Health Innovation
WEST MIDLANDS

HIWM Impact Report

2023 — 2024

CONTENT

FOREWORD

Professor Michael Sheppard
Chair of Health Innovation West Midlands

It is with immense pleasure that I introduce the 2023-24 annual impact report from Health Innovation West Midlands (formerly West Midlands Academic Health Science Network).

2023 marked an important milestone for the Health Innovation Networks nationally, with the Government and NHS England's decision to relicense England's 15 Academic Health Science Networks for a further five years. We are now looking to advance the successes achieved as an Academic Health Science Network under the new banner of Health Innovation Networks.

The new name reflects Health Innovation West Midland's (HIWM) vision to transform local health and care through collaborative innovation. Working with integrated care systems, innovators, researchers and health and care systems, HIWM will continue to develop solutions and innovations meeting local need, as well as accelerating the adoption and spread of proven solutions.

The healthcare sector continues to be a highly dynamic and evolving environment, with several changes across the landscape during 2023-24. The West Midlands has the fastest growing population in the UK, which has seen an increase by 40,000 in the last year, remaining the second largest population in the UK.

As an organisation, we continue to work closely and collaboratively with our commissioners – NHS England, NHS Improvement, and the Government's Office for Life Sciences, as well as strengthening our partnerships with organisations like the NIHR Applied Research Collaboration West Midlands (ARC WM).

In November 2023, we were delighted to hold our inaugural Stakeholder Conference with representatives from across the health and care sector descending upon Birmingham to take part and learn from the transformational health innovations and projects that HIWM has spearheaded.

Projects showcased at the event included Heart Failure, Managing Deterioration in Care Homes and Patient Safety Incident Response Framework (PSIRF).

FOREWORD

Tim Jones
Chief Officer of Health Innovation West Midlands

Much has been achieved over the past 12 months, we have been involved in developing exciting projects such as a Point of Care Ultrasound (POCUS) Programme. POCUS aims to support nurses and increase understanding across the industry of how it can transform unchallenged traditions in healthcare.

The team is currently completing a real-world evaluation with the haemophilia team at Birmingham Children's Hospital, which treats paediatric patients who present with suspected joint bleeds. When a child with haemophilia has a confirmed joint or muscle bleed, it must be treated by replacing missing clotting factors as soon as possible. POCUS could aid the team in their decision making and reduce the burden on radiology ultrasound departments. Results from this critical evaluation will be revealed later this year.

Back in September, Anna Edwards, Innovation Project Manager at HIWM, spoke at TedxNHS about medicines and their impact on the environment. Anna delved into how medicines are harming our planet, how we can reduce their environmental impact, and the challenges being faced to achieve this. Her talk has been viewed by tens of thousands of people across the UK and beyond.

Anna has also been instrumental in the development of the West Midlands Pharmacy Environmental Sustainability Network – a cross-sector group of pharmacy professionals, from across the West Midlands, who meet regularly to share best practice in reducing the field's environmental impact.

In other news, 2024 saw the return of our podcast, All Systems Ergo. The second series has been bursting with knowledgeable guests and presented by our very own Fran Ives, Human Factors Specialist. The show has reached 300 downloads.

In November 2023, our project 'West Midlands Managing Deterioration in Care Homes Safety Improvement Programme' was highly commended in the 'Provider Collaboration of the Year' category at the 2023 Health Service Journal (HSJ) Awards. The work supported 1,679 regional care homes through training and adoption of deterioration management tools to reduce deterioration associated harm. It has allowed professionals to improve the prevention, identification, escalation, and response to physical deterioration through better system coordination.

The project has been recognised as a national exemplar and HIWM is continuing to support NHS England by establishing a national change package in line with the deterioration framework. It is now widely known as the 'West Midlands Model'.

In January 2024, we introduced the pipeline model, taking programmes through a series of gateways:

- Discover - scoping the system, 'ideation'
- Develop - 1. Project design, 'solutioning',
  2. Proof of value
- Deploy - roll out at scale, 'delivery'

137 programmes are already going through the pipeline and we expect our Impact Report next year to be much richer with innovations.

DISCOVER

Scoping the System 'Ideation'

Entry Point

Decision on whether opportunities should proceed for development considering:

- Problem outline
- Anticipated benefits
- HIWM priorities
- Policy drivers
- Stakeholders
- Funding

DEVELOP

Project Design 'Solutioning'

Develop Score

The opportunity is worked up to a completed Project Initiation Document (PID), including:

- Risks and issues
- Benefits
- Scope
- Delivery resource
- Speciality resource

Proof of Value

Develop II

The project is subject to local refinement (where appropriate) through:

- Real world validation
- Review against controls
- Benefits realisation

Consideration is given to scaling at regional level (which would require a refreshed project initiation document).

DEPLOY

Roll out at Scale 'Delivery'

Regional Adoption

Project delivery is implemented in accordance with the PID, including:

- Communication and engagement
- Highlight reporting
- Benefits realisation
- Change control
- Risks and issues management

CLOSING

Conclusion

Project Completion

Completion activity is undertaken, including:

- Evaluation
- Lessons learnt
- Case study
- Business case for sustainability/ submission to national team
- End of project report
- Outstanding actions

N.B. Opportunities may be closed prior to delivery, closure will include:

- Signposting
- Stakeholder management
- Communications
- Shared learning

I would like to extend a huge thank you and a fond farewell to Julian Sonksen (Clinical Director) and John Williams (Academic Services Director) who left HIWM this year.

Finally, I would like to thank all the members of our team, as well as our myriad of partners and collaborators, for their continued support this year.

I look forward to seeing what lies ahead, as we embark on the next stage of our journey as Health Innovation West Midlands.

OVERALL IMPACT

Of all Health Innovation Networks the West Midlands region is

THE SECOND LARGEST

in the UK by population

6.46m
UK population living in our region

722
Patients received QbTesting

446
Companies supported

540
Delegates attended a webinar series to prepare for the introduction of the national Patient Safety Incident Response Framework

16
Unique innovations introduced to new clinical settings

2,577
Patients who accessed FeNO testing

40,000
West Midlands population increase in the past year (average 31,000)

293
Healthcare sites in the West Midlands introduced to a national innovation by HIWM

3,510
Users on the Meridian Innovation Exchange

6
ICBs supported (Health Innovation Network average 3)

The West Midlands region has

THE FASTEST GROWING

population in the UK of all the Health Innovation Networks

INTRODUCTION TO OUR RENEWED MISSION AND VISION

As we step into our new identity as Health Innovation West Midlands, we have identified four areas of focus to help us to support the development of transformational health innovations, and accelerate the adoption and spread of improvement solutions demonstrated to deliver patient benefit.

Deliver evidence-based interventions to improve health and wealth

We will act as the focus for supporting innovation in the West Midlands (WM).

We will provide stakeholders with a framework in innovator support services, accessible through our innovation exchange platform. This will enable innovators and local entrepreneurs, seeking assistance, to access a comprehensive set of services aligned to the national network.

Delivery at pace and scale

We will work with partners and stakeholders to develop the necessary skills, resource, and agility, to engage with and adopt innovations at pace on a local, regional, or national footprint.

We will work with industry, commissioners, the network, and stakeholders to overcome barriers to the adoption of innovations, sharing learning and knowledge gained from evidence-based methodologies for adoption and spread.

Supporting the workforce of the future

We will develop and nurture an agile workforce that can respond to the current and emergent needs of the region and is representative of the people which it looks to serve.

Leading through convening

Working with academia, industry and healthcare providers, we will strengthen relationships and partnerships and facilitate collaborations to the benefit of the region and its citizens.

We will work to bring partners together to support the development and adoption of innovations for patient benefit and promote innovation opportunities to improve health outcomes locally, regionally and globally.

We share embedded posts with our partners, including the WM Cancer Alliance, WM Health Tech Innovation Accelerator, WM Patient Safety Collaborative and WM Secure Data Environment.

DELIVER EVIDENCE BASED INNOVATIONS TO IMPROVE HEALTH AND WEALTH

52
PCNs engaged, receiving improvements to support staff

16.5 hours
Reduction in treatment time from admission to birth

7
Heart Failure training sessions delivered to promote change in staff knowledge, skills and confidence

26
Staff engaged with the QI Notify programme

118
IP disclosures received

8
Horizon-scanning activities completed

8
License agreements signed

8
Evaluations initiated

CASE STUDY: HEART FAILURE

Introduction

Heart failure (HF) affects around 900,000 people in the UK, and this number is likely to rise, due to an ageing population, more effective treatments, and improved survival rates after a heart attack. HF is a large burden on the NHS, accounting for 1 million bed days per year, 2% of the NHS total, and 5% of all emergency admissions to hospital. (NICOR (2021), Heart Failure Audit 2021 summary report).

Despite advances in treatment, mortality remains high with around 30-40% of patients dying within a year of diagnosis.

Health Innovation West Midlands (HIWM) recognised that there is a wide variation in timely access to diagnostics and treatment, resulting in sub-optimal treatment. The HF project sought to address the pinch points within the clinical pathway that can be improved, either through education, or implementation of innovations that will enable improvement. Therefore, we developed a local project that would be implemented in all six integrated care boards (ICBs) of the West Midlands from January 2023 to March 2024.

CASE STUDY:
HEART FAILURE

Aim

The HF project has four specific aims.
Firstly, it seeks to enhance the detection of patients with HF and ensure timely diagnosis through Natriuretic Peptide tests and echocardiograms in primary care.

Secondly, it aims to improve the quality of GP patient registers in primary care to ensure appropriate coding of patients with HF, whether with reduced ejection fraction (HFrEF) or preserved ejection fraction (HFpEF).

Thirdly, the project also aims to guarantee that patients with HFrEF receive a 12-monthly review and optimisation of their therapy to prevent avoidable hospital admissions.

Lastly, it seeks to ensure that patients with HFpEF receive optimal management of their co-morbidities.

Our approach

By working in collaboration with the regional cardiac network the project provided regional meetings for HF teams to share and learn and surveyed all the regions heart services to provide a landscape review. This helped embed HF champions into each ICS and targeted primary care networks (PCNs) in relation to health inequalities and heart failure HF prevalence.

The work also supported the workforce of the future by offering upskilling workshops to raise awareness of HF and encouraged the primary care workforce to undertake quality improvements at both PCN and practice levels.

To improve health and wealth, the project delivered evidenced based interventions, through a specialised toolkit aimed at primary care to aid quality improvement projects. The HF champions targeted PCNs in relation to heath inequalities and HF prevalence.

Examples of good practice were identified and case studies produced to aid spread and adoption of improved HF care.

Outcome

The HF project has resulted in 46% of PCNs committing to enhancing HF care through engaged champions, dedicated to undertaking improvement initiatives.

Furthermore, 22% of PCNs have embraced our tailored resources for quality enhancement projects. Participating practices have contributed eight insightful case studies, facilitating knowledge dissemination and adoption.

Additionally, eight HF upskilling workshops, attended by 216 individuals, were conducted across the ICB. Some PCN pharmacists have shadowed HF champions, subsequently establishing HF clinics within their PCNs.

A comprehensive toolkit has been developed and shared to support these endeavours. Moreover, a State of the Region report was produced following a comprehensive survey of all HF services, while two regional workshops, in collaboration with the cardiac network, were convened.

CASE STUDY:
LIPID MANAGEMENT

Introduction

High cholesterol is, a significant contributor to cardiovascular disease and is, according to NICE, the main factor attributed to a third of all ischemic heart disease cases. Raised levels of cholesterol can be caused by either lifestyle or genetics, and can, with the right treatment, be managed effectively irrespective of cause.

Health Innovation West Midlands (HIWM) works to ensure that patients at risk and diagnosed with cardiovascular disease are effectively treated for their cholesterol. Working collaboratively with partners to deliver targeted education across the region to increase awareness, knowledge and access, to all cholesterol and lipid lowering treatments for patients.

CASE STUDY: LIPID MANAGEMENT

Aim

The lipid management programme set out to improve overall outcomes for the population at risk of cardiovascular disease. To achieve this, the project set a range of aims, collectively working to improve patient diagnosis rates and access to the range of treatments available.

Aims included:

- Increasing the percentage of known cases of Familial Hypercholesterolaemia (FH)
- Increasing the percentage of clinical commissioning groups engaged with the adoption of the lipid management and FH programmes
- Growing the percentage of high-intensity statin therapy (HIST) prescribed in primary care, compared to statins
- Growing the absolute number of Ezetimibe prescriptions
- Increasing the percentage of the PCSK9i among the eligible patient population
- Increasing the percentage of Inclisiran prescribed among the eligible patient population

Our approach

HIWM set out a range of approaches to achieve these targets, including developing shared case studies showcasing areas of best practice, providing training workshops to grow awareness of best practice and lipid optimisation.

Working directly with primary care staff and primary care networks (PCNs) with major cardiovascular disease burden or health inequalities, HIWM undertook quality improvement projects and multiple-system transformation fund projects, to grow awareness and support available to frontline staff.

Alongside this, the project team developed and implemented standard operating procedures as a practical guide for practices and PCNs to implement search tools, run searches and optimise patient treatment.

By implementing standard operating procedures, it was clearer and easier for practitioners to provide more treatment options to high-risk patients, who remain at risk despite maximum tolerated statin therapy.

HIWM worked with education and training hubs to provide tailored teaching around the newer therapies available, and worked with medicine management teams to ensure the newer treatments are available to primary care (unlocking any barriers that may have arisen).

> **I feel confident in adding a second treatment as I am always second guessing what to do next.**
>
> Participant, lipid management education session

Outcome

From discussions with the West Midlands Familial Hypercholesterolaemia (FH) Service, the rate of detection for the condition, following the implementation of the project, has increased to 16% for the West Midlands.

Although referral rates have slowed down following the end of the Dedicated Enhanced Service (DES), the FH service has seen a 205% increase compared to the previous year. The number of patients referred from primary care has seen a significant increase in detection rate, and subsequent cascade testing.

Prescribing of HIST, Ezetimibe, Inclisiran and PCSK9 inhibitors have all increased over the last year. All six ICBs have adopted the national lipid pathway, or a localised version of the pathway.

CASE STUDY: INDUCTION OF LABOUR SUPPORT

Introduction

The number of women having their labour induced has increased from 25% to 33% over the last ten years. This increase adds substantial pressure on UK maternity units. Locally, Birmingham Women's Hospital (BWH) highlighted this as a particular area of concern.

During a one-week sample taken at BWH, 22 women were delayed in admission to hospital and 32 women were delayed in being transferred to a delivery suite. Initial data also identified a correlation between delays and poor outcomes for either mum or baby.

In response to this, the Health Innovation West Midlands (HIWM) Patient Safety Collaborative team, invited applications for funding of up to £20,000 to implement an innovation, or improvement intervention, that would result in improved outcomes for patients.

CASE STUDY:
INDUCTION OF LABOUR SUPPORT

Aim

The aim of the fund, was to improve the experience and clinical outcomes for both the birthing parents and their babies, reducing delays and improving patient flow through the maternity unit.

Targets included:

- Increasing the percentage of women admitted for induced labour when required
- Reducing the number of women delayed by at least 10%
- Increasing the percentage of women transferred to the delivery suite within six hours
- Reducing the number of complaints by 50%
- Reducing the number of incidents resulting in harm from induction of labour (IOL) delays by 50%
- Increasing the overall percentage of data compliance

Our approach

The fund enabled BWH to trial the implementation of a specialist IOL role. The IOL Flow and Capacity Coordinator was tasked to establish a more effective oversight and management process in the unit, which included the adoption of an electronic system for reviewing patient lists.

During the trial a Flow and Capacity Midwife was introduced alongside the Coordinator, to provide further specialist support. Thanks to the positive impact, a second fixed term midwife was also hired to ensure cover seven days a week.

The introduction of safe gestational ranges within the unit further helped to manage patient's expectations, and flow into the induction service, further reducing admission delays.

HIWM has been nothing but supportive through the whole process. Without the opportunity of the grant, the initial pilot phase would not have been possible, and it would have been far more difficult to demonstrate the value of, what was at the time, a theoretical innovation. We are forever grateful for this opportunity and all the support.

Louisa Davidson, Head of Midwifery and Associate Director of Nursing and Midwifery, BWH

CASE STUDY: INDUCTION OF LABOUR SUPPORT

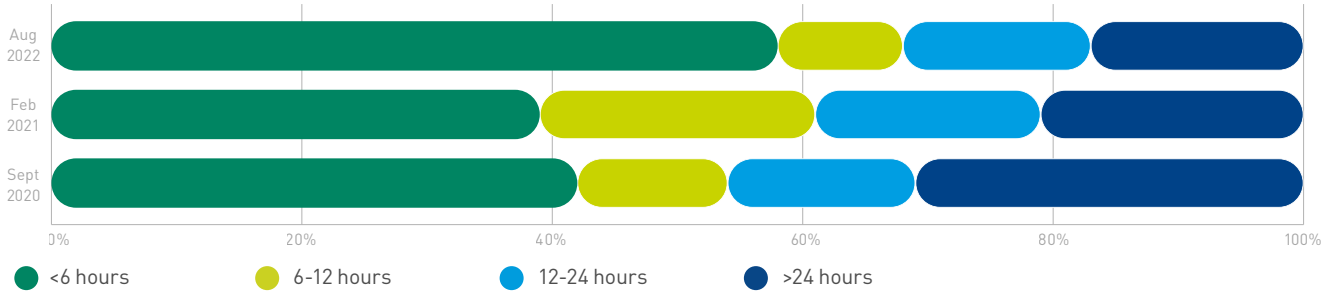
Outcome

Applied across all inductions at BWH, the initial three-month trial supported an average of 58 women undergoing inductions per week. Within two years of the implementation of the role, delays in admission were reduced from over seven hours to just under 15 minutes. A business case has been submitted to extend the IOL Coordinator support to cover the unit 24/7.

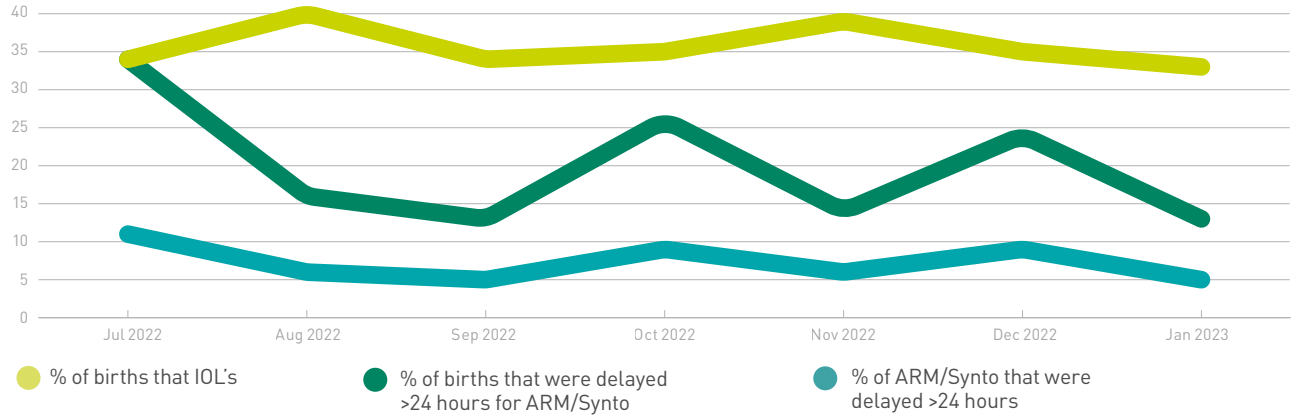
The total length of time from IOL admission to birth was reduced by 16:05 hours, which improves outcomes for both parent and child. The percentage of women transferred to the delivery suite, receiving induction within six hours, increased from 43% to 57%.

As the national conversation around the need for improvement projects in IOL pathways has ramped up, BWH continues to provide information and resources highlighting best practice to other maternity units nationwide, to support tackling common problems and improve quality of care.

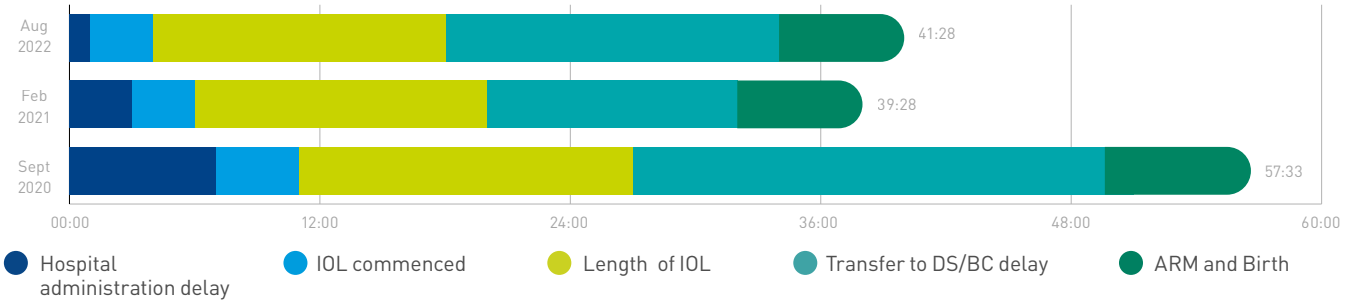
Overall (urgent and elective transfers combined) % of mothers transferred to DS/BC within each timeframe



ARM's and Synto's delayed >24 hours



Time study: overall



CASE STUDY: POINT OF CARE ULTRASOUND SCANNING (POCUS)

Introduction

Point of care ultrasound scanning (POCUS) is a procedure commonly used at the patient's bedside, often within acute medicine, to aid assessment and management of patients. As ultrasound technology has advanced, POCUS enables healthcare staff to use a handheld probe connected to a tablet or smartphone, to support diagnosis decision-making. POCUS can positively impact capacity within radiology, by improving patient flow and providing more timely diagnostics.

Through Health Innovation West Midlands' (HIWM) work, several healthcare organisations around the West Midlands highlighted interest in trialling POCUS in their clinical areas, including the Birmingham Children's Haemophilia (BCH) team.

CASE STUDY:
POINT OF CARE ULTRASOUND SCANNING (POCUS)

Aim

The POCUS project adopted a human factors approach to the implementation of POCUS to improve the diagnosis, treatment, and management of paediatric haemophilia patients with suspected joint bleeds. Repeated bleeding into a joint break can cause joint damage, meaning timely treatment is crucial if a bleed is suspected. If a child with haemophilia has a joint or muscle bleed, it needs treatment with a replacement for the missing clotting protein as soon as possible.

By working with HIWM, the BCH team hoped to improve the patient journey and diagnostic pathway, and enable the haemophilia nurse or physiotherapist to undertake ultrasound scanning independently, to inform decision making, benefitting both staff and patients.

Our approach

A hierarchical task analysis (HTA) was conducted to understand the existing process for suspected bleed patients to be referred to radiology for an ultrasound. Information from discussions with staff, observations, and the HTA, was used to assist with the identification of where and how the pathway could benefit from POCUS.

Baseline data was also collected to gain a greater understanding of the patient pathway, this included:

- Date of presentation to clinic and ultrasound (if performed)
- Length of wait for ultrasound results
- Whether a bleed was confirmed
- Whether factor medication was prescribed

Adoption of a human factors approach, before the trial of the POCUS equipment, ensured full consideration of how the patient pathway would change with the introduction of a nurse-led ultrasound scan. Additional work focused on understanding and reducing the risk of staff developing musculoskeletal problems, from using POCUS, in the future.

Outcome

After the implementation of the project, the results revealed:

- The waiting time for an ultrasound scan in the radiology department varied from 10 minutes to a week
- 33% of ultrasound scan patients were confirmed to have a joint bleed and were prescribed factor clotting medication
- 50% of patients without an ultrasound scan were prescribed factor clotting medication as a precaution, due to an ultrasound scan not being immediately available

User trials of the POCUS equipment found that although the equipment was portable, easy to use, and affordable, the probe was heavy and too large for young patients. This led to further trials with less portable equipment, with a range of ultrasound probe sizes, which was chosen for long-term implementation.

Although POCUS was not the final solution, the project gave haemophilia staff the skills to perform ultrasound scans, hoping to:

- Reduce the number of patients prescribed factor medication unnecessarily
- Reduce the amount spent on factor medication
- Reduce patient waiting time
- Provide reassurance for patients and carers
- Reduce ultrasound requests to radiology

The HIWM Innovator Support team continues to support the POCUS team to further develop their work and to secure further adoption and then spread of the technology.

DELIVERY AT PACE AND SCALE

58%
Of participating West Midlands sites at Stage 4+ of Adoption of MedTech Funding Mandate

144
Healthcare Professionals supported by our Polypharmacy Project

44
Intellectual Property (IP) disclosures received

13
Maternity services shared preterm infant data

2
Integrated Care Systems supported to implement a system-wide approach to reducing opioid related harm

13
Trusts have adopted the Clinical Escalation Toolkit

44
Wards participated in Mental Health Safety Improvement Programme

6
Wards participated in System Safety: Patient Safety Incident Response Framework programme

3
Babies saved by optimal cord clamping

CASE STUDY:
EACH BABY COUNTS CLINICAL ESCALATION TOOLKIT

Introduction

The early recognition and escalation of the deterioration of pregnant women and babies is essential in improving patient outcomes. To support maternity units, the East and West Midlands Health Innovation Networks have been supporting the adoption and spread of the Each Baby Counts (EBC) clinical escalation toolkit across the Midlands. The toolkit sets out to complement the implementation of the Maternity Early Warning Score (MEWS) and Neonatal Early Warning Trigger and Track 2 (NEWTT2) tools, in supporting staff with recognising the signs of deterioration in women and babies to minimise avoidable harm and improve patient outcomes.

Aim

As well as supporting current systems in place, such as MEWS and NEWTT2, the EBC clinical escalation toolkit aims to facilitate the early recognition and escalation of the deterioration of women and babies using three tools:

- AID: Advice, inform, do
- Teach or treat
- Team of the shift

These three tools enable maternity and neonatal staff to effectively recognise deterioration and escalate appropriately, to ensure the impacts of deterioration are kept to a minimum. Previously, it had been found that staff were not confident in escalating deterioration, for fear that it had been recogognised incorrectly. The EBC toolkit builds confidence alongside MEWS and NEWTT2, to ensure deterioration is treated effectively.

The tools also allow teams to work collaboratively as a unit with clear guidelines and processes, allowing them to confidently support one another in the treatment of deteriorating patients to improve patient outcomes.

Our approach

A core team was developed to support the planning of a Midlands-wide approach to adopting the EBC toolkit. To better understand the factors that enable or hinder maternity and neonatal staff to escalate clinical concerns, a number of rapid insight learning sessions were held with clinical colleagues in the Midlands.

One midwife and obstetrician from each labour ward were identified to represent the programme as the unit-based clinical leads for the project. The team hosted a regional launch webinar in September 2022 introducing the EBC clinical escalation toolkit, supported by the regional chief midwife who outlined the vision, aims, and importance of the improvement initiative.

After sharing the resource, regular learning system meetings were held with each element of the toolkit explored. Early adopters of the toolkit also shared methods for implementation and measurement, with opportunities for cross-system learning and support.

Regular evaluation of the approach was undertaken by the Applied Research Collaborative West Midlands (ARC WM) through surveys, interviews, and observations from the learning events, to identify changes in confidence in escalation, improvement in working culture, and approaches to implementation.

CASE STUDY:
EACH BABY COUNTS CLINICAL ESCALATION TOOLKIT

Outcome

Following an evaluation of the toolkit, several change ideas were implemented, including:

- A partnership working approach between Health Innovation West Midlands, Health Innovation East Midlands and the regional Perinatal Network, to support the project and track progress
- Learning events were set up to create a collaborative environment, to encourage cross-system learning and idea sharing between clinical leads
- Supportive calls were set up to determine progress, state of adoption, and identify support requirements
- Direct engagement with board safety champions and non-executive directors to support the project
- The Midlands Perinatal Team is funding regional maternity and obstetric clinical advisors, to provide additional coaching and support as the formal implementation of the project nears conclusion

The project identified clinical leads in all 21 trusts across the Midlands, including 13 in the West Midlands, with the trusts working towards implementing the three elements of the toolkit to improve understanding of deterioration across systems and improve patient outcomes.

Regular evaluation of the Midlands Learning System meetings found good engagement from participants, including support from local senior clinicians who were part of the original EBC learning and support

CASE STUDY: POLYPHARMACY

Introduction

Polypharmacy simply means many medicines. Every year, the primary care sector in England dispenses over 1 billion prescription items. As more people are living longer, the number of patients managing multiple long-term conditions also increases. This can have a significant burden on the patient, as they are navigating multiple medicine regimes which could, if combined wrongly, be harmful.

Studies have shown that over 50% of older people are prescribed a medicine that is causing more harm than benefit. This is resulting in avoidable morbidity, hospitalisation and excess mortality for patients, while also contributing to preventable costs to the healthcare system. A person taking ten or more medicines is 300% more likely to be admitted to hospital. The most deprived areas tend to have the most issues around polypharmacy, also making this a health inequality issue.

Most of the harm from polypharmacy is preventable.

CASE STUDY: POLYPHARMACY

Aim

The Health Innovation West Midlands (HIWM) Polypharmacy Programme aims to support primary care to address problematic polypharmacy by using data to identify patients at potential risk of harm and support better conversations about medicines.

The project set out to support professionals limit the prescription of conflicting, or unrequired medicines, to help improve the safety of patients while reducing preventable costs.

Our approach

The Polypharmacy Programme set out to manage the prescription health of patients by using data to understand their health risks and support the prioritisation of those most at risk by providing a structured medication review.

The primary care workforce was given training to develop their confidence in reviewing complex medicine regimes and de-prescribing where appropriate, through free, centrally run, Polypharmacy Actioning Learning sets, and locally run virtual Polypharmacy Workshops administered by HIWM.

A focus group was set up to gather patient opinions on public-facing materials, alongside a pilot study within primary care networks (PCNs) which trialled the materials during structured medication reviews and obtained feedback from clinicians and patients. Through this testing and evaluation process, the roll-out of public-facing materials led to public perceptions of prescribing medications being challenged and changed, and patients were encouraged to talk about medicines.

Outcome

The NHS Business Services Authority webinar empowered 75 attendees with insights into identifying patients vulnerable to problematic polypharmacy, utilising polypharmacy comparators.

Through collaboration with HIWM analytics, three tailored data dashboards were crafted, prompting five integrated care boards (ICBs) to designate polypharmacy as a focal comparator. Concurrently, five local trainers achieved accreditation to facilitate polypharmacy education sessions, while nationally, 68 individuals engaged in Polypharmacy Action Learning Sets.

Moreover, 144 participants benefited from virtual workshops in the West Midlands. Three community of practice sessions were convened, attracting 119 attendees from a range of sectors.

Five clinicians completed Polypharmacy Quality Improvement projects, culminating in the publication of their work on the Health Innovation Network's online library, with one project earning a prestigious PrescQIPP gold award.

Additionally, 55 downloads of the 'Preparing for medication review' patient pack were recorded, with feedback indicating intent by 73 primary care clinicians to integrate these materials into their practice. This effort is further supported by the incorporation of patient materials into local ICB structured medication reviews best practice guidance by the ICB Medicines Optimisations team.

CASE STUDY:
INNOVATION FOR HEALTHCARE INEQUALITIES PROGRAMME (INHIP)

Introduction

The West Midlands is home to a vastly diverse patient landscape. With a population of over 6.2 million spanning six integrated care systems (ICS), it is also home to extensive rural populations outside two of England's most deprived ICSs.

In fact, more than 65% of the population across the region is considered to be living in the most deprived 20% of the national population.

There are noteworthy differences in the rates of circulatory disease (heart disease and stroke), cancer and respiratory diseases between the most and least affluent, highlighting the need to improve access for under-served populations.

Aim

Health Innovation West Midlands (HIWM) conducted extensive equality impact assessments (EIA) across its six ICSs, which showed a range of populations affected by health inequalities, including seldom heard communities facing some of the biggest health inequality gaps.

Under the NHS England's Innovation for Healthcare Inequalities Programme (INHIP) HIWM can support its local ICSs in undertaking the Accelerated Access Collaborative to address local healthcare inequalities experienced by deprived and other under-served populations.

Working with project teams from across the country alongside a range of local communities the project sought to identify, address and improve access to the latest NICE approved health technologies and medicines. The project worked in alignment with the national Core20PLUS5 approach to reducing healthcare inequalities.

Already told by GP that blood pressure was high, so not surprised it was high. I never went back but will go back to GP now and hopefully get some medications to help.

Patient

I feel more informed of how to spot the symptoms that my asthma is becoming uncontrolled.

Patient

CASE STUDY:
INNOVATION FOR HEALTHCARE INEQUALITIES PROGRAMME (INHIP)

Our approach

Project teams comprising of clinical and non-clinical experts from across the county worked together with their local communities to identify, address and minimise healthcare inequalities through local projects. These set out to improve access to the latest NICE approved health technologies and medicines.

Within the West Midlands, HIWM supported five of the six ICSs through this project.

By adopting a targeted approach tailored to each ICS the project was able to support some of the most prevalent challenges to their local population.

Staffordshire and Stoke-on-Trent ICS used a targeted approach in four primary care networks (PCNs) with areas of high deprivation and ethnic minority populations. They graded asthma patients and invited those at higher risk of severe asthma to take the NICE approved FeNO test.

Shropshire, Telford and Wrekin ICS targeted areas of high deprivation and rurality, along with high prevalence of cardiovascular disease, utilising volunteers to undertake blood pressure checks.

Coventry and Warwickshire ICS undertook cardiovascular disease health checks in Warwickshire North. This area was chosen as it has a number of 'Core20PLUS5' populations and areas of rural deprivation.

Birmingham and Solihull ICS used a targeted approach in three PCNs with high areas of deprivation and ethnic minority populations, utilising volunteers to undertake mini health checks.

Herefordshire and Worcestershire ICS undertook cardiovascular disease health checks using a bus to do checks in 'Core20PLUS5' communities and areas of rural deprivation.

Outcome

Throughout the project a range of predictive tests were made available to some of the most at risk communities across the five ICSs, results included:

- 2,200 people engaged across the region
- 450 people referred to either primary care or secondary care for further follow up or investigations following initial testing
- 750 FeNO tests performed
- 1,700 blood pressure checks performed
- 750 atrial fibrillation screenings performed
- 650 cholesterol checks performed
- Patient information resources, including leaflets and videos created in different languages, to directly inform hard to reach audiences
- 100 volunteers used for some of the projects

You don't have to spoon feed people everything, but you do have to make it more accessible as opposed to expecting everyone to come to us and do everything we say.

Healthcare professional

CASE STUDY: ADHD

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a treatable disorder that affects around 5% of school-aged children worldwide. If left undiagnosed or untreated, ADHD can have significant impacts on personal development, academic outcomes, and family interactions. However, the process for diagnosing ADHD takes on average 18 months for children in the UK.

To establish a diagnosis a multi-step process is often used. This involves several appointments and assessments through clinical judgement, informed by subjective reports from parents, teachers, and patient observation, which raise the barrier to treatment access. The volume of activity involved in diagnosis is estimated to cost the NHS £23 million per year. The West Midlands ADHD project provided funding to four hospital trusts in the region to support the adoption of QbTest, which accelerates the diagnosis of ADHD.

Aim

The ADHD project set out to accelerate the process of diagnosis of patients with ADHD across four West Midlands trusts, by funding and overseeing the implementation of QbTest. The long-term goal is to create a more sustainable ADHD diagnosis service for the future.

QbTest is an objective, computer-based assessment that supports the ADHD diagnostic pathway, developed by QbTech Ltd. The QbTest assesses a patient's attention, impulsivity, and motor activity in just 15 minutes. When integrated into ADHD pathways it helps speed up diagnosis and therefore reduces the number of appointments and resources needed.

Our approach

Health Innovation West Midlands (HIWM) funding supported the four trusts with the implementation of the QbTest, by enabling the sourcing of testing equipment, such as an infrared camera, a headband with an infrared marker, and a responder button.

During the QbTest, several symbols appear on the computer screen and the patient must push the responder button when a particular symbol is shown. The test results are then compiled into a report and compared with data from other people of the same sex and age who have not received an ADHD diagnosis.

These results are used in combination with other ADHD assessment tools to aid clinical judgement. After the test, the results are entered into the child's record, with a health professional then submitting a referral to paediatricians, along with other documentation from home and school, to support in achieving an ADHD diagnosis.

Outcome

Progress at each trust was demonstrated via:

- The numbers of staff completing the QbTest training
- The numbers of QbTests conducted
- Completion and submission of quarterly reports to HIWM to understand qualitative progress, successes and barriers

Since its implementation in Q1 of 2023, all four trusts involved in this project successfully adopted QbTesting into their patient pathways to help diagnose ADHD. 722 patients were tested across the trusts, helping surpass the self-assigned target of 288 tests by the end of Q4.

67 staff members also received training to support the new processes and pathways put in place around QbTesting. The project is now complete and exceeded the agreed targets for the 23/24 financial year.

In one trust, offering QbTests with initial appointments after triage, avoided the duplication of administration time. Another trust was able to offer shorter appointment times with senior nurses, and able to assign responsibility for school observations from a senior staff member, to junior staff, helped by the QbTest providing an objective measure in the pathway, bringing efficiency and cost savings.

SUPPORTING THE WORKFORCE OF THE FUTURE

94
Healthcare professionals trained on the Live Well with Pain training programme, supporting people living with chronic pain

137
Participants have undertaken a learning session in Greener Anaesthetics

2,718
Events and communities of practice supported (cumulatively since 2022)

196
Participants in Pharmacy Net Zero Community of Practice

129
Healthcare professionals trained to use the FeNO device, growing skills, knowledge and confidence

130
Participants have undertaken a learning session in Greener Inhaler Care

CASE STUDY:
NET ZERO COMMUNITY OF PRACTICE

Introduction

Sustainability remains a key focus area across all NHS organisations. All integrated care systems (ICSs) in the West Midlands have set net zero targets and published Green Plans, with the aim of reducing the carbon footprint of services and medications.

Medicines contribute to 25% of the NHS carbon footprint and have additional environmental impacts including waterway pollution; with anaesthetic gases and inhalers being major contributors to the NHS' overall carbon footprint, at 2% and 3% respectively. Healthcare organisations have a responsibility to mitigate and reduce the impact as much as possible.

CASE STUDY:
NET ZERO COMMUNITY OF PRACTICE

Aim

To support the goal of making prescribing more sustainable, Health Innovation West Midlands (HIWM) launched The West Midlands Medicines Environmental Sustainability Network/Community of Practice (CoP).

The programme sets out to provide a supportive environment for pharmacy professionals to hear from, and connect with, other like-minded professionals across the West Midlands, to discuss medicines-related environmental sustainability topics. The forum's aims include:

- Sharing successful medicine-related environmental sustainability projects
- Creating a platform for pharmacists to discuss the challenges they are facing
- Building peer networks seeking to improve environmental impact in pharmacy

Our approach

Prior to the group being developed, there was no dedicated community for pharmacy professionals to collaborate and share learnings. Although regional groups for general practice and sustainable anaesthetics existed, these were normally arranged outside of working hours and not accessible to many individuals.

The CoP provides a virtual platform for collaboration, allowing pharmacy professionals to share challenges, successes, and resources to help other teams contribute to the NHS' net zero targets and improve the environmental impact of medicine use. The group also provides an opportunity to improve patient outcomes on both a personal and professional level. Setting up the network involved facilitating sessions, including sourcing a range of medicines and environment-related speakers, between 2023 and 2024.

The sessions focused on topics like antimicrobials and the environment, digitising medicines information leaflets, and information on the platform YewMaker.

After each session, a resource pack was produced with key documents for attendees, and recordings of the sessions shared with those unable to attend. Hints and tips were also shared by members within the community, to support the delivery of quality improvement projects.

Outcome

The group has been well received in the West Midlands pharmacy community and has even grown in numbers since its inception.

Members cross over from a wide range of different sectors, including both pharmacy and wider medicines sustainability professionals.

The effectiveness of the group was regularly evaluated through assessment polls in the meetings, which noted a desire from attendees to continue engagement. The evaluation also found that 83% of attendees stated an increase in knowledge – demonstrating the group's effectiveness.

Given the group's success, it has now been opened up to all NHS employees involved in undertaking improvement work in medicines and the environment. This will enable more professionals to learn from other specialisms and gain multidisciplinary collaboration.

CASE STUDY:
WOUND CARE PATHWAYS

Introduction

A study by the NHS Benchmarking Network in 2021 estimated that wound care cost the sector £8.3bn each year and can take up 50% of community nurse time.

A large proportion of this is spent on caring and managing lower limb wounds, ulcers and surgical wounds. By improving wound care, it's possible to speed up healing and reduce the recurrence of wounds for patients, making their recovery shorter and more comfortable, while saving resources and time.

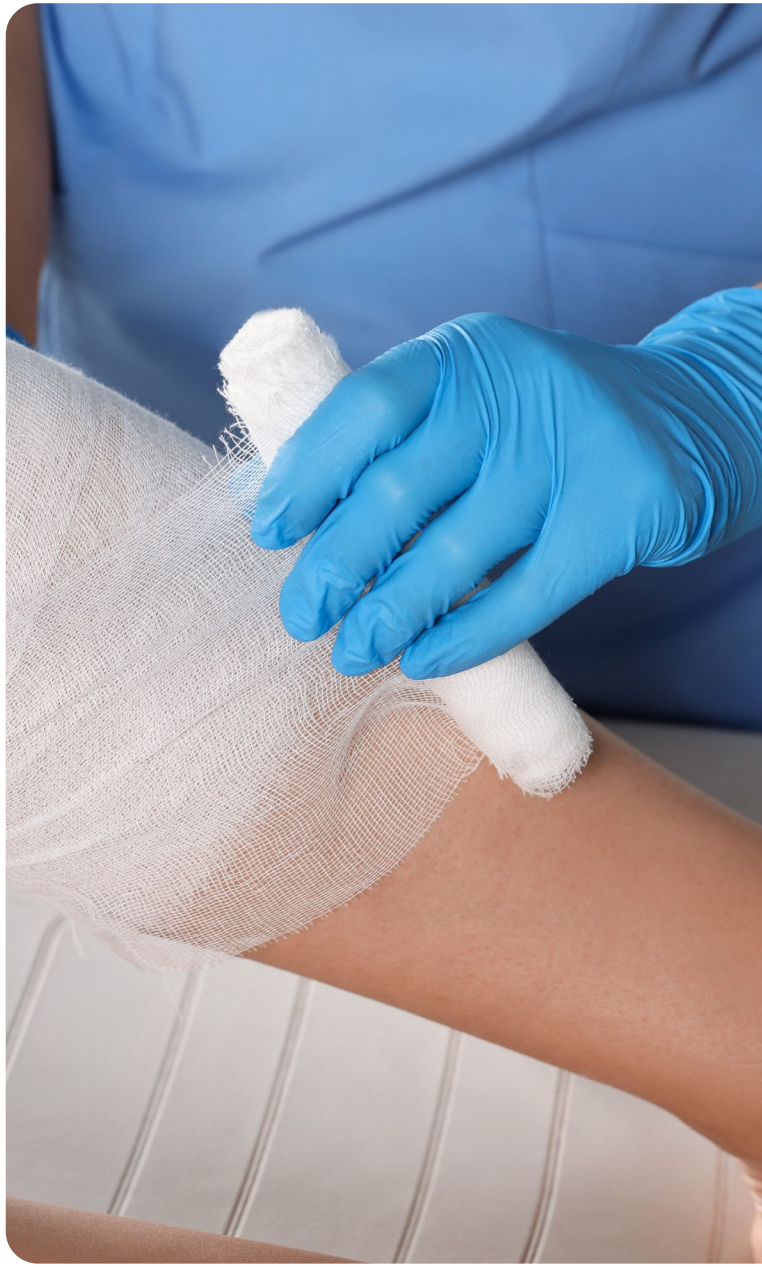
Working in collaboration with Birmingham and Solihull Integrated Care System (ICS), Health Innovation West Midlands (HIWM) launched a wound care pilot project to help improve the way wound care is approached.

Aim

The programme sought to develop an educational programme of support to primary care networks (PCNs) in delivering evidence based wound care, by implementing a pathway based on best practice.

The aim of the pathway is to encourage faster healing of wounds, give patients improved quality of life, reduce the likelihood of wound recurrence and ensure a more efficient use of resources.

Additionally, the programme included the development of a resource package and establishing a dedicated wound care clinic to further support PCNs in delivering the best possible wound care to patients.



CASE STUDY:
WOUND CARE PATHWAYS

Our approach

Through collaboration with PCNs within the Birmingham and Solihull ICB, HIWM developed a learning matrix with tiered options to align with staff's existing levels of knowledge.

All appropriate staff within the ICB completed a 1.5 hour e-learning course covering the fundamentals, with certain individuals continuing on to complete three hours of face-to-face learning. The in-person training covered topics such as wound types, treatments, formulary choice, red flags, compression and introduction to local pathways.

HIWM also facilitated the development of a resource package to support the assessment, diagnosis and onward referral, which encompassed methods for both simple and hard to heal lower limb pathways.

To address more complex cases beyond the scope of the training a dedicated wound clinic was created, managed by clinicians possessing extensive knowledge in comprehensive assessments and treatment plans. The implementation of clear pathways and specific inclusion criteria ensured a smooth flow of patients through the process.

Outcome

The resource package was developed and made available to the ICSs where nurses could take part in the resources and make referrals to the wound care clinic. During this time a real-life case study highlighted the benefit of its adoption and its contribution to the healing process.

The patient, a male aged 45-60, presented to the clinic with a traumatic wound on his left leg above the ankle, after his GP had tried to independently manage his care for several weeks.

After being assessed twice weekly for a number of weeks by the practice nurse, using a variety of dressings and oral antibiotics, there was no improvement to the wound bed.

The practice nurse received e-learning and a face-to-face education session on the lower limb pathway. Recognising the necessity for additional evaluation, the nurse referred the patient to the dedicated wound care clinic, part of this pilot programme.

At the clinic, a full vascular and wound assessment confirmed a venous aetiology. The patient was started on full compression therapy using a leg-ulcer hosiery kit, local formulary dressing products and education on self-management.

In the following weeks the wound showed signs of improvement with a reduction in size and pain. After nine weeks from the initial assessment at the wound clinic, it was considered healed - an improvement by a third, compared to the average healing time of three months. The patient was discharged back to the GP for ongoing hosiery management to reduce the likelihood of recurrence.

Patient feedback on the service was positive, with the patient describing it as, "absolutely excellent", praising the advice provided and finding a sense of relief at having a management plan in place.

CASE STUDY: GOOD HEALTH, GOOD LIVES

Introduction

People with learning disabilities are more than twice as likely to die younger than the general population, on average 22 years earlier for males and 26 years earlier for females. Of those with disabilities who died in 2021, half of their deaths were avoidable.

'Good Health, Good Lives' emerged from a pilot project between Health Innovation West Midlands (HIWM), West Midlands Association of Directors of Adults Social Services (WMADASS), East Midlands Health Innovation Network and East Midlands Association of Directors for Adult Social Services. Through funding from NHS England (NHSE) the collaborative was tasked to help identify how 'Supported Living' organisations can support better identification and escalation of deterioration for people with learning disabilities.

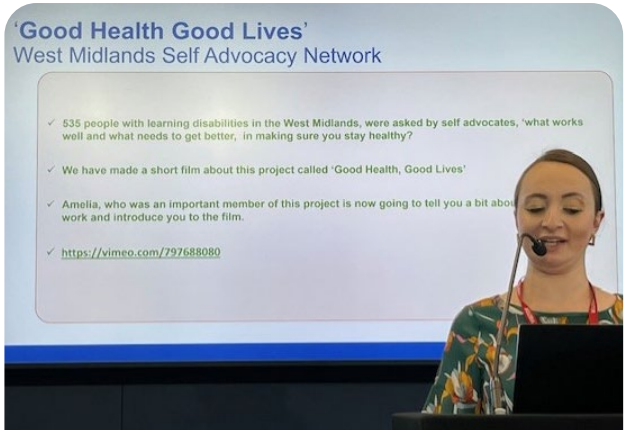
CASE STUDY:
GOOD HEALTH, GOOD LIVES

Aim

Through initial research, many social care staff felt that they were not listened to by clinical staff, despite knowing the patient best and regularly identifying changes to their health and needs.

We wanted to equip social care staff with the skills, tools, and confidence to work with NHS staff to successfully present key information and to quickly escalate that the person they support is deteriorating.

'Good Health, Good Lives' brings together the NHSE Learning Disability Mortality Review (LeDeR) commissioned pilot and HIWM's work with West Midlands Self Advocacy Network. Together, adult social care support providers and the NHS are collaborating to reduce health and social care inequalities for people with a learning disability to live better and longer lives.



Our approach

In collaboration with individuals receiving care for learning disabilities, our initiative spanned across four pilot sites, incorporating both urban and rural locales for a diverse demographic representation. Our aim was to empower social care personnel with the necessary expertise and confidence to effectively liaise with NHS counterparts, expediting the communication of critical information concerning the deteriorating health of those under their care.

We evaluated potential tools suitable for testing within supported living services, considering factors such as evidence quality, applicability to care settings, and local clinical commissioning group endorsement. This culminated in the development of the bespoke 'Keeping Well' tool, tailored to the programme's objectives.

Comprehensive training sessions were conducted for care providers and clinical staff, emphasising the utilisation of deterioration assessment tools and fostering a culture of continuous quality improvement. Supplementary resources, including regular drop-in sessions and documentation on Plan, Do, Study, Act (PDSA) fundamentals, were also provided to augment the training initiative.

Outcome

This collaborative project established new regional strategic relationships and involved 91 people with a learning disability, 100 social care support workers, ten general practices, community health teams and receptionists.

As a result of the project, a suite of bespoke soft sign deterioration management tools called 'Keeping Well' were developed, to better support earlier recognition and management for people with learning disabilities. 'Keeping Well' has been shared nationally, and the West Midlands-based integrated care systems have used the learnings to begin shaping improvement plans to better recognise and respond to deterioration of people with learning disabilities.

Within the wider West Midlands, the Managing Deterioration Safety Improvement Programme worked with care homes, including learning disability care homes, using deterioration management tools. This lead to a 1% reduction in 999 calls, a 4% reduction in emergency admissions and a 5% reduction in length of stay in acute hospitals, when compared to other homes or settings not using tools.

CASE STUDY:
FUSE: SOCIAL ENTERPRISE

Introduction

Fuse is a social enterprise programme dedicated to supporting start-ups in the health and social care sector, across the West Midlands. The programme provides three months of intensive support to enable new and budding businesses to gather the tools and expertise needed to move from ideation through to incubator. Working in collaboration with the Initiative for Social Entrepreneurs (iSE), the programme has been running for the last five years and is the only one of its kind in the West Midlands.

Aim

The core aim of the programme is to spark innovation in the health and social care sector, with the main objective of creating better services and improved healthcare systems that can help to save time, money and lives.

A social enterprise can be defined as not for personal profit businesses, that seek to address health and well-being challenges that are community centric. They respond directly to issues that have been identified within their local communities. The profits generated through the business' activity are reinvested to enable growth in support of the social enterprise ambitions.

Research from Social Enterprise UK has revealed that social enterprises based in the West Midlands are less resilient than in other areas of the UK and seem to fail at an earlier stage, which is why incubator programmes like Fuse are so crucial.

Our approach

Over the duration of three months, social enterprises are provided with bespoke courses including practical masterclasses on having a business mindset, social value creation, building a sustainable business model, finance and funding, plus digital marketing.

The help is hands-on and is delivered on a hybrid basis, helping to build confidence with those who attend it. Attendees also benefit from a supportive community of social entrepreneurs and industry experts to help guide and provide crucial advice along the journey. Not only this, but there is also the opportunity to access a small grant following completion of the programme, as well as usage of co-working spaces.

Outcome

During the last five years, the Fuse programme has supported more than 200+ innovators and SMEs.

In 2023 there have been 90+ innovators apply for the programme, demonstrating the true impact it can have. The support provided has caught the attention of the Living Well Consortium who now offer further small grants for individuals to deliver pilot schemes in real life scenarios. Offering grants is a key part of the programme, which in turn has helped start-ups become more resilient and provides alternate options to implement and develop new solutions to stem growth and prosper.

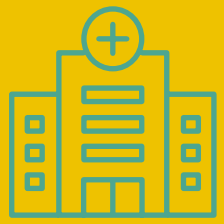
Not only this, but thanks to the additional research also highlighted by Social Enterprise UK, further adjustments have been made to the programme, including:

- Implementing more of a hybrid learning model
- Piloting two slightly smaller cohorts, with a rigorous application process in place
- Making the programme available to anyone in the West Midlands
- Small grant offerings
- Social enterprise MOT developed programmes

LEADING THROUGH CONVENING

3,510
Users of Meridian Innovation Exchange

137
Healthcare sites in the West Midlands have adopted a national product, service or technology through HIWM



427
New users set up on the Meridian Innovation Exchange in the last year

30
Incubator and Accelerator tenants supported

4
New co-creation communities created within last year through Meridian Innovation Exchange

11
Collaboration agreements signed

1
Junior ideator facilitated

50
Social enterprises supported through FUSE

34
Innovations signposted

32
Junior innovators supported

5
Innovations Exchange events supported

CASE STUDY:
MY PNEUMOTHORAX JOURNEY

Introduction

Primary spontaneous pneumothorax (PSP) is when otherwise healthy lungs spontaneously leak air into the chest cavity via a small hole or tear. The result is an imbalance of pressure in the chest cavity causing a collapsed lung.

Despite affecting approximately 3,000 people in the UK annually, patients have little knowledge of PSP and available treatment options. The 'My Pneumothorax Journey' project set out to develop a resource for PSP patients to inform them of what they need to know and what they can expect from treatment.

Aim

The project aimed to raise awareness of the treatment options for PSP and to better inform patients, particularly those from hard to engage communities.

To achieve this, the project team decided on producing an information leaflet and animation describing PSP, what it is, and the treatment options available to patients. By developing an easy to access and understand resource, available in a number of languages, to help improve access to information and support the reduction of health inequalities.

Our approach

Health Innovation West Midlands set up a group to inform the project and contribute to the resource. Joining the project manager were participants from NHS England patient and public involvement, Accelerated Access Collaborative (AAC), consultant respiratory physicians and clinical nurse specialists from two NHS trusts.

The group drafted a leaflet which was shared with patients with lived experience of PSP. Through a focus group, the patients were able to input and provide feedback on the leaflet content. This proved invaluable to the development of the resources, as it provided insights into the questions PSP patients wanted answering.

Patient feedback also informed the supporting animation and production of an accessible leaflet, including an easy read version.

In addition to English, the leaflet was translated into four additional languages, Arabic, Urdu, Polish and Romanian - all identified as the most commonly requested languages for interpretation at the trusts participating in the project.

The leaflets and animation were made available online via a QR code poster. This can be displayed in A&E and pleural clinics, or printed out for those without internet access or a smartphone.

> **Really great resource, will definitely be using with my pneumothorax patients!**
>
> Pleural Clinical Fellow

Outcome

Thanks to the adoption of the resource in clinical care, the 'My Pneumothorax Journey' won the Best Poster Presentation Award at the UK Pleural Society Conference in 2023 and has received great feedback from both professionals and patients. As well as being adopted across the West Midlands, there are also national adopters, including clinical teams in Bristol and Newcastle.

CASE STUDY:
LANDSCAPE REVIEW OF VIRTUAL WARDS

Introduction

The expansion of virtual wards was a key consideration set out in the 2023/24 NHS England (NHSE) priorities and operational planning guidance. This priority was raised following a Black Country Pharmacy Leadership Group (PLG) meeting, where a request was raised to understand the landscape of virtual ward services across the Black Country Integrated Care System (ICS), with a focus on medicines management and the role of pharmacy teams.

Health Innovation West Midlands (HIWM) facilitated this request through the Landscape Review of Virtual Wards project, working in collaboration with representatives from the Black Country Integrated Care Board (ICB), The Dudley Group NHS Foundation Trust, Sandwell and West Birmingham NHS Foundation Trust, The Royal Wolverhampton NHS Trust, Walsall Healthcare NHS Trust, and NHSE Midlands.

Aim

The project aimed to bring together the various virtual ward providers across the Black Country ICS to establish how medicines are managed within virtual wards, and the role of pharmacy teams in the expansion of these as per the NHSE 2023/24 priorities.

The project focused on a number of key themes including:

- The workforce, including pharmacy teams and how they interact with other medical professionals
- The transfer of care between different areas of ICS
- Prescription, supply, and administration of medication to patients
- Suitable governance and documentation
- Effective digital processes

Our approach

To understand how medicines are managed within virtual wards across the Black Country ICS, HIWM established a 'task and finish' group. The group consisted of stakeholders from the ICB, pharmacists or service leads representing each of the acute trusts within the Black Country ICS, and colleagues from the regional NHSE team.

Information was gathered from the 'task and finish group' which addressed the key themes of the project by using two methods: a series of six virtual 'task and finish' group meetings and through members responding to written questions about the key themes.

This information helped to build a picture of what virtual ward services are provided in the various specialties across the Black Country ICS.

Outcome

The information gathered through this project was collated into a written report highlighting the current state of play, challenges, examples of good practice, potential risks, and recommendations for the Black Country ICB.

The project brought to light how conducting audits could demonstrate where pharmacy input on the virtual ward could add value, improve patient safety, and support business case development. The report also highlighted how existing tools, such as shared care records and the electronic prescription service, could improve communication across different healthcare specialisms as part of the virtual ward environment.

The final report was shared with the 'task and finish' group members and will be presented to the Black Country PLG. The project demonstrated a great opportunity to bring together colleagues from across the Black Country ICS and provided a dedicated space to discuss medicines within the virtual ward environment to improve processes and patient outcomes.

CASE STUDY:
WEST MIDLANDS PHARMACY NETWORK

Introduction

Established in 2020, the West Midlands Pharmacy Network is a forum where pharmacy teams across the West Midlands come together to share best practice and learnings around medicine optimisation.

The network has since evolved to include pharmacy technicians and pharmacists across all sectors including primary care networks (PCNs), GP practices, community pharmacy, care homes, acute trusts, community health trusts and mental health trusts across the region.

Aim

Meeting quarterly, the aim of the network is to provide a platform for teams to connect with other regional pharmacy colleagues in a supportive environment. The group also provides a chance for members to network, share experiences and take advantage of the various training programmes available.

By providing continuous learning opportunities and the ability to connect with peers across the industry, the project seeks to empower pharmacy staff to learn from each other and spread good practice.

Our approach

In 2023, Health Innovation West Midlands held four sessions, with guest speakers from across the region invited to share their insights and experiences around key topics in the industry. A collaborative approach was taken to help identify topics by gathering feedback from network members on the subjects they would find the most valuable to learn about, and identifying current priorities within the sector.

A series of topics were covered, including wound care, genomic medicine, oral nutritional supplements, Heart Failure@Home and many more.

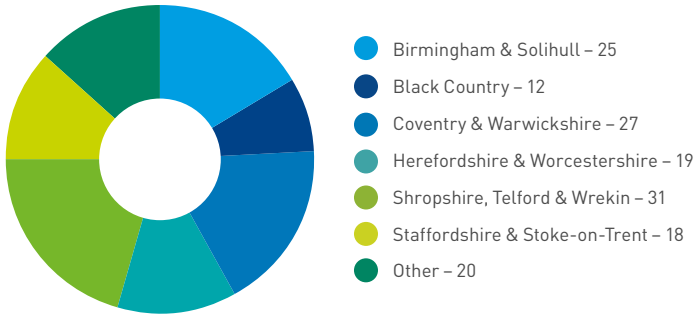
Through these sessions, tailored, specialist insights and information were shared, encouraging the adoption of best practice among pharmacy practitioners, while increasing knowledge and boosting confidence.

Outcome

A total of 95 people attended the meetings across the year, with more than 150 people signing up and receiving the meeting resources shared.

The meetings attracted a good mix of people from each integrated care system (ICS) within the region, as illustrated via the pie chart below. Attendees rated the sessions 4.5 out of 5 overall (based on feedback gathered from 36 individuals).

Number of registrants per ICS for the West Midlands pharmacy network meetings held from June 2023 - March 2024



CASE STUDY: BLOOD PRESSURE OPTIMISATION

Introduction

Cardiovascular disease (CVD) remains a significant contributor to premature morbidity and mortality, with hypertension being a leading cause. Strategies aimed at optimising the detection and management of high-risk conditions, such as hypertension, are important as they will hopefully lead to a reduction of CVD-related events.

To lessen the overall impact CVD has on both patients and healthcare systems, the CVD – Blood Pressure Optimisation project worked with primary care networks (PCNs) in the West Midlands, alongside several policy drivers, to support improvements in CVD prevention and management.

CASE STUDY:
BLOOD PRESSURE OPTIMISATION

Aim

The aim of the CVD – Blood Pressure Optimisation project was to support PCNs in implementing the University College London Partners (UCLP) Proactive Care Framework for Hypertension. The framework improves the detection of hypertension, through blood pressure optimisation, and has the aim of achieving implementation of the resource across 50% of PCNs.

The project also aimed to tackle health inequalities through the identification of practices and PCNs that are in the bottom 20%, as measured per indices for multiple deprivation (IMD), and supporting them in implementing the framework. In addition, the work aligned to the 'Core20PLUS5' clinical focus, working to identify undiagnosed groups with hypertension, to provide optimal lipid and cardiovascular management to minimise the risks of heart attacks and strokes.

Our approach

Health Innovation West Midlands (HIWM) worked collaboratively to engage with all six integrated care boards (ICBs) in the West Midlands, to implement the UCLP's Proactive Care Framework across 50% of PCNs. The networks that were situated in the 20% most deprived areas were primarily targeted, to support in tackling health inequality.

The project also involved the sharing of best practice between PCNs that had successfully undertaken case finding and risk stratification of patients in their locality.

HIWM supported in a number of areas:

- Identifying areas of good practice, producing, and sharing case studies to showcase areas of this to other PCNs to aid the spread and adoption of improved heart failure care
- Offering upskilling workshops, to raise awareness of blood pressure optimisation in the workforce of the future
- Supporting the primary care workforce in undertaking quality improvement projects at PCN and practice level
- Designing and implementing a standard operating procedure as a practical guide for practices and PCNs to implement search tools, run searches and optimise patient care

> **I'm new to primary care and the session provided me with knowledge and more confidence!**
>
> An attendee of the Hypertension education sessions

Outcome

Overall, the project increased the number of patients with targeted treatment in West Midlands' PCNs, improving patient health outcomes to prevent heart attacks and strokes, during the project's planned timescale which ended in March 2024.

The project resulted in 41% of PCNs implementing the Proactive Care Framework, which included implementing case study findings and risk stratification of patients, to support in the reduction of congenital heart disease burden across the West Midlands.

Upskilling workshops were also provided to a range of clinical staff across the region, ensuring they are equipped and skilled to optimise the detection and management of high-risk CVD conditions.

Finally, a standard operating procedure was developed to support in the implementation of risk stratification tools and optimisation of patients.

LOOKING FORWARD

As we move forward as an organisation, we will look to strengthen our relationships with the six regional integrated care boards (ICBs) and respond to local challenges whilst complementing the priorities of the Health Innovation Network.

The next year will see many exciting developments for Health Innovation West Midlands (HIWM). We will continue to lead by convening, and developments to look out for include:

'Empowering Digital Leaders', a collaboration between HIWM and the Shuri Network, aiming to amplify the voices and celebrate the achievements of females in digital leadership within the healthcare sector. The Shuri Network is renowned for its commitment to championing diversity and inclusion in health technology. This collaboration is not merely an alliance; it is a shared commitment to recognise and elevate the influence of women who are steering innovation, breaking barriers, and shaping the digital landscape of healthcare.

The rollout of Spectra Optia® Apheresis System which will benefit children, young people and adults in the West Midlands living with sickle cell disease. They will benefit from better care closer to where they live, with a national £1.5m investment in 25 red blood cell exchange devices across the UK. One device is already in place at Birmingham Women's and Children's NHS Foundation Trust.

We will also be continuing our support for respiratory patients. Over the next year we will be carrying out real world evaluation of digital inhaler solutions, focusing on how these innovations could improve outcomes and care for patients with asthma.

From 2024, we will also be transitioning over to a cardiovascular disease (CVD) portfolio approach. This enables delivery of a network-wide programme centred around CVD which is also aligned to ICB needs and priorities.

There will be a continued focus on:

- Adopting a population health management approach to addressing CVD prevention and management
- Addressing health inequalities
- Ensuring equitable access to evidence-based and/or NICE approved treatments, medicines, devices and medical technologies

All of which will be delivered in the context of ensuring the adoption and spread of innovation alongside our chosen clinical areas of focus, CVD prevention (blood pressure and lipid optimisation) and heart failure.

As we reflect on the past year's achievements and look towards the future, we are grateful for the support of our stakeholders and the hard work of our dedicated team.

With the continued endorsement from NHS England and the Office for Life Sciences, we are confident that we will be able to continue to grow our positive impact on the region. We look forward to collaborating with our partners and stakeholders and are excited to drive positive change in healthcare and create a more equitable, sustainable, and innovative health and care system.

Professor Michael Sheppard
Chair of Health Innovation West Midlands

Health Innovation
WEST MIDLANDS

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