How the West was one
Collaborating as a health and care community to identify, adopt and spread best practice

Creating an ecosystem for innovation
A look back at the first four years of our Academic Health Science Network and where we go next

The digital health journey
Driving the digital transformation of our health service

Spotlight on the deteriorating patient
How do we identify patients most at need and communicate this across every handover of care?
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Creating an ecosystem for innovation

Deborah Evans, Managing Director of the West of England AHSN

Looking back to when the West of England AHSN was first set up back in 2013, what stands out most for you?

From the beginning our priority has been to involve all of our network, the NHS commissioners and providers and the universities of Bath, Bristol and the West of England. We had to create our own vision, deciding what our version of an Academic Health Science Network might be.

The extent to which NHS organisations have engaged at senior leadership and clinical level has been remarkable. Our success rests on that bedrock. Everything else, our work with universities and with companies, depends on us having that commitment and involvement from the entire healthcare community.

What were the key challenges we have had to address as an AHSN?

Our first challenge was creating an ecosystem for innovation. We wanted to engage NHS organisations and clinicians in understanding how we can work together to draw innovation into the health service. We have ‘link directors’ within every innovation into the health service.

What does interaction sit in relation to innovation?

It’s our firm belief that we need to use improvement approaches in order to help to embed innovation. Whether it has a medicines, med-tech or digital flavour, or is simply a much better pathway, there is a real role for improvement in helping the health service make much needed transformational changes.

When I think about this AHSN I can see our great achievements have been equally strong on both innovation and on delivering improvements in care.

We started off with PReCePT, which we delivered in one year. It was about preventing babies from being born with cerebral palsy by giving magnesium sulphate to mums who went into labour at 30 weeks or earlier. So far we know that we have prevented seven babies being born with cerebral palsy. That has a lifetime saving of at least £1 million per baby to the NHS, let alone the cost to families.

The way we worked on PReCePT has become a blueprint for other projects. With PReCePT we recruited all five obstetric units in the West, and so we always try to build in adoption and spread from the start. The second thing we learned from PReCePT is to identify clinical champions. In this case research midwives. It’s very powerful when clinicians talk peer-to-peer about the reason for adopting an innovation.

Based on this, people were willing to back us to do other more ambitious things, such as our treatment programme for atrial fibrillation in primary care called Don’t Wait to Anticoagulate, delivered in partnership with Gloucestershire Clinical Commissioning Group (CCG) and Bayer. This project has now spread to other parts of the West, as well as other AHSNs.

Another huge achievement is our Test Bed, the Diabetes Digital Coach. This is one of seven test beds ‘experiments’ sponsored by NHS England and Innovate UK. Ours is looking at how people might manage their diabetes better using digital technologies. One of the interesting things from our point of view is how we enable different companies to work together and with health service providers. So test beds are for us to learn both about the clinical and the commercial side of developing new digital health solutions.

We have done some excellent work around citizen empowerment. I think this will be increasingly important in the future of the NHS.

In building this ‘ecosystem’, we have provided support to many companies who want to develop their products with the NHS, and have worked closely with organisations, such as Local Enterprise Partnerships, to explore how to stimulate regional growth in key areas around health and life sciences.

What are you looking forward to in 2017-18?

I’m looking forward to continuing to work with the three Sustainable Transformation Partnerships (STPs) in the West. In the last year it’s fair to say they have been finding their feet and they’re now becoming much clearer about their priorities and what they’re trying to achieve. We will continue to support each of the STPs with their Digital Road Maps, as well as coordinating more connection events, like the brilliant Digital Art of the Possible event we held last year.

In addition we are funding three project managers, one for each STP, with the particular remit to be a conduit back to the AHSN around support for innovation. With the new AHSN licence starting in 2018, supporting STPs will be a significant focus. STPs have a huge agenda when it comes to service transformation and financial efficiency, so I’m very much looking forward to playing our part in that.

As we enter the final year of our first five-year licence, I believe we can demonstrate real impact as a result of ambitious programmes inspiring the involvement of all our member organisations. That’s a huge achievement for the NHS.
How engagement leads to adoption and spread
The year in numbers 2016-17

95% of people receiving quality improvement support said they have found this valuable

93% of people who received patient safety or support to spread and adopt innovation feel this was valuable

4,000 Dosette box referrals have been made through our Medicines Safety Project

333 primary care staff have completed the SCORE culture survey about their practices

554,489 people had their NEWScore recorded by the South Western Ambulance Service on an Electronic Patient Care Record (ePCR)

3,162 staff have received Human Factors training

1,203 patients in the West of England have benefited as a result of the Emergency Laparotomy Collaborative in the last year

93,219 people had their NEWScore calculated at triage into one of our emergency departments

127 patient safety and quality improvement projects from across the West of England are now on the Life System

142 commissioners attended our evidence and evaluation workshops

52 entrepreneurs in the West of England have been supported to develop new healthcare solutions and services through our Healthcare Innovation Programme (HIP), run in partnership with SETsquared

£13.5 million in funding has been attracted to date into the West of England with our help for the development of innovative healthcare technologies and solutions

3,730 people from across our health and care communities have benefited from West of England Academy learning events and programmes

142 commissioners attended our evidence and evaluation workshops

573 entrepreneurs and companies have come to us for business advice at connection events this year

10 GP Clinical Evidence Fellows are working with all 7 of our CCGs

3,162 staff have received Human Factors training

44 active members from across the West of England healthcare community are in our Chief Clinical Information Officers Network

410 people with diabetes are using digital tools to help manage their condition through Diabetes Digital Coach pilot projects

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Bringing innovation into practice

When we think of the healthcare sector and its economic impact, our view is usually focused on those who provide care - our hospitals, GP practices and community care services. While the region’s healthcare providers generate significant jobs and wealth directly and indirectly through procuring services, the vibrant and burgeoning health economy here in the West of England is much more, including a significant hub of private sector businesses, social enterprises and universities all focused on research and development, innovation and growth in the health and life sciences field.

Innovation is at the heart of our mission as an AHSN to support the West of England health economy. We help to accelerate the generation and adoption of new innovations by:

- enabling collaborations between businesses with new solutions, health service providers and universities, who can provide the research base that underpins new technological developments
- facilitating funding to support feasibility studies, product development and evaluation
- co-creating new healthcare innovations with patients and the public
- supporting businesses and healthcare professionals on how to bring new ideas successfully to the healthcare market.

Design Together, Live Better

Our Design Together, Live Better initiative is a citizen-led design programme, which aims to help people living with challenging health conditions improve their quality of life and maximise independence.

Following on from our work in 2015 with Designability to crowdsourced ideas for three healthcare product prototypes, the programme continued in 2016 by supporting two local innovators to connect with citizens and healthcare professionals to develop their products (a speech therapy app and a musical memory box for people with demential) using a combination of online surveys and face-to-face focus groups.

Design Together, Live Better will be scaled up as it goes online in 2017, enabling us to be more ambitious in our ability to connect people who are interested in creating or being part of designing new healthcare products with innovators of new technologies and solutions.

www.weahsn.net/DTLB

Key stats:

- 93% of people who received support to identify, adopt and spread innovation feel this was valuable
- 410 people with diabetes are using digital tools to help manage their condition through Diabetes Digital Coach pilot projects
- Our Healthcare Innovation Programme has supported 52 entrepreneurs in the West of England to develop new healthcare solutions and services
- To date, we have helped attract £13.5 million in funding into the West of England for the development of innovative healthcare technologies and solutions
- In the last year we gave business advice to 173 entrepreneurs and companies at connection events

Diabetes Digital Coach

One of seven NHS Test Beds around the country, Diabetes Digital Coach is a unique collaboration between 10 partners, with the support of Diabetes UK and involving all our NHS commissioners and service providers.

Led by the West of England AHSN and funded by the Department of Health through Innovate UK, the findings of this pioneering feasibility project will have a significant impact on the future of digital health and citizen-centric healthcare.

During 2017-18, we are enrolling people in the West of England with type one and type two diabetes, providing them the opportunity to better self-manage their condition using a specially selected suite of integrated digital tools.

Diabetes is a life-threatening condition, and a priority area for the NHS to improve care and reduce costs. When diabetes is properly self-managed by people with the condition, it can be controlled to improve health outcomes and lower costs.

“Technology can be used to enable true partnerships between the GP, consultant or practice nurse and the person with diabetes,” says Sandra Tweedell, coordinator of the Bristol Diabetes Support Network.

“Diabetes Digital Coach is a really exciting initiative. It will enable more people to better manage their diabetes, hopefully reducing the awful complications that go with the condition.”

www.diabetesdigitalcoach.org

General Practice of the Future

The Small Business Research Initiative (SBRI) Healthcare is an AHSN-led programme for NHS England, supporting the innovation, health and wealth agenda.

Recognising the current pressures in primary care, this year we have encouraged the development of innovative technologies by leading the General Practice of the Future SBRI competition, in partnership with Eastern and South West AHSNs. The three themes were self-care, diagnostics and earlier imaging, and workload and demand management.

The competition attracted huge interest, and 22 companies were awarded a share in the £2.1 million investment to develop and commercialise novel technologies with the potential to revolutionise GP services and address the challenges of an ageing population.

This coming year we will support one of the local winners, Digital Algorithms, to help spread an exciting social prescribing product.

www.weahsn.net/gp-of-the-future

Healthcare Innovation Programme

The Healthcare Innovation Programme (HIP) has to date supported 122 healthcare entrepreneurs across Southern England to develop businesses that improve patient care, generate savings for the NHS, create jobs and economic growth.

A collaboration between four AHSNs (West of England, Kent & Medway, Surrey & Sussex, Wessex and South West) and the global no. 1 university business incubator SETsquared, HIP is a unique personal development training programme helping healthcare entrepreneurs navigate what can be a very complex NHS business landscape.

Innovations that have benefited from HIP so far include a pain self-management app, radiology image management, a speech therapy app, medical dictation software, and ‘how to’ videos for people with learning disabilities.

www.weahsn.net/hip

Healthcare from your living room

In partnership with Enterprise Europe Network (EEN) South West, our Healthcare from your living room event highlighted the role technology can play in assisting health and social care professionals and families to bring care to individuals at home.

Delegates heard about various pilot projects – national and international – with a focus on the progress being made in Denmark where key policy decisions have been made to ‘rebuild’ the hospital setting.

The event concluded with a call for a culture of open innovation, cooperation and collaboration between all health providers, and for users and their families to be at the centre to ensure their particular needs are really being met by technology solutions.

www.weahsn.net/healthcare-living-room

Way Out West
Some years ago I came across an interesting book while clearing out my father’s study after he passed away. In the late 1960s, The American Association for the Advancement of Science brought together the leading scientific minds of the time to speculate on what the world would be like 40 years later at the turn of the century.

Looking back today, 60 years on, it seems that some of the predictions they made were astonishingly correct and some were not. When it comes to the physical sciences, it seems the microprocessor and the personal computer, the internet, satellite communication and mobile phones, and even the iPod and digital media were to a large extent predictable from trends at that time.

In health and life sciences though the situation is very different. It was predicted back then that major killers such as cancer and cardiovascular disease would obviously have been vanquished by now; paraplegics would obviously be walking through regenerative medicine and we would be selecting the characteristics of our children based on voluntary genetic manipulation of our genomes. So it seems that there is something fundamentally less predictable in health and life sciences than, say, engineering.

So I started to think, well what if we look ahead from now to 2067, what’s it going to be like? Knowing full well that whatever I fantasize about is bound to be an inaccurate prediction...

I imagine myself 50 years from now walking around with a little microchip implanted in my left arm that has all my data including my personal genetic code on it.

This chip now gets updated regularly by my health coach I used to be called a GP during my routine visits to track any major changes. It also stores and tracks compliance with my lifestyle plan that I have agreed with my health coach. It works out how much exercise I do and tracks what I eat from edible bar codes in my food and reports that I am indeed taking the disease preventing supplements I have agreed to. It also monitors all my bad habits and lets my health consultant know immediately if things start to go seriously wrong by tracking physiological parameters. All of this is relayed non-invasively in real time via the wristband of my phone watch.

“I now have at my fingertips so much data and information to help me make all kinds of decisions and how I can invest in my own health”

All this data is being continuously sent to the national health data hub for general monitoring as part of my mandatory subscription to the national health system. All data is, of course, linked to my personal medical record in the cloud so anybody (with my permission) can know what they need to about me and I can upload any of this, whenever they need it.

The national health system now works on a system of health credits. Unfortunately these health credits can’t cover absolutely everything, but I can voluntarily top these up via my national health insurance pension plan. My employer also tops these up to help prevent me from falling ill and thereby keeping me productive.

If something bad happens, then my health consultant will advise me on my personalised treatment based on my genetic endophenotype. The downside is I may have to co-fund some of this from my voluntary health credits, as my basic allocation of national health credits won’t cover everything anymore.

I can always go online to check out the latest treatments. I might choose to enrol in a clinical trial through my relevant disease association. They use my data in partnerships with companies to develop new treatments, providing me with preferential access to new medicines or devices, which I then pay less for by agreeing to take part in the trial. The good news is I have amassed a few additional health credits for good behaviour - due to my two visits to the gym every week and taking my diet supplements.

Looking back 50 years to 2017, what strikes me is how little choice we had back then. We just did as we were told because we didn’t know any different. I now have at my fingertips so much more data and information to help me make all kinds of decisions about myself and how I can invest in my own health. I have an incentive to stock up on health credits by taking care of myself while I still can.

Anyhow, life is pretty good now. I’ll be 105 next month but I am starting to worry what will it be like for my kids in 50 years from now when they are my age?

Coming back to reality I wonder, 100 years from now, what will that look like?

On the blog

You can read further personal reflections on the future of our health service at www.woahsn.net/blog. Fancy your own turn on the soap box? Then write us a blog post! Email contactus@woahsn.net with your ideas...

Imagining the healthcare system of the future

Lars Sundstrom, Director of Enterprise

time-travels to 2067

Way Out West
Increasingly the West of England AHSN is playing an important role in supporting our member organisations to understand and take best advantage of the opportunities arising from the digital transformation of our health service.

The range of solutions available in the digital health world can seem daunting but healthcare economies have many common digital ambitions and similar challenges. Sharing knowledge and experience across areas is key to optimising the region’s ability to deliver effective, useable and safe digitally enabled care.

We continue to coordinate the West of England Chief Clinical Information Officers (CCIO) Network, which now has 44 active members from across our healthcare community.

This network provides an ideal space for CCIOs and emerging clinical digital leaders to connect with colleagues across the region to discuss and share best practice on the local challenges they are facing, as well as exploring the progress of our Sustainability and Transformation Partnerships (STPs) and the development of associated Local Digital Roadmaps. The local network feeds into the wider national CDO and CCIO networks and has started to provide regular feedback into the NHS England (South) Regional Information and Digital Technology Delivery Board.

Supporting the digital journey

**The digital art of the possible**

Developing the conversation between transformation leaders and enterprise was the focus for our successful Digital Art of the Possible event in September 2016 at Ashton Gate Stadium. The event brought together more than 150 health and care delegates with over 50 companies and innovators all keen to explore the critical role of technology in improving health and care and in addressing the huge challenges in delivering safe, high quality services in the context of rising demand and constrained budgets.

Organised in partnership with NHS South, Central & West Commissioning Support Unit (CSU) and NHS England, the event was designed to stimulate thinking around the potential offered by emergent digital technologies. It provided a speed horizon scan for health and care leaders to consider some of the innovations and opportunities available which have potential to support STPs achieve Local Digital Roadmap transformation priorities.

Looking at almost any service improvement or transformation of care priority, there will inevitably be a need to exploit technology to support professionals and also, increasingly, to enable and activate patients and citizens in caring for themselves and keeping healthy.

Identifying robust, resilient and usable technology which supports the improvements in patient care set out in the Five Year Forward View and the transformation in patient pathways prioritised by our STPs is critical to a future service where digital plays a key enabling role in reduced costs, improved quality and efficiency.

In staging the Digital Art of the Possible event our ambition was to stimulate the digital thinking of those responsible for leading and delivering transformation of the health and care service, from board level through to frontline staff and from innovator to large scale enterprise. Our hands-on engagement with Local Digital Roadmap groups provided visibility of live core themes which were at the heart of each set of digital plans and which became the main focus of our event:

- Clinician-to-clinician communication
- Mobile apps and devices to support clinicians in delivery of care
- Mobile working, connectivity and cloud solutions
- Person-centred technologies supporting self-care, including personalised health records and citizen digital health
- Population health analytics and real-time clinical decision support

Our event provided the ideal space for exploratory digital conversations and for a wide range of connections to be made between NHS and enterprise. While some of our delegates and stakeholders were taking the first steps on their digital journey, there was a great deal of evidence shared that demonstrated some really positive digital developments already underway. Highlights included:

- Demonstration from our colleagues in Hampshire of personalised health records (PHRs) which enable patients to access key information about their care and engage more directly with their care team, particularly around shared-care planning. Such PHRs link directly with integrated care records to create a full join between patient and care team.
- Examples from across England of integrated digital care records that join up professionals across health and social care to share information in a person-centric way rather than organisational, supporting safer and better managed care.
- Showcasing of platforms that enable care professionals to develop solutions with patients for the issues they face, enabling role in reduced costs, improved quality and efficiency.
- Integrated web, app and phone solutions that provide ways for patients to get advice as well as signposting them to the most appropriate primary or urgent care service. These solutions also support GPs in prioritising patients who most need a face-to-face appointment and manage the intense demand on primary care.
- Digital solutions to record and share key information captured by the patient, to help manage their condition and connect with their care team to monitor changes.
- Decision-support and analytics tools that integrate or link with the patient record to support clinicians with diagnostic and care-management decisions.

For videos from the event and details of the digital solutions exhibited, visit www.weshsn.net/digital-art

### Digital transformation – adoption, spread and evaluation

Plans are afoot for a follow-up event on 4 October 2017 to build on the conversations started at the Digital Art of the Possible.

As part of this next event we will continue to support the core themes communicated from the STPs and Local Digital Roadmaps in the region. In addition, we will support hands-on workshops to assist our members with techniques for rapid evaluation of digital innovations. As in 2016, we will partner with NHS England to provide even greater networking capabilities for technology companies, entrepreneurs and healthcare professionals to explore opportunities for accelerating, spreading and evaluating the digital agenda across our region and beyond.
Creating a culture of evidence-led practice

A key focus of our work is to create a culture of evidence-led best practice across our healthcare community here in the West of England. The NHS has not always been consistent in applying and spreading evidence-based practice, resulting in care variations. Variations in care are not good for patients and can indicate inefficiencies and waste.

We work with healthcare clinicians and managers to implement research evidence and use quality improvement techniques in areas such as commissioning and delivery of services so that best care for patients and best value for the NHS are achieved at the same time.

GP Clinical Evidence Fellowship

We are now into the third year of our GP Clinical Evidence fellowship programme, with four new GP recruits joining the six who have continued in post for another year. These 10 GP fellows are based in a clinical commissioning group (CCG) for half a day a week, acting as ‘evidence champions’.

Working closely with commissioners, they find and review best clinical evidence, and embed it into commissioning planning discussions and decision-making to ensure scarce resources are used effectively.

The fellows are based in the same CCG throughout the year, with all seven of the CCGs in the West of England hosting at least one clinical evidence fellow. This year four of our CCGs have opted to fund another session per week to secure additional dedicated resource to support evidence-informed commissioning.

“The principle is to put the needs of the patient at the heart of change, allowing change to be developed and delivered by those staff who provide the care”

Key stats:

- 10 GP Clinical Evidence Fellows are working with all 7 of our CCGs.
- 142 commissioners attended our evidence and evaluation workshops.
- Don’t Wait to Anticoagulate has potentially prevented 21 strokes to date.

Some examples of work that the fellows have been involved in to date include:

- Reviewing evidence on the use of computers and apps in depression and anxiety.
- Near-patient CRP (C-reactive protein) testing to reduce antibiotic prescribing in an out-of-hours setting.
- Redesign of Chronic Obstructive Pulmonary Disease (COPD) patient pathway to improve patient care and reduce hospital admissions.
- Evidence review for exercise and spinal injections in musculoskeletal management (MSK).
- Implementation and evaluation of Patient Activation Measures in MSK pathways.
- Evaluation of the use of Comprehensive Geriatric Assessment in primary care.

Online Evidence & Evaluation Works toolkits and workshops

Commissioning decisions should be informed by the best available evidence. This helps to improve outcomes for patients and makes sure that scarce resources are used efficiently and effectively.

To support commissioners, we worked in partnership with the Avon Primary Care Research Collaborative (APCRC) and the Collaboration for Leadership in Applied Health Research and Care West (CLAHRC West) to develop two online toolkits: Evidence Works and Evaluation Works.

The toolkits are intended for anyone working in or with health...
Anticoagulate project (DWAC) is 21 strokes amongst people project’s roll-out in Gloucestershire, during phases one and two of the scheme across their regions. country now have plans to run the number of AHSNs around the Receiving national recognition, patients with atrial fibrillation (AF). helping to prevent strokes amongst medicines management in of over £489,000 by optimising patients with AF, representing a saving as a result of the training, they were inspired to carry out an evidence review that led to a potential full year saving of approximately £400,000.

![Jacky Webb, Practice Nurse at the Hawthorn Surgery, Swindon](image)

**Swindon Wound improvement Project (SWIPE)**

Launched in June 2016, the Swindon Wound Care Improvement Project (SWIPE) is helping to make improvements to wound care pathways for patients. The project is run by Swindon Clinical Commissioning Group (CCG), working with GP practices and Great Western Hospitals NHS Foundation Trust.

We have supported SWIPE by providing quality improvement training to tissue viability staff from across primary, community and secondary care. The principle behind the methodology is to put the needs of the patient at the heart of change, allowing change to be developed and delivered by those staff who provide the care, supported by managerial and clinical leadership. In addition, the Bristol, North Somerset and South Gloucestershire (BNSSG) Sustainability and Transformation Partnership (STP) is considering DWAC as part of their stroke prevention pathway, which we hope will form phase four of the local rollout. Co-designed with a wide range of stakeholders, including NICE, patient representatives and clinical partners, DWAC provides an easy-to-use toolkit and information materials for patients, clinicians and pharmacists to support shared decision making and optimise anticoagulation. Further support is also provided in the form of quality improvement and clinical skills training. DWAC received a Pharmaceutical Market Europe (PME) Award for 'Excellence in Healthcare Collaboration and Partnerships' in 2016, and has been recognised as best practice in the Healthcare Pioneers 2017 report, which was developed by the AF Association and endorsed by the All-Party Parliamentary Group on Atrial Fibrillation.

![www.dontwaittoanticoagulate.com](image)

**Don’t Wait to Anticoagulate**

Working in collaboration with Gloucestershire CCG and Bayer, our innovative Don’t Wait to Anticoagulate project (DWAC) is helping to prevent strokes amongst patients with atrial fibrillation (AF). Receiving national recognition, a number of AHSNs around the country now have plans to run the scheme across their regions. During phases one and two of the project’s roll-out in Gloucestershire, DWAC has potentially prevented 21 strokes amongst people with AF, representing a saving of over £489,000 by optimising medicines management in primary care.

Phase three of DWAC was rolled out in partnership with Bristol CCG to all primary care practices. Completed in March 2017, the full evaluation of this latest phase will be available in the autumn.

**Manifesto for evidence informed health and care commissioning**

<table>
<thead>
<tr>
<th>Ten principles at the heart of improving value in healthcare</th>
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<tr>
<td>1. Evidence is present at the heart of commissioning to shape and direct decision-making</td>
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<td>2. Evidence is accessed in a timely way at key points in decision-making</td>
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<tr>
<td>3. Research evidence is integrated with other sources eg data, expertise, policy, feedback and organisational learning</td>
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<td>4. Evaluation of decision making measures outcomes and informs future investment decisions</td>
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<td>5. Commissioning staff have the awareness and skills to access and utilise evidence or the support available</td>
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<td>6. Co-production between users and producers of evidence support evidence-informed commissioning and commissioning-informed evidence</td>
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<td>7. Evidence is recognised as part of decision making alongside other factors eg local context, community and political priorities and resources</td>
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<td>8. It is considered unethical to adopt an intervention where evidence has not been considered</td>
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<tr>
<td>9. Commissioning is multi-disciplinary and should be usefully informed by evidence from a range of disciplines</td>
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<tr>
<td>10. Intermediaries facilitate innovative approaches to translate evidence into actionable insights, balancing rigour and timeliness</td>
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Developed by Siân Jones, Primary Care Programme Lead, West of England AHSN & Alison Turner, Head of Evidence Analysis, Midlands & Lancashire CSU
Three ingredients for a truly evidence-informed healthcare system

Peter Brindle, Leader, Commissioning Evidence Informed Care, suggests a recipe for success

The NHS should stand out as the most evidence-informed health system in the world. The worsening mismatch between the demand on the NHS and its resources of cash and staff mean we can’t afford not to have an evidence-informed approach to our health and care system.

This means making a deliberate and conscious effort to routinely look for and use the best available evidence before spending scarce resources on a new model of care or technology. And when the evidence is incomplete, which is most of the time, we need to commit to creating evidence through evaluating the change.

Having an evidence-informed approach makes sense. From a range of possible service designs, interventions or innovations, we will get better outcomes from those that have evidence of effectiveness compared to those that do not. Better outcomes mean spending less on the consequences of poor ones. Also having the evidence in hand makes it easier to defend stopping doing things that don’t work or that harm people.

So how do we get the evidence-informed approach into practice? The tens of thousands of NHS staff who have some management responsibility are the crucial link between the evidence and the beneficiaries – patients and the public. But while many people know this is the right approach, they find it hard to do. This is where the evidence comes in. Let’s consider three ingredients to making this happen.

1. Hardwire into the processes of normal business

Let’s get the paperwork right and make sure that business cases and priority-setting templates have sections asking about a balanced evidence appraisal and how the proposals are to be evaluated – and with what resource? Service specifications also need to be clear from the outset that potential providers must demonstrate an evidence-informed approach.

2. Engage the right people

Leaders should understand that not following an evidence-informed approach is unaffordable and risky. They need to expect the same from their teams, creating the culture that working in an evidence-informed way is everybody’s business.

But even with good leadership and willing teams, it is still not easy to create a truly evidence-informed system. There are many reasons for this, but perhaps the most potent is the culture gap between the evidence producers – primarily researchers – and the evidence users who commission and provide services. Researchers might be seen as being out of touch with current service priorities and pressures, and those working in the service are sometimes seen by researchers as having a disregard for their evidence.

One way of tackling these issues is having people and teams who have a specific role in promoting better evidenced services and more impactful research and who can successfully cross the boundary between the service and research worlds. Some of the approaches we are using in the West of England include:

- Health Integration Teams, which bring together patients, commissioners, providers, researchers and clinicians to tackle specific service related issues and in some cases become the main governance structure for a particular service area.
- GP Clinical Evidence Fellows, seconded for one or two sessions per week into a CCG leadership position to champion the use of evidence, conduct evidence appraisals and support an evidence informed business planning process.

3. Resources

Despite having the right leadership and organisational processes guiding staff to work in an evidence-informed way, knowledge and skills are still needed to make the right way the easy way. Training workshops based on practical toolkits can give the confidence to get started and signpost to existing but often under-used resources such as the library and knowledge services, public health, commissioning support units and regional CLAHRCs (Collaboration for Leadership in Applied Health Research and Care).

In a world of crushing timelines and the need for in-year savings, how do organisations create the financial and strategic space to develop an evidence-informed approach – one that offers few quick fixes but longer term benefits? But then that’s the point: the less money and time there is, the greater the need for a culture that reduces the waste from initiating or continuing ineffective and harmful services and products.

By using just a tiny proportion of the health and care spend in a better evidenced and evaluated way, it would save millions. Now more than ever, there is too much at stake in the NHS to take anything other than an evidence-informed approach. We can’t afford not to.
Building capability for improvement and innovation

Our West of England Academy is supporting healthcare professionals across the region to build the skills and knowledge to deliver long-term, sustainable improvements in patient care. With the strengthened focus on transformation in health systems, it is increasingly important for us to support Sustainability and Transformation Partnerships (STPs) around workforce capability and capacity in quality improvement, innovation and patient safety core skills.

**Improvement Coaches**

Our network of Improvement Coaches continues to grow from strength to strength. We support members of this network, all staff from our member organisations, to help their colleagues plan and deliver improvement projects that will make a real and positive difference to patient safety and care.

By providing training in proven improvement techniques and by encouraging cross-organisation learning, this network successfully supports transfer of knowledge and the adoption and spread of best practice.

[www.weahsn.net/improvement-coaches](http://www.weahsn.net/improvement-coaches)

**Key stats:**

- 3,730 people from across our health and care communities have benefited from West of England Academy learning events and programmes this year

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**Flow Coaching**

Our Flow Coaching Programme is developing a group of regional flow experts and an improvement faculty capable of teaching and training staff.

Funded by the West of England AHSN and the Health Foundation, the programme is being delivered by Royal United Hospitals Bath NHS Foundation Trust (RUH). Six coaches from the RUH attended the training in Sheffield last year and now with the support of the Sheffield Microsystem Coaching Academy they are learning how to become trainers for our region.

The new teams are from Gloucestershire, Bristol, Bath, Southampton and Bournemouth.

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**Continuous improvement in mental health services**

A new online toolkit for people involved in providing and commissioning services for people with mental health problems was officially launched in December at the Houses of Parliament.

The MINDSet quality improvement toolkit was funded by the West of England AHSN and NHS Improvement, and designed with the aim of making continuous improvement in mental health easier.

The focus on patient flow has received increasing traction within healthcare, especially in relation to reductions in waiting times for emergency and elective care. With pressure on A&E services and increased awareness of issues such as weekend variation, there is a growing recognition that the health care system requires better coordination and new models of provision.

The Flow methodology provides a comprehensive diagnosis of how the local system is working and where to effectively focus improvement efforts. It aligns well with aspirations in the Five Year Forward View as it recognises that improving systems of care is a health system-wide agenda, requiring an end-to-end patient pathway approach across departments and organisations.

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**Sustainability and Transformation Partnerships**

Our spotlight was very much focussed on Sustainability and Transformation Partnerships (STPs) this last year.

They were the focus of our annual conference in October 2016, attended by senior leaders from across the regional health and care community, industry partners and colleagues from organisations such as NHS England and Health Education England.

The event helped colleagues to share and learn from each other, as well as from experts with insightful experience in leadership, cross-organisational culture change and delivering place-based systems of care.

We also have a lead director assigned to work closely with each of the three STPs in the West of England.

This support will continue as we appoint a full-time project manager for each STP, who will work within each STP programme management office and whose role will include acting as a conduit to and from the AHSN on improvement and innovation.

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**Welcome to Q**

We were one of the first three AHSNs to roll out the Health Foundation’s Q initiative by recruiting a regional cohort of 128 people, who came together at the end of March for our launch event in Bristol.

Q is an initiative connecting people, who have improvement expertise, across the UK. Led by the Health Foundation and co-funded by NHS Improvement, Q’s mission is to foster continuous and sustainable improvement in health and care by creating opportunities for people to come together as a community – sharing ideas, enhancing skills and collaborating to make health and care better.

Our launch event was a fantastic opportunity to provide our new Q members with a better knowledge and understanding of how Q can make a real difference towards improving care for the communities we serve, and to start shaping an approach that will encourage networking, pooling of knowledge, insights and connections, and collaboration to make improvement happen.

[www.mindssetq.net](http://www.mindssetq.net)

**MOOC: Quality Improvement in Healthcare**

We have partnered with the University of Bath to offer Quality Improvement in Healthcare through the FutureLearn platform – the UK’s leading organisation for the provision of ‘Massive Open Online Courses’ (MOOCs).

Our six-week course is designed for anyone working in a health or social care setting, from doctors and nurses to healthcare support workers.

The course is designed to be flexible and how it can be embedded into daily work practices, so that participants can make a real difference to patient safety and care.

[www.futurelearn.com/courses/quality-improvement](http://www.futurelearn.com/courses/quality-improvement)

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**Our keynote speaker**

Beverly Bryant from NHS Digital
Eight ways to use QI for patient-focused care

Anna Burhouse, Director of Quality

Through my work in the field of quality improvement (QI), I often reflect how we, as improvement leaders, could do more to encourage a culture where patients are at the heart of our health systems.

Here are my eight suggestions for some tried and tested ideas that might help improve the type of patient-focused care offered by your organisation.

1. Focus on the patient journey

An important element of QI is always to think about how the patient journeys through your system. One simple but effective way to really understand this is to experience it in ‘real time’, by asking permission to accompany a patient as they travel through your system. You will see and more importantly, feel how they move through the care pathway.

Often this process will help you see things from a different perspective, noticing both the ‘flow’ through the system and ‘emotional touchpoints’ of the journey, the elements where the patient is pleased, frustrated, bored, vulnerable, empowered and so on. This method enables you to collect powerful data and can assist you to combine a process map of the patient journey with the experience of the journey.

2. Value added time

Once you have mapped the whole patient journey, you can start to ask a range of questions like:

‘What parts of the journey really add value to the patient?’

‘Is there any unnecessary duplication or waste?’

‘Can we make the experience of the journey better?’

You have then started a process of co-production of improvement ideas that can be tested using Plan Do Study Act (PDSA) cycles.

3. Ask for feedback

Every NHS organisation has processes in place to gain feedback from patients about their experience of care, like the friends and Family Test. This can help provide organisational feedback. However, what happens if you are trying out a new improvement idea in your team or microsystem and want very quick, direct feedback?

There are really creative ways of obtaining immediate feedback at a microsystem level, such as in a busy outpatient clinic or wards.

For instance waiting rooms can be great environments for feedback. A simple yet effective technique is to give people a token and ask them to drop it into one of two jars in the waiting room as they exit. You can label the jars according to the question you want answered. For instance, if you want to improve the running time of the clinic you might ask, ‘Did you wait more than five mins after your scheduled appointment time?’ and put out two jars, one labelled ‘yes’ and another ‘no’.

For younger patients, we recently asked them to help us brainstorm improvement ideas by providing drawings of magic wands to colour in. We then asked, ‘If you could use your magic wand to reach a service better today, what would you do?’ The children loved this idea and were colouring and writing on their wands in no time. These ideas can then be taken forward for testing.

This type of feedback is a great option for those of you who love to get creative, as the only limit here is your own imagination!

4. Share patient’s stories

Patient stories are a core element of QI and should never be underestimated. Patient experiences can be a powerful way to inspire change at all levels of an organisation, from a busy clinic right up to the board. Use them wisely to get buy in and describe why change is needed.

5. Get social!

Social media is a great way both to get feedback and to help test change ideas through crowdsourcing. Often people are really keen to help and you can reach a much wider and more diverse audience with a broad range of ideas. This is an effective way of seeking active engagement on how to improve both hospitals and/or care settings.

6. Be a fantastic listener

If you are leading improvement, don’t forget that you can improve yourself too! Ask yourself whether you really and truly listen to people to understand what they are saying, even when it’s a difficult conversation to have. Or do you habitually listen to answer?

Be brave and ask for feedback from colleagues and patients about their experience of you.

The art of active listening is crucial for QI leaders and it’s a skill that can be learnt and improved. An easy exercise to help you understand the power and importance of this skill is to find a friendly QI colleague and both take turns to tell each other something important while the other person tries as hard as they can not to listen. It’s a good technique to show how not listening to someone impacts on us emotionally.

7. Don’t underestimate the power of a question

If you unearth a patient experience issue in your team, you can help to better understand it by using the ‘Five Whys’ technique. This is a simple QI method based on asking “why?” five times to take you on a deep dive to the root cause of the issue. This can then help you see if this was an unfortunate ‘one-off’ variation to the norm or a systemic issue that will require wider improvement.

8. Appreciative Inquiry

Appreciative Inquiry can be used across an organisation or in a single team, for staff and patients, carers and families. It asks ‘appreciative’ questions about what’s working well and why. It is a strengths and asset led model where you actively seek to build on what you’re good at rather than ‘problem solve’ by looking only at deficits. This doesn’t mean that you don’t uncover things that need improvement; in fact it asks people to dream about what the organisation could look like in the future in order to continuously improve and transform.

I hope you have enjoyed reading these techniques, and are inspired to give some of them a go.

I’d love to hear from you so that together we can spread ideas about how to improve patient-centred care approach and leadership skills. I believe no matter what your role is in your healthcare environment, we are all leaders for improvement.

Please feel free to tweet us at @annaburhouse or @WEAHNSN with your suggestions.
The deteriorating patient

Sharing the NEWS

Too often, healthcare providers in different sectors do not speak the same ‘language’ across the various handovers of care. This can lead to a lack of consistency in detecting and responding to acute illness.

In the West of England, all acute trusts, out-of-hours GP services, mental health trusts, community service providers and clinical commissioning groups (CCGs) have signed up to the adoption and spread of National Early Warning Score (NEWS), and communicating this score at the interfaces of care across the system.

NEWS is a simple scoring system, based on the six physiological measurements that make up the routine vital signs of an adult patient. We have produced a toolkit to support the adoption and spread of NEWS in a variety of health care settings: www.weahsn.net/news-toolkit

A video has also been produced telling the story of a patient called Paul in North Somerset who had sepsis but thanks to the early detection of his condition in primary care through the use of NEWS, it was treated within five hours of seeing his GP and he made a quick and full recovery. Watch the video at www.weahsn.net/news-film

Key stats:
- 1,203 people in the West of England have benefited as a result of the Emergency Laparotomy Collaborative in the last year
- 93,219 people had their NEWScore calculated at triage into one of our emergency departments
- 554,489 people had their NEWScore recorded by the South Western Ambulance Service on an Electronic Patient Care Record (ePCR)

It involves the spread and adoption of the evidence-based Emergency Laparotomy Pathway QI Care bundle and consider which emerging themes will lend themselves to a collaborative quality improvement approach. www.weahsn.net/structured-mortality-reviews

Identifying patients most at need in the emergency department

Crowding has a profound impact on the ability of emergency department (ED) staff to deliver safe care. Delays in recognition and treatment of severe illness are common, with associated poor outcomes. This is particularly problematic for patients suffering from stroke, heart attack and sepsis.

The ED Safety Checklist is a simple response to this issue. Piloted at University Hospitals Bristol NHS Foundation Trust, it is a time-based framework of tasks completed for every patient, other than those with minor complaints.

With our support, the checklist has now been adopted by all acute trusts in the West, as well as the South Western Ambulance Service. This has been supported by a special toolkit, sharing lessons learned to support trusts to introduce the checklist in their own EDs.

As a result, the number of majors/resus patients having their NEWScore calculated within an hour of admission to EDs has improved from an average of 55% to 84%, while those having their pain score calculated has gone up from 59% to 93%. The number of ECGs being instructed within 10 minutes of people arriving in ED has increased from 36% to 77% of all appropriate patients.

To download the toolkit visit www.weahsn.net/emergency-department

“One of our challenges is to know firstly does somebody need to go to hospital, secondly how urgently they need to go in, and how we communicate that to the hospital – how worried are we about this patient when they can’t see them for themselves,” says GP Jon Rees in the video.

“And that’s where I found the NEWScore so helpful – it immediately clarified in my mind there was no doubt he needed to be in hospital, there was no doubt he needed 999, and as soon as I rang 999 it was clear they knew there was no doubt that they needed to respond quickly.”

Emergency Laparotomy Collaborative

The West of England, Wessx and Kent Surrey Sussex AHSNs have joined forces to form the Emergency Laparotomy Collaborative.

The Collaborative is delivering a quality improvement (QI) programme that aims to save 1,000 lives over two years by improving standards of care and outcomes for patients undergoing emergency laparotomy surgery.

It involves the spread and adoption of the evidence-based Emergency Laparotomy Pathway QI Care bundle from four hospitals to 28 hospitals in our three regions, including all six acute hospitals in the West of England. It encourages a culture of cross-organisational collaboration, and is embedding QI skills to ensure sustainability of change.

Key outcomes so far include:
- Significant reductions in mortality rate and length of stay.
- Risk-adjusted mortality rate fell by 18% in the first three months.
- Length of stay has fallen by 8.5% or 1.5 days, equating to non-cash releasing savings of £1.3m in the first nine months.

www.weahsn.net/structured-mortality-reviews

Our collaborative will develop a best practice framework, train clinical reviewers, implement the new system...
Collaborating in the community

Since the West of England AHSN was established back in 2013, our work with colleagues in primary and community care settings has proven an invaluable launch pad for new collaborations, creating connections through new and existing networks, supporting a safety culture to reduce variation in practice, and delivering workforce transformation.

Key stats:
- 5 community education provider networks have been established in the West of England
- 14 primary care practices have joined our Primary Care Collaborative
- 333 primary care staff have completed the SCORE culture survey about their practices
- 3,162 primary care staff have received Human Factors training
- 3,162 survey about their practices
- 14 practice managers and healthcare assistants (HCAs)
- 333 primary care staff have received Human Factors training

Community Education Provider Networks (CEPNs)

In April 2016 we launched a programme with Health Education England (HEE) to develop Community Education Provider Networks (CEPNs) across the region.

CEPNs are an exciting new development bringing together primary care organisations in partnership to improve education and training capability and capacity in primary and community care settings. They support general practice by contributing to workforce planning and development, responding to local need and acting as a local coordinator of education and training for primary and community care.

In the South West, the establishment of CEPNs is being driven by both West of England and South West AHSNs, and in the longer term these networks will become self-supporting and directing.

In the West of England we have five CEPNs: Bristol, North Somerset & South Gloucestershire (BNSSG); Swindon; Wiltshire; Gloucestershire; and Bath & North East Somerset.

The five networks have developed project plans, and priorities include:
- mapping existing workforce
- physician associates
- maximising training opportunities for primary care staff
- GPs with a special interest
- networks for practice nurses, practice managers and healthcare assistants (HCAs)
- mental health workers in primary care
- developing the nursing workforce, including HCAs.

Human Factors

“There’s a combination of energised joint working, a structured improvement approach and the sharing of best practice, which gives us a really good chance of achieving our shared objectives on patient safety.”

Primary Care Collaborative

Within primary care practices, just as in any organisation, a strong safety culture is associated with greater satisfaction and engagement from staff: the safer the culture, the better the care.

In partnership with all seven of the clinical commissioning groups (CCGs) in the West of England, we have been running our Primary Care Collaborative since April 2016.

This collaborative is now supporting 14 practices:
- carrying out a culture survey and identifying actions through a facilitated debrief with staff,
- developing knowledge and skills in quality improvement, human factors and incident reporting through training and resources;
- a series of learning and sharing events.

The Collaborative has developed a number of resources freely available to all practices. These include a simple guide to the National Reporting and Learning System and a guide to Human Factors in Primary Care.

All practices have the opportunity to take part in collaborative events to learn and share from each other, as well as a cultural survey that measures the practice culture and provides actionable feedback to practices on areas to improve.

Alison Moon, Transformation & Quality Director for Bristol CCG, says: “It is really positive working with the AHSN on the primary care programme. There’s a combination of energised joint working, a structured improvement approach and the sharing of best practice and experiences, which gives us a really good chance of achieving our shared objectives on patient safety.”

A reference group has been set up to promote and share learning across the five CEPNs, which also includes representatives from the University of the West of England and the University of Bath, and primary and community care providers.

This work is closely aligned and supporting the Sustainability and Transformation Partnerships (STPs) through representation on the Local Workforce Action Boards.

All resources are available at www.weahsn.net/human-factors.
Talking about the future: catalysts and connectors, challengers and champions

Steve West, Chair of the West of England AHSN and Vice-Chancellor of the University of the West of England

It's good news that NHS England has confirmed that AHSNs will be granted a second five-year licence from April 2018.

We need a strong economy more than ever and governments of every persuasion will want to see a strong health and life sciences sector and effective regional growth. More specifically the recommendations of the Accelerated Access Review for the NHS see a very strong role for AHSNs in helping to support innovation.

When I think back over these first four years of the West of England AHSN I can see that we have developed some 'unique selling points', which will stand us in good stead in the future. I am incredibly proud of our people, our partners and our approach to partnership working that has delivered so much.

High levels of engagement from all our member organisations
We have had tremendous buy-in from the leaders of clinical commissioning groups (CCGs), NHS trusts and social enterprises, which provides an excellent platform for future work with Sustainable Transformation Partnerships (STPs), which we believe will be a key element in the new AHSN licence. In 2017-18 we are supporting each STP with dedicated project management resource and a conduit from the AHSN to promote innovation.

Known for our system leadership
We have shown our ability to bring together all parts of the health and social care system to work together to improve outcomes. Our ambitious programme on using the National Early Warning Score (NEWS) to spot and treat deterioration is a prime example, involving every member organisation, all out-of-hours providers, scores of GP practices and nursing homes. Senior clinicians were among the first to spot the opportunities for pan-system working.

Build in adoption and spread and capability legacy from the outset
Whether it’s GP Clinical Evidence Fellows, stroke prevention in primary care or preventing babies from being born with cerebral palsy, our West of England organisations have committed themselves to the adoption and spread of best practice and innovation that works right from the very start of each of our programmes of work.

Strong leadership
We have the highest calibre leaders who are supported by excellent teams and a very strong clinical faculty. We are flexible and fast: we don’t let the grass grow under our feet and everyone wants to work with us to find out how we do things!

Innovative citizen empowerment
We have shown the future with our crowdsourcing and citizen-led approaches including Design Together, Live Better and the Diabetes Digital Coach test bed.

So what will the next five years hold for AHSNs?
NHS England and their partners are taking 2017/18 to discuss and develop the new licence with AHSNs so the blueprint is not yet finished. However we do know that innovation and supporting STPs to improve processes of care will be the two main themes. It’s likely that the innovation focus will bear resemblance to the West of England’s current work with the addition of a strong emphasis for all AHSNs on rolling out high impact, well proven innovations, as well as encouraging early stage developments. These may include pharmaceuticals, along with medical technologies and digital innovations.

We continue to shine a spotlight on the importance of change management and quality improvement to embed and sustain innovation effectively.

STPs are becoming the cornerstone of NHS planning and development, so AHSNs will focus on supporting them in delivering improved services and outcomes, twinned with financial efficiencies.

We currently have a director assigned to each of our three STPs and we are increasingly offering events that are designed by and for the STPs, such as our 2016 annual conference and the Digital Art of the Possible event last autumn.

One of our developments for 2017/18 is to resource a full-time project manager for each STP, whose role will also include being a conduit to and from the AHSN on innovation.

We are known for our ambitious adoption and spread programmes, such as our partnership with Gloucestershire CCG and now Bristol CCG to optimise stroke prevention in primary care, which has prevented strokes and hospital admissions.

While there isn’t a single magic bullet for STPs, the West of England AHSN can offer improvement and innovation skills, which will make a tangible difference.

Over the last four years we have proven our worth as catalysts, connectors, challengers and champions across the West of England. We look forward to continuing to work for local NHS organisations, with our universities and industry, and to empower our citizens, in order to transform our health service.
Accessing patient data is critical to care. That’s why more than 500 million patients and clinicians in 80 countries rely on us to make information reliable and accessible. Because connected care is the best care. Learn more at www3.InterSystems.com/health