective support programmes (Chan et al 2017), this website provides key information and signposting for second victims, colleagues and managers wishing to help individual staff and those seeking to develop more strategic, organisational and system level support. It is also informed by second victims themselves and other stakeholders.

Central to this resource are short videos of second victims sharing their experiences and coping strategies and we thank those who participated in this way in order to help others. The website also outlines the common human response that individuals involved in a patient safety incident experience, along with strategies for coping and sources of practical and emotional support.

The website was developed in conjunction with the Improvement Academy http://www.improvementacademy.org/ and with the support of professional bodies including the Medical Defence Union and the Royal College of Physicians.

You can view the website at www.secondvictim.co.uk

To volunteer your story as a second victim, colleague or manager supporting someone in this situation, for inclusion on the website contact Dr Judith Johnson: j.johnson@leeds.ac.uk

For further general information contact: Iona.Elborough-Whitehouse@bthft.nhs.uk

References:

Chan ST, Khong PCB, Wang W (2017) Psychological responses, coping and supporting needs of healthcare professionals as second victims. International Nursing Review 64(2): 242-262 DOI: 10.1111/inr.12317

Harrison R, Lawton R, Perlo J, Gardner P, Armitage G, Shapiro J (2015) Emotion and Coping in the Aftermath of Medical Error: A Cross-Country Exploration. Journal of Patient Safety 11(1): 28–35

Pratt S, Kenny L, Scott SD, Wu AW (2012) How to develop a second victim support program: a toolkit for health care organizations. Joint Commission. Journal on Quality & Patient Safety, 38 (5): 235-240

Wu AW, Steckelberg RC (2012) Medical error, incident investigation and the second victim: doing better but feeling worse? BMJ Quality and Safety 21(4): 267-270

# OUR SAFETY INNOVATION CHALLENGE EVENT

In November, we hosted our first **Safety Innovation Challenge** event for academic researchers, healthcare staff and patients.

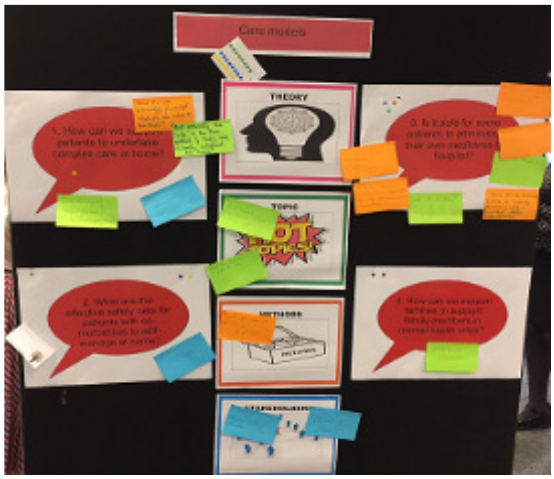
The event drew together teams interested in developing patient safety research ideas, meeting potential research collaborators and finding out about opportunities to work with our PSTRC.

On the day, delegates were able to move between themed sessions, which explored research ideas within the four main research themes of our Centre and discuss ideas for new projects.

Attendees were also able to find out more about our Safety Innovation Challenge fund of up to £10,000 for teams wishing to deliver a translational research project. The closing date for this fund was 21 December 2018, and we received over and above the number of applications than we are able to fund in our first year. We will be encouraging our unsuccessful applicants to submit applications again in the future and we will be announcing the successful projects in the coming weeks.

Feedback about the event was excellent and we hope all our delegates were inspired to work up new research ideas and stay in touch with our researchers.

You can find out more about the sessions run at the event by our Digital Innovations theme on Page 9.



**Ideas generated during our Patient Involvement in Patient Safety breakout session**


**Our PSTRC Lay Leader Dr Max Maclean introduces the Safety Innovation Challenge event**

## DIGITAL INNOVATIONS AT THE SAFETY INNOVATION CHALLENGE EVENT

During the PSTRC special event to promote the Safety Innovation Challenge Fund each of our project themes hosted a workshop and our Digital Innovations theme engaged attendees in conversations about the challenges and opportunities for digital innovation for patient safety.

The current safety culture and the relationship between people and IT were identified as barriers to implementing digital solutions. These themes partly manifested in blame, checklist exhaustion, IT illiteracy, depersonalisation of care, and abdicating individual responsibility for safety onto external systems. But there was a strong clinical demand for safety solutions and many opportunities were identified to support safety through technology.

At a systemic level, our shared understanding of and requirement for safety suggested a harmonising of guidelines and systems. Such harmonisation could be facilitated by integrating guidelines into existing technology and communicating between systems involved in care. Attendees of the workshop also highlighted specific problems for which digital solutions could help. Detection and prediction of various conditions often featured as did technological solutions to usability, e.g. dementia-friendly or remote-access interfaces. The Digital Innovations theme are working on these algorithms for sepsis and cancer, developing and evaluating a solution that is both accurate and designed with users in mind.

Research Fellows Dr Ciarán McInerney and Dr Binish Khatoon at the Safety Innovation Challenge event

At a cultural level, the attendees expressed demand for a forum to record safety information and reflect on safety events. Each of the sessions throughout the day spoke about the need to capture narratives of safety culture. The Digital Innovations theme's project on narratives in maternity care is addressing this demand.

Together, everyone at the workshop identified ways of working to improve safety using technology. Examples included artificial intelligence, pre-implementation testing of applications, standardised data capture and constant review and evaluation.

Better clinical engagement during design of digital solutions was also strongly cited and the PSTRC committed to this during the Safety Innovation Challenge event. We will continue to engage users in the improvement of patient safety, not least by supporting the projects that are funded by this initiative.

**Contact details**

If you have any questions about our Digital Innovations research theme, please contact: Dr Jonathan Benn j.benn2@leeds.ac.uk or Owen Johnson o.a.johnson@leeds.ac.uk


## CONTACT US

To find about more about us you can visit our website at www.yhpstrc.og or to get in touch email pstrc@bthft.nhs.uk

The views expressed in this article are those of the author(s) and not necessarily those of the NHS, the NIHR, or the Department of Health and Social Care.