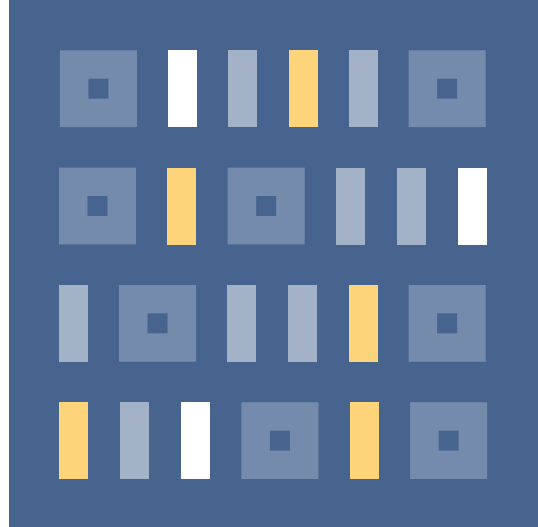


**NIHR** | Collaboration for Leadership  
in Applied Health Research  
and Care West

# Best of CLAHRC West

Highlights from five years of applied research



**82**

projects with more than  
100 collaborating  
organisations



**290**

research papers

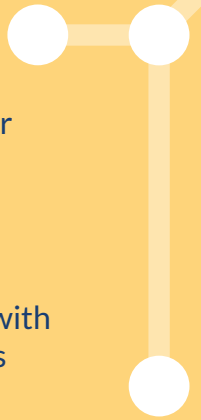


**30+**

voluntary sector  
collaborators

**20**

collaborations with  
other CLAHRCs



**1,171**

training course attendees

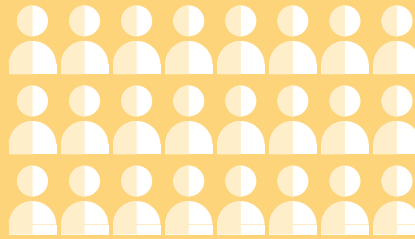
**3.6 out of 4**

average score  
for our training  
courses



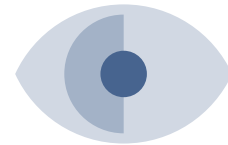
**24**

partners



**150,000+**

views of our film  
Overcoming Barriers:  
Autism in the Somali  
Community



**£13 million**

in matched funding



**6,000+**

followers on Twitter

**1,500+**

YouTube subscribers



**750+**

newsletter subscribers



---

# Welcome to the Best of CLAHRC West

Collaboration has always been at the heart of CLAHRC West's work – the clue is in the name given to us by our funding body, the National Institute for Health Research: the Collaboration for Leadership in Applied Health Research and Care (NIHR CLAHRC).

As NIHR CLAHRC West, we brought together patients and the public, NHS service providers, NHS commissioners, universities, local authorities, charities and third sector organisations with researchers, to work on collaborative projects to bring research evidence into everyday practice. Our aim throughout has been to improve the health of the population and the delivery of health and social care so that it is equitable, appropriate and sustainable.

Working at the boundaries of research and service provision can be challenging, but also extremely rewarding. As a collaboration of people from a variety of backgrounds and disciplines, we are pleased to highlight some of the best work we have done together. With our colleagues and public contributors, we have worked tirelessly to translate research evidence into practice and improve health and care in the West.

We are delighted to be able to share the results of some of our projects and their impact so far.

**Prof. Jenny Donovan**  
Director, 2014-2018

**Prof. Sarah Purdy**  
Director, 2018-2019

**Dr Sabi Redwood**  
Deputy Director

## Contents

- 4** | Reducing cerebral palsy in pre-term babies
- 5** | Is drinking two units of alcohol twice a week 'safe' or should pregnant women abstain?
- 6** | Improving healthcare response to domestic violence and abuse
- 7** | What causes delays in discharging frail and elderly patients from hospital?
- 8** | Evaluating online GP consultations
- 9** | Evaluating patient safety tools
- 10** | Releasing resources for optimal care
- 11** | Evaluating the extension of the liaison psychiatry service at the Bristol Royal Infirmary
- 12** | Overcoming barriers: autism in the Somali community
- 13** | Driving the use of safer low dead space injecting equipment among people who inject drugs
- 14** | Embedding public involvement in our work
- 15** | Developing the workforce: training and capacity building



## Reducing cerebral palsy in pre-term babies

**Preterm birth is the leading cause of brain injury and cerebral palsy, with lifelong impact on children and families. Magnesium sulphate (MgSO<sub>4</sub>) given to mothers during preterm birth is an effective treatment for protecting the baby's brain from injury, reducing cerebral palsy in a third of cases.**

PRCePT (Prevention of cerebral palsy in pre-term labour) is a quality improvement (QI) initiative that provides practical tools and training to help staff consider administering MgSO<sub>4</sub> in eligible women. It was co-designed with patients and staff from University Hospitals Bristol NHS Foundation Trust and the West of England Academic Health Science Network (AHSN).

PRCePT is one of seven programmes selected for adoption and spread across the national AHSN Network. It aims to support all maternity units in England to increase their average uptake of MgSO<sub>4</sub> to eligible women during preterm labour to 85 per cent by 2020.

The PRCePT Study is a cluster randomised controlled trial in 40 maternity and neonatal units in England. This Health Foundation funded trial is nested in the national roll-out programme. The trial aims to evaluate whether an enhanced QI intervention improves and sustains the uptake of MgSO<sub>4</sub> in preterm deliveries, over and above the national programme roll-out. The findings will provide evidence to inform best practice for the roll-out of future perinatal QI interventions.

We have been evaluation partner since the pilot in the West of England and will evaluate both the national roll-out programme and research trial.

- [clahrc-west.nihr.ac.uk/precept-programme/](https://clahrc-west.nihr.ac.uk/precept-programme/)
- [clahrc-west.nihr.ac.uk/precept-study/](https://clahrc-west.nihr.ac.uk/precept-study/)



## Is drinking two units of alcohol twice a week 'safe' or should pregnant women abstain?

**Our systematic review of studies on the effects of drinking small amounts of alcohol during pregnancy caused a media stir in September 2017.**

The study aimed to understand whether the old Department of Health guidelines advising pregnant women to limit alcohol to no more than two units twice a week were supported by evidence. We looked at outcomes including miscarriage, still birth, birth size, developmental delays, behavioural and cognitive deficits.

We found only seven studies exploring whether small amounts of alcohol affected the size of babies at birth. We found evidence that women who reported drinking the amount in the guidelines were 8 per cent more likely to deliver a small baby. The evidence that light drinking affected delivering prematurely was weaker and there wasn't enough evidence for other outcomes.

The guidelines were updated in 2016 to advise pregnant women to completely abstain. In the absence of definitive evidence, the research team support this precautionary approach.

The study was covered by international media, including BBC Breakfast, CNN, This Morning, the Daily Mail, Sun, Times, Guardian and Telegraph. It was misreported in some media, with journalists assuming absence of evidence meant it was safe to drink. A robust social media campaign aimed to set the record straight, with Suzi Gage, Simon Singh, Chris van Tulleken and David Spiegelhalter, among many others, speaking out. NHS Behind the Headlines and Gizmodo published analysis of the research and misreporting.

- [clahrc-west.nihr.ac.uk/alcohol-in-pregnancy/](http://clahrc-west.nihr.ac.uk/alcohol-in-pregnancy/)
- [bit.ly/AlcPregMoment](https://bit.ly/AlcPregMoment)



# Improving healthcare response to domestic violence and abuse

**IRIS (Identification and Referral to Improve Safety) is an evidence-based programme that has helped GPs refer over 10,000 women experiencing domestic violence and abuse (DVA) to specialist services.**



Developed by researchers at the University of Bristol for GP practices, IRIS incorporates staff training, support and patient advocacy. Set up following this success, IRISi is a social enterprise which develops and implements evidence based DVA interventions.

NIHR CLAHRC West has worked with the IRISi team on two projects, one to adapt the IRIS approach for a sexual health setting (IRIS ADVISE), and another on extending IRIS to community pharmacists.

We piloted IRIS ADVISE in two sexual health clinics and demonstrated that IRIS ADVISE is feasible, increases DVA enquiry, response and referral rates and is acceptable and welcome. We used the findings from the evaluation to refine the intervention and are now supporting implementing IRIS ADVISE for all patients attending sexual health clinics.

We also investigated whether requests for emergency contraception could be a sign of DVA. We found that women who experience DVA are more than twice as likely to seek emergency contraception as other women. This means community pharmacists, who provide half of all emergency contraceptives, could play an important role in identifying and referring women who are experiencing DVA.

Informed by this work and interviews with pharmacists, we have adapted the IRIS intervention for customers attending community pharmacies for emergency contraception or a sexual health consultation.

- [clahrc-west.nihr.ac.uk/IRIS-ADVISE/](http://clahrc-west.nihr.ac.uk/IRIS-ADVISE/)
- [clahrc-west.nihr.ac.uk/IRIS-pharma/](http://clahrc-west.nihr.ac.uk/IRIS-pharma/)





# What causes delays in discharging frail and elderly patients from hospital?

**Problems organising the next stage of care mean that there are often delays in discharging elderly and frail patients from hospital. This can be upsetting for patients and families, and costs the NHS £820 million a year.**

These patients' discharge can take longer as it involves different professionals and organisations. Social care funding cuts are one cause of delays, but they aren't the only cause.

There are recommended ways to reduce delays, although these aren't always used across the NHS. We worked with staff from a hospital in the South West and another in the West Midlands, and community staff from both areas to understand why this is the case.

We wanted to find out what happens on wards in these hospitals that might lead to delays in discharge. We also explored how to facilitate the recommended improvements and address any barriers to adopting them.

Our findings will help improve the process of discharging frail and elderly patients from the participating hospitals. They will also be valuable for policymakers and healthcare professionals who want to reduce discharge delays for these patients.

- [clahrc-west.nihr.ac.uk/discharging-frail-elderly/](http://clahrc-west.nihr.ac.uk/discharging-frail-elderly/)



# Evaluating online GP consultations

**Online GP consultation systems are seen as a solution to improve patient access to care and reduce the need for face-to-face appointments, freeing up GP time.**

Our research found that unless these systems are carefully implemented, the benefits policymakers are hoping for might not be realised.

The research evaluated eConsult, a system piloted in 36 practices in Bristol, North Somerset and South Gloucestershire. Patients submit their symptoms to a GP through their practice website.

Patient satisfaction with the system was high with most saying they would use the service again. When patients were dissatisfied this was usually because of a lack of interaction with a GP, or thinking that their query could be answered remotely, and then being asked to book an appointment.

The cost of dealing with an online consultation was higher than a standard GP face-to-face consultation. This was driven by the time GPs spent dealing with online consultations and that most resulted in GPs following up with telephone (32 per cent) or face-to-face (38 per cent) appointments. GPs often needed to see or speak to patients with new or complex conditions. Staff felt that online consultations worked well for straightforward queries like prescriptions, fit notes and follow-up enquiries.

With the NHS 10-year plan committing to all patients having a “digital first primary care offer” by 2022/23, this work is more relevant than ever. It has led to the DECODE study, which is examining the unintended consequences of digital health tools in primary care.

■ [clahrc-west.nihr.ac.uk/eConsult/](http://clahrc-west.nihr.ac.uk/eConsult/)





# Evaluating patient safety tools

**We've been working closely with the West of England Academic Health Science Network (AHSN) to evaluate their roll-out of the National Early Warning Score (NEWS) and Emergency Department checklist.**

NEWS was developed for use in hospitals. Using the same score across the health system could benefit patients and help manage patient handover. As well as supporting use of NEWS in hospitals, the AHSN promotes its use in out-of-hospital settings, including GP practices, the ambulance service, community and out-of-hours care.

Our evaluation of NEWS in out-of-hospital settings included two systematic reviews, in-depth interviews and data analysis of its use in different settings. Our findings highlight the range of scores recorded in out-of-hospital settings, and the benefits of using the tool alongside challenges experienced by staff. Our recommendations highlight the benefit of tailoring implementation strategies to accommodate diversity of healthcare organisations and roles.

The Emergency Department checklist is intended to be completed every hour for each patient admitted to an Emergency Department. It was developed in the West of England, and NHS Improvement has recommended its use across the NHS.

Our observation and interview study aimed to understand how staff used the checklist and whether it helped prevent undetected patient deterioration. Staff were broadly supportive of the tool but reported it could be overlooked during busy periods. Our study identified some of the reasons why it wasn't being used and, with the AHSN, we have developed an evidence informed update to a toolkit to support hospitals planning to introduce the checklist.

- [clahrc-west.nihr.ac.uk/NEWS-out-of-hospital/](http://clahrc-west.nihr.ac.uk/NEWS-out-of-hospital/)
- [clahrc-west.nihr.ac.uk/EDchecklist/](http://clahrc-west.nihr.ac.uk/EDchecklist/)



## Releasing resources for optimal care

**We wanted to identify opportunities to improve how NHS clinical commissioning groups (CCGs) use their resources.**

We looked at spending data from the seven CCGs in the West of England to identify areas for further investigation. These included eye injection drugs and prescribing gluten-free food.

Eye injection drugs recommended by NICE cost the NHS £447 million in 2016 but could be replaced by another drug costing up to ten times less. CCGs and clinicians were deterred from prescribing the cheaper alternative by legal challenges brought by pharmaceutical companies.

Our research found use of the recommended drugs had increased three-fold over five years. Some areas in England were treating five times more patients than others. A 2018 High Court ruling allowed the use of the cheaper drug, saving the NHS money. This should lead to more equal access to treatment for eye conditions.

The Department of Health and Social Care changed gluten-free food prescription guidelines in 2018, recommending that CCGs limit the items available to bread and flour products. Our analysis of spending on prescriptions in 7,000 GP practices found annual spending on gluten-free products was £25.1 million. CCGs introducing a complete ban reduced spending by around 80 per cent.

The suggested policy is unlikely to result in substantial savings as bread products, which are still recommended, account for around 65 per cent of spending. The impact of these policy changes on patients, especially from more deprived areas, remains unclear and requires further research.

- [clahrc-west.nihr.ac.uk/eye-injections/](http://clahrc-west.nihr.ac.uk/eye-injections/)
- [clahrc-west.nihr.ac.uk/gluten-free/](http://clahrc-west.nihr.ac.uk/gluten-free/)



# Evaluating the extension of the liaison psychiatry service at the Bristol Royal Infirmary

**Our research found that extending the operating hours of the liaison psychiatry service at the Bristol Royal Infirmary's (BRI) Emergency Department led to improved care and outcomes for patients who have self-harmed. Self-harm is a strong risk indicator for suicide, so getting psychiatric support for these patients has the potential to save lives.**

The findings also show that, over the three-month period the study focused on, the investment in the extended service may have led to savings of £36,150, equating to £144,600 annually.

In 2014, Bristol Clinical Commissioning Group commissioned University Hospitals Bristol NHS Foundation Trust, which runs the BRI, to extend the operating hours of its liaison psychiatry service. The service was extended because most emergency department patients who have self-harmed present outside office hours.

The service change, increasing levels of liaison psychiatry team cover from 40 hours over five days to 98 hours over seven days a week, needed an additional investment of around £250,000 per year.

Following the service extension, about 10 per cent more patients received a psychosocial assessment. The waiting time for an assessment decreased by more than three hours. In 2015 with the new hours in place, patients were 20 per cent less likely to re-attend for self-harm within 90 days.

We are now analysing the long-term effects of the service, looking into clinical and cost-effectiveness outcomes over a six-year period.

■ [clahrc-west.nihr.ac.uk/psychiatric-liaison/](http://clahrc-west.nihr.ac.uk/psychiatric-liaison/)





## Overcoming barriers: autism in the Somali community

**There is no word for autism in the Somali language. The number of children being diagnosed with autism is rising, especially among migrant communities.**

More than 80 families in the Bristol Somali community have one or more children with autism. They are supported by a community organisation, Autism Independence, led by Nura Aabe.

Our research with Autism Independence identified the challenges these families face in getting support for their children. The findings highlight that service providers need to understand cultural views of autism. There's a need to raise awareness and reduce stigma within the Somali community, and to provide support to encourage families to seek help for their children.

With Autism Independence and Therapeutic Media, which specialises in films on wellbeing and mental health, we developed a short film to bring these issues to life. *Overcoming Barriers: Autism in the Somali community* was launched on 3 April 2019 at the Watershed in Bristol. In less than a month, the English version on YouTube had been viewed 23,000 times, and the Somali version had been viewed 110,000 times. It has stimulated debate which has highlighted many of the cultural attitudes to autism that the film explores.

We are analysing the YouTube comments and are considering a new project to develop other resources for the Somali community, to address some of the misleading information that's out there on this issue.

- [clahrc-west.nihr.ac.uk/Somali-autism/](http://clahrc-west.nihr.ac.uk/Somali-autism/)
- [clahrc-west.nihr.ac.uk/OvercomingBarriers/](http://clahrc-west.nihr.ac.uk/OvercomingBarriers/)
- [bit.ly/OvercomingBarriersPlaylist](http://bit.ly/OvercomingBarriersPlaylist)



## Driving the use of safer low dead space injecting equipment among people who inject drugs

**Low dead space injecting equipment has less space between the needle and the plunger after injecting. Blood and drug remain in this space: the risk of spreading viruses such as HIV and Hepatitis C is lower when there's less space for blood to be left in the equipment.**

Low dead space equipment had been available for some time, but uptake by needle and syringe programmes (NSPs) was at an early stage. Our research found people who inject drugs were willing to switch to this safer equipment, if the benefits were explained and it was introduced gradually. We developed posters, a booklet and animation to promote the benefits and use of low dead space equipment, alongside other harm reduction messages.

Deborah Hussey from Bristol Drugs Project, who worked with us as a Knowledge Mobilisation Fellow, visited NSPs around the UK to understand barriers to uptake of low dead space equipment and how NSPs share harm reduction messages.

We worked with Michael Linnell, a designer who specialises in drug and other public health campaigns. The materials were co-designed by service users from Bristol Drugs Project, who shaped their messages, language and look and feel.

Social enterprise Exchange Supplies has pioneered detachable low dead space equipment. They sent a promotional mailing to NSPs and the materials are available to order from their website. The web pages for the materials have been viewed nearly 3,000 times.

- [clahrc-west.nihr.ac.uk/Use-low-dead-space/](http://clahrc-west.nihr.ac.uk/Use-low-dead-space/)





## Embedding public involvement in our work

**We are proud of our work with the public, which has been made possible by our public involvement team and regional network, People in Health West of England (PHWE).**

From co-producing a film about autism with the Bristol Somali community to co-designing harm reduction materials with people who inject drugs, we have worked closely with the people our research affects.

The PHWE team supports public involvement in CLAHRC projects, from helping to recruit public contributors to advising on involvement strategies. The emerging world of co-production has been a focus, helping researchers understand what it is – and what it isn't. We are developing a list of resources that help researchers think about power and equality in co-produced research.

CLAHRC West can boast two public involvement panels, one to review our research summaries and another to contribute to system level projects with a broad focus. We also have two public contributors on our Board, bringing the public voice to this strategic level.

PHWE train researchers and other professionals on involvement, and public contributors to become more research and health system literate. Hosted by the University of the West of England, the PHWE team works across CLAHRC West, the NIHR Bristol Biomedical Research Centre, the West of England Academic Health Science Network, the NIHR Clinical Research Network: West of England and Bristol Health Partners. This gives us a more joined up approach to public involvement, allowing best practice to be shared more easily.

- [clahrc-west.nihr.ac.uk/patient-and-public-involvement/](http://clahrc-west.nihr.ac.uk/patient-and-public-involvement/)
- [www.phwe.org.uk](http://www.phwe.org.uk)





## Developing the workforce: training and capacity building

**Our training and capacity building work focuses on developing research and evidence skills in the local workforce. The core of our offer is our highly successful training programme, which we designed by analysing the skills gaps and the courses already available in our region.**

The programme offers everything from how to get an article published to using Twitter, and the basics of evaluation, understanding and using evidence, statistics and health economics. These free courses are open to everyone in our partner organisations. Uniquely, they are also open to the voluntary sector, including specifically tailored courses.

So far, the team has delivered 116 courses and trained 1,171 participants. Feedback has been excellent, with courses evaluated on a scale of 1 (poor) to 4 (excellent) and a mean score of 3.6.

CLAHRC West has also funded fellowships, including the Dan Hill Fellowship for Health Equity. One of the recipients, Oli Williams developed his research on obesity stigma into an evidence-based comic *The Weight of Expectation*. This led to the British Science Association awarding him the Margaret Mead Award Lecture for Social Sciences. He is now a Post-Doctoral Fellow at The Healthcare Improvement Studies (THIS) Institute and is based at King's College London.

We also supported Nikki Cotterill, who joined us as a Post-Doctoral Nurse Fellow in Continence Care. She is now Associate Professor in Continence Care at the University of the West of England and has been awarded the Florence Nightingale Foundation Leadership Scholarship.

- [clahrc-west.nihr.ac.uk/training-and-capacity-building/](http://clahrc-west.nihr.ac.uk/training-and-capacity-building/)
- [clahrc-west.nihr.ac.uk/Dan-Hill-Fellowship/](http://clahrc-west.nihr.ac.uk/Dan-Hill-Fellowship/)
- [clahrc-west.nihr.ac.uk/Nikki-Cotterill-career-development/](http://clahrc-west.nihr.ac.uk/Nikki-Cotterill-career-development/)

## Contact us

NIHR CLAHRC West  
9th floor, Whitefriars  
Lewins Mead  
Bristol BS1 2NT

**T** 0117 342 1262

**E** [clahrcwest@nihr.ac.uk](mailto:clahrcwest@nihr.ac.uk)

**W** [clahrc-west.nihr.ac.uk/](http://clahrc-west.nihr.ac.uk/)

 [@CLAHRC\\_West](https://twitter.com/CLAHRC_West)