TheAHSNNetwork

AHSN Network Patient safety strategy

Cheryl Crocker
AHSN Network Patient Safety Director

#AHSNs @AHSNNetwork

Background

Report of
the Mid Staffordshire
NHS Foundation Trust
Public Inquiry
Volume 1:
Analysis of evidence and
lessons learned (part 1)

Patient Safety Collaboratives

A retrospective review

November 2018

The King's Fund

Improving patient safety through collaboration

A rapid review of the academic health science networks' patient safety collaboratives

A PROMISE TO LEARN – A COMMITMENT TO ACT: IMPROVING THE SAFETY OF PATIENTS IN ENGLAND

August 6th, 2013

Don Berwick, MD

Department of Health

Hard Truths

The Journey to Putting Patients First

Volume One of the Government Response to the Mid Staffordshire NHS Foundation Trust Public Inquiry

A system devoted to continual learning and improvement

RESTRICTED

Improving Quality

England

Patient safety collaboratives – core priorities

Core Collaborative improvement areas	Pressure Ulcers		Medication Errors		Measurement	Leadership
NHS Outcomes Framework Improvement Area	VTE		HCAI		Maternity	Deterioration in children
Tackling other major sources of death and severe harm	Falls	Handover and Discharge	Nutrition and hydration	AKI	Deterioration in adults	*Plus any focus where the collaborative can make the case that it represents a major source of avoidable harm*
Improving safety for vulnerable patient groups	People with Mental Health needs	People with Learning Disabilities	Children	Offenders	Acutely ill older people	Transition between paediatric and adult care
Patient involvement Whole pathway, and cross-sector Evidence-based with consistent measurement for 5 years, centrally supported.						

Review into the quality of care and treatment provided by 14 hospital trusts in England: overview report

Professor Sir Bruce Keogh KBE

Opening the door to change

NHS safety culture and the need for transformation

DECEMBER 2018

The AHSN Network

Beyond Berwick: Patient Safety Collaboratives in England

A learning review on behalf of the Academic Health Science Network

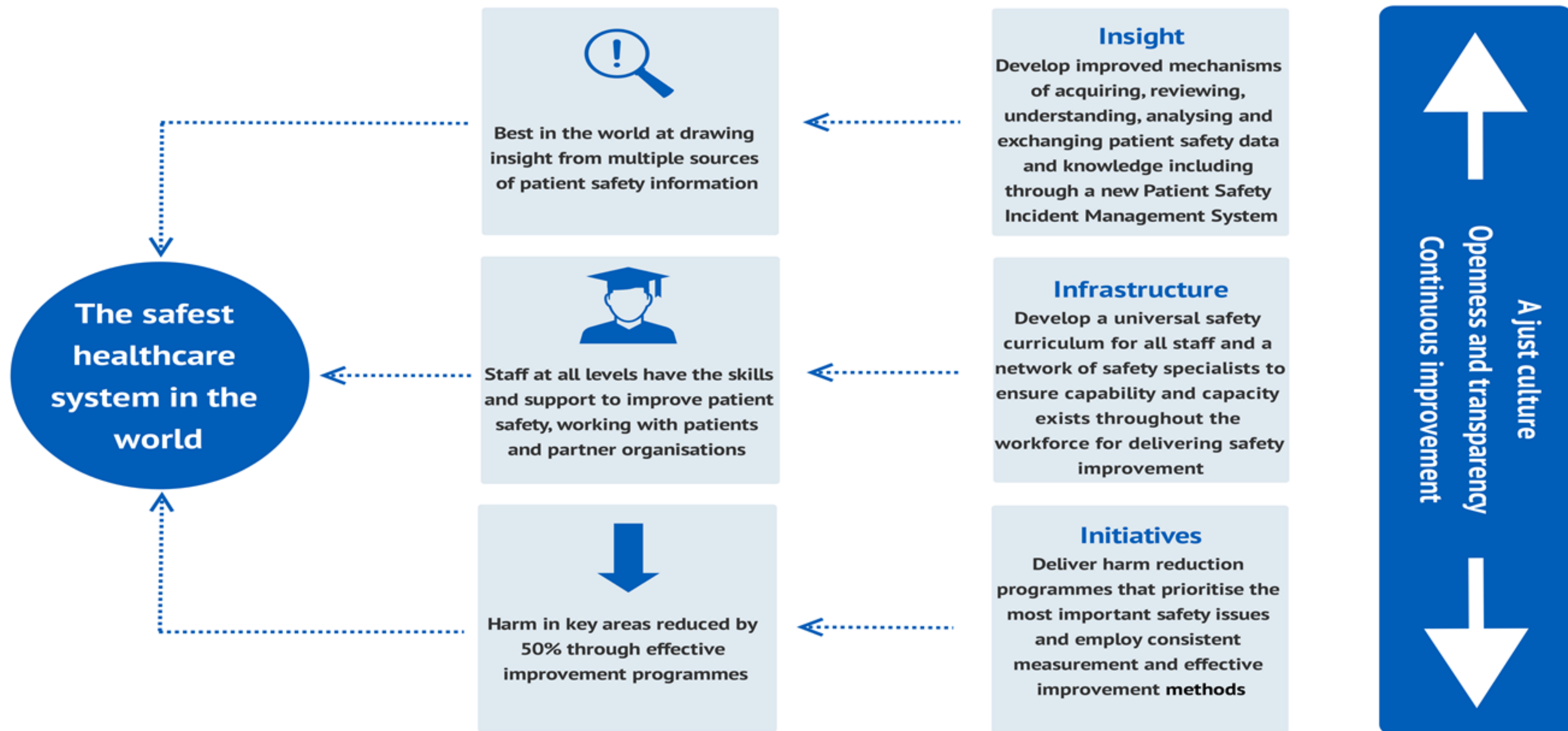
Dr Cheryl Crocker, Academic Health Science Network (AHSN) patient safety leads chair

Dr Jonathon Gray, South West Academic Health Science Network and AHSN lead chief officer for patient safety

September 2018

The AHSN Network

Developing a Patient Safety Strategy for the NHS



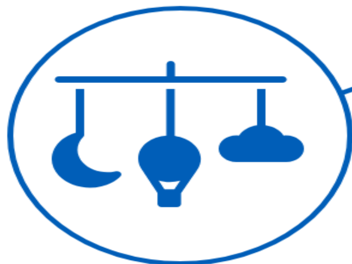
TheAHSNNetwork

Baseline - estimated annual cost of avoidable harm in the NHS 2017/18

At least 11,000 lives and £1bn

(Hogan et al 2015, NRLS data)

Maternity and neonatal safety - eg £700M awarded p/a for cerebral palsy obstetrics legal claims (NHSR)



Deterioration - Represents 10% of overall harm, ie £100m and 1,100 lives (Hogan et al 2015, NRLS data)

Medication safety - Estimated 237 million medication errors in the NHS each year (Elliot et al 2018)

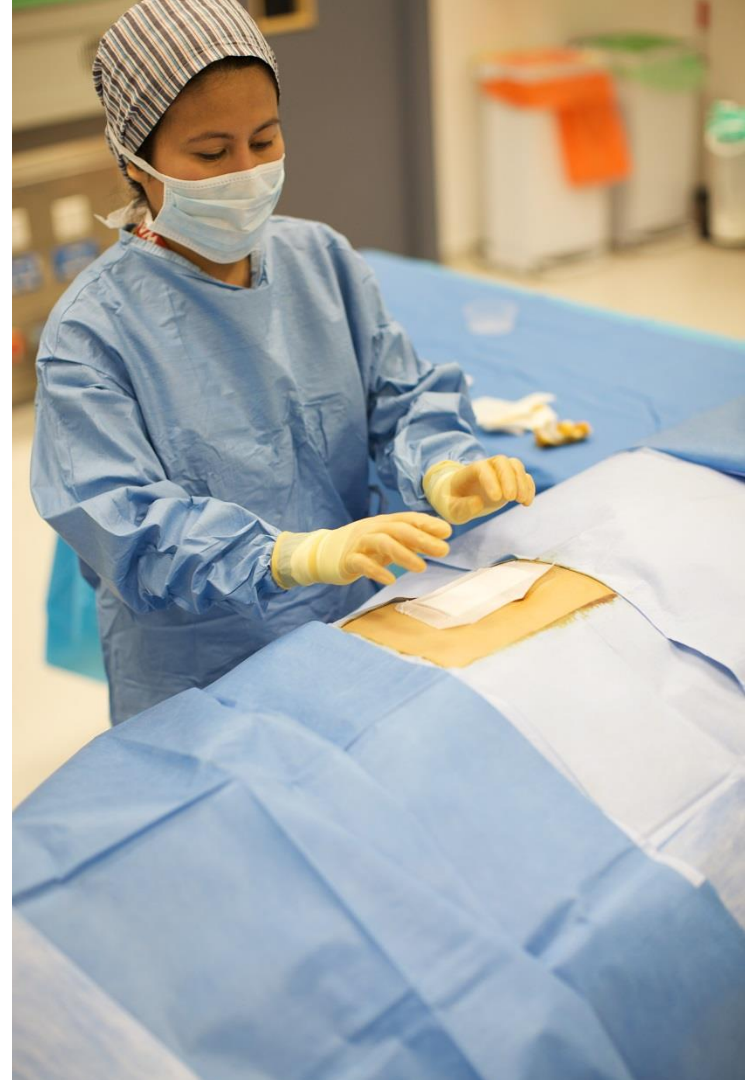
The AHSN Network

Background

Original brief: The AHSN response to Developing a Patient Safety strategy for the NHS

NHS Strategy to be launched at Patient Safety Congress, July 2019

AHSN Network Patient Safety Strategy to be launched at EXPO, Sept. 2019



TheAHSNNetwork

With thanks to….

Tasha Swinscoe, West of England

Cheryl Crocker, East Midlands

Jonathon Gray, South West

Amanda Risino, Health Innovation Manchester

Bill Gillespie, Wessex

Gary Ford, Oxford

Catherine Dale, Health Innovation Network

Tony Jamieson, Yorkshire & Humber

Kay Haughton, West of England

Kate Hall, UCLPartners

The AHSN Network

Goal

Patient safety should not be vested in the PSCs alone, but will be woven throughout the AHSN wider improvement and innovation agenda.

- We will deliver the NHSI patient safety strategy initiatives and develop a pipeline for future safety initiatives
- We will work with our members
- We will work along side Regional Patient Safety Teams
- We will support capability building and leadership development
- We will build on the operational and strategic relationships we have with other national bodies

Bringing innovation and patient safety together

TheAHSNNetwork

Our ambition

The AHSN Network is the only system partner that brings together NHS providers, commissioners with academic and industry sector partners with an interest and desire to improve quality and safety.

We are unique in that we do not see improving safety as merely the reduction of harm but rather the ability to maximise the opportunities and benefits of innovation, testing and scale up across systems.

The AHSNs are system orchestrators, we connect parts of the system that would otherwise not connect, we are neutral brokers and we span boundaries.

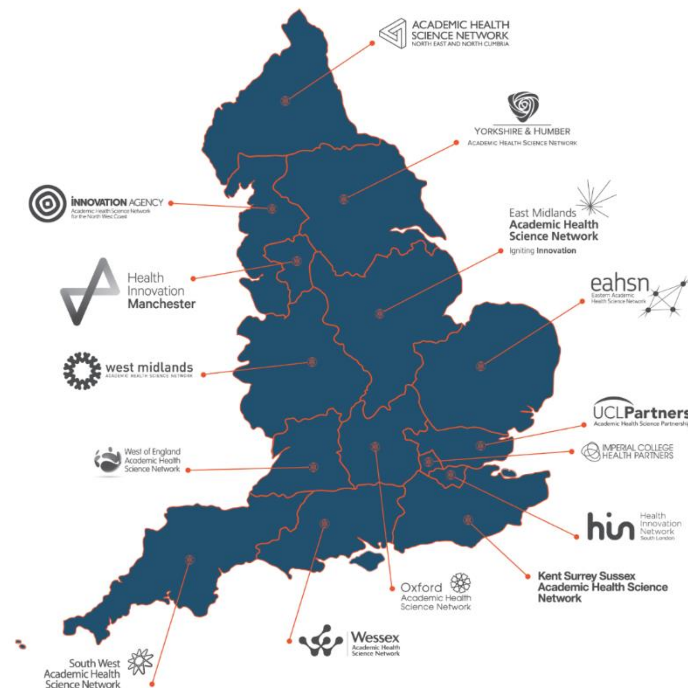
Bringing innovation and patient safety together

Stronger together

We can demonstrate that where there is strong alignment and integration of PSCs with AHSNs, this is associated with better delivery of programmes

Recognise that patient safety can be delivered in different ways – a matrix approach:

- **Our connection events**
- **Our sound QI approach**
- **Our connection to academia**



INSIGHT

TheAHSNNetwork

PSCs within the AHSNs

We can demonstrate that where strong alignment and integration of PSCs is present in AHSNs, this is associated with better delivery of programmes.

Our Matrix approach (all our agenda “cross overs” in terms of PS, meds Opt, Digital, AI etc.) and how in each of our AHSNs we inter-link these agendas to make the best use of the opportunities to align and co-work and make more impact across the entire portfolio

- Our connection events
- Our sound QI approach
- Our connection to academia – PSTRCs, ARCs etc.

TheAHSNNetwork

What makes a successful PSC?

- ✓ Full integration with AHSN
- ✓ Clinician involvement
- ✓ Patient safety is broader than the NHS Improvement commission
- ✓ Recognition that programmes of work will succeed and sustain when the conditions are right: cultural readiness, leadership and quality improvement capability

AHSN Review of PSCs

1. Creating a national learning system
2. Partnerships accelerating innovation
3. Acting locally, impacting system-wide
4. Building on the foundations

TheAHSNNetwork

PSC impacts

- **Standardised benchmarking tool for care homes:** predicted **£4.5m savings** by reducing pressure sores over three years (500 care homes) **saving £3,440** per home
- **Hydration projects:** reduction in hospital admissions, AKI project resulted in **30-day mortality reduction by 47%**
- **Safety Huddles aimed at falls: 107% RoI giving £2 back for every £1 spent**
- **Catheter Associated Urinary Tract Infection Collaborative: achieved a 30% reduction** across the participating trusts

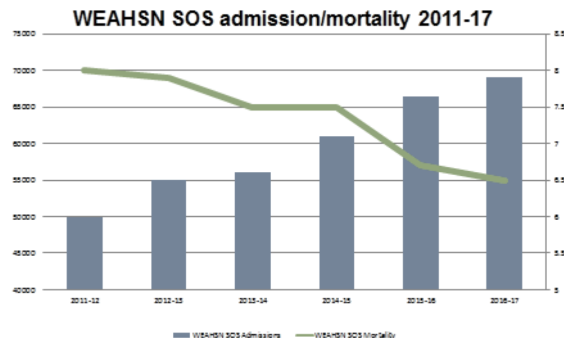
The AHSN Network

Nationwide learning

- **PReCePT:** By **Q3 2019** of our two-year programme we had already achieved **71.7% uptake** from a starting point of 60%
- **Emergency Laparotomy Collaborative:** through compliance with ELC bundle, national spread could result in **85,000 fewer bed days** and a net benefit to the NHS of **£9.8m**
- Our achievement of successful spread through programmes such as: **ED checklist, NEWS2** and the **Suspicion of Sepsis Insights dashboard**. These have all been **adopted for roll-out across NHS sites**.

Future insights

Developments in data management like the **SOS Insights dashboard** will support the identification and testing of new programmes of work for early detection, management and prevention of physical deterioration.



Learning from deaths - working with Health Education England as funding partners, the AHSN Network has taken a novel approach by employing safety fellows to gather learning following hospital deaths in Gosport.

Sample Charts from SOS Insights Dashboard showing Wessex AHSN* Data

(* Dashboard can filter data to show, amongst others, National, AHSN or Trust level activity)

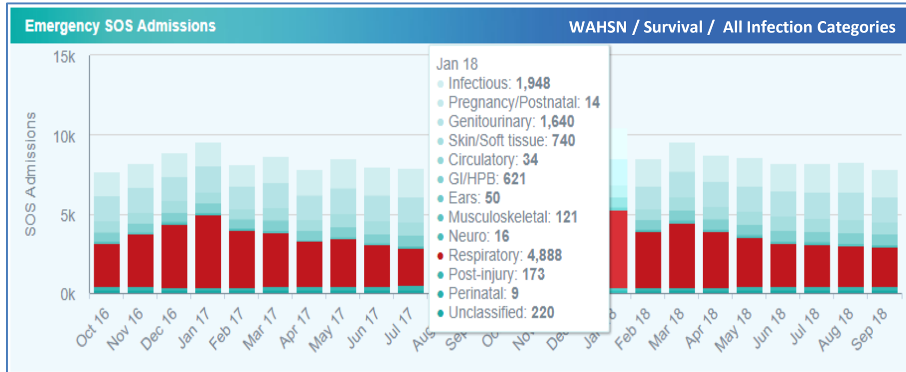


Chart A Breakdown of SOS Admissions by Infection Category showing impact of each category according to filters set. Within Wessex, at AHSN level, Respiratory, Infectious & Genitourinary are top three categories accounting for 80% of cases by Pareto Analysis.

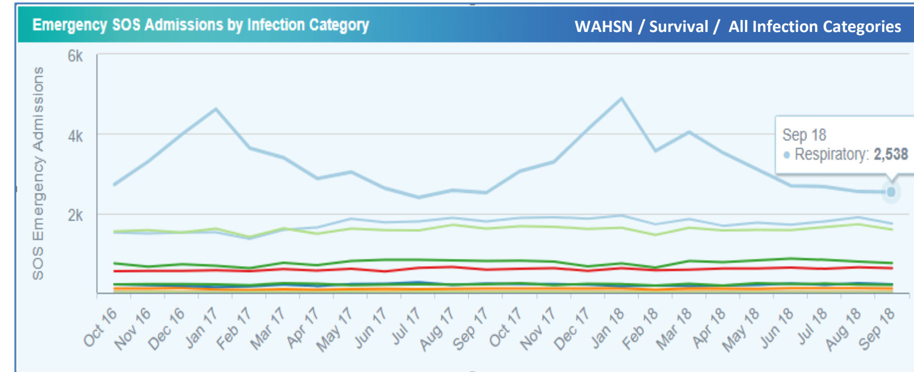


Chart B Most significant (numerically) SOS Admissions over time, showing seasonal trends by Infection Category. Wessex data demonstrates seasonal pattern in top category (Respiratory) of SOS cases (see Chart C for operational impact).

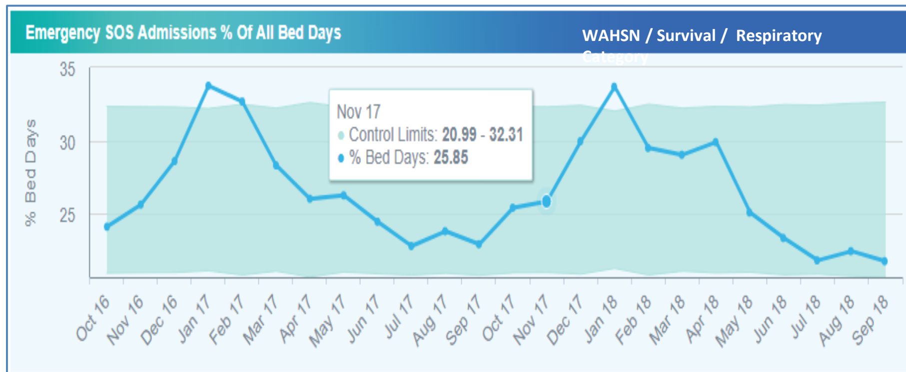


Chart C SPC chart showing the impact that the seasonal fluctuations in Respiratory SOS cases (Chart B) are having on operational activity (admissions) with significant variation including Special Cause Variations seen in patterns of Emergency Admissions.

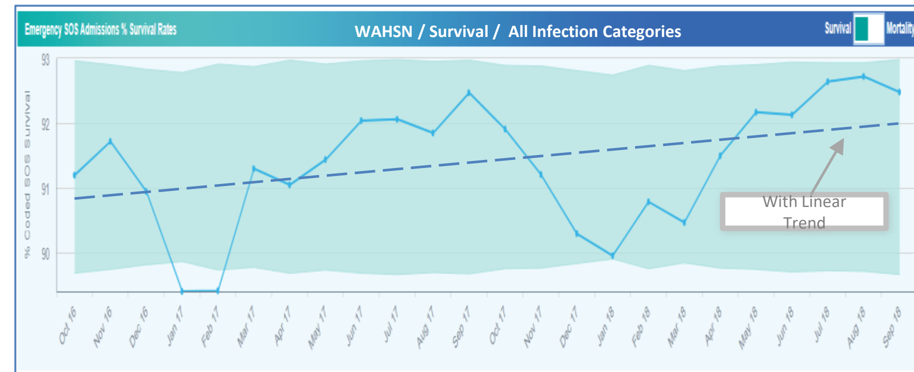
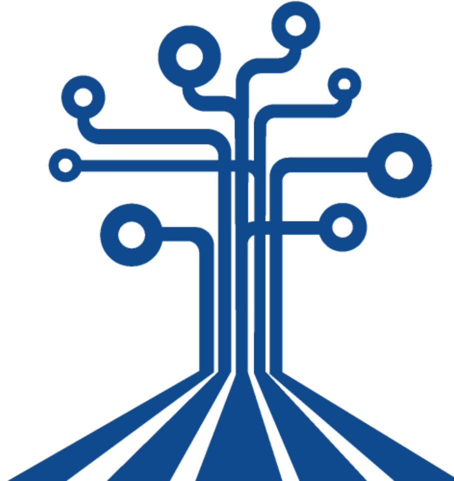


Chart D SPC chart showing seasonal trends in Survival rates over last 2 years. Linear Trend line indicates improvement in survival outcomes (reducing mortality) over this period which are potentially linked to the PSC Deteriorating Patient Workstream interventions.

The AHSN Network

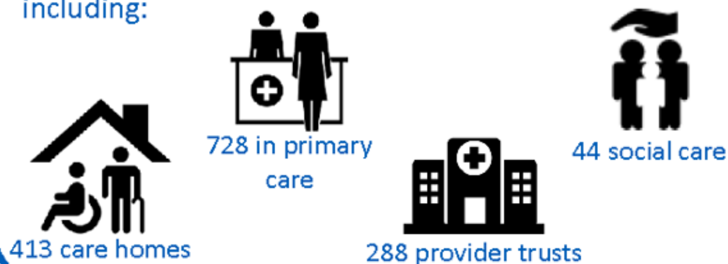
INFRASTRUCTURE



The AHSN Network

NHS Improvement

..have engaged with more than **2,198** organisations, including:



..trained **19,463** people as part of QI capability building including:

- 5,472 in measurement for improvement
- 2,943 in cultural awareness
- 2,705 in human factors
- 1,712 in safety leadership

..started **914** QI projects and completed **349** of them

..recruited over **3,000** patient safety champions, Q members and QI experts

Based on 15 returns for Q3 & Q4 16/17, Q1 & Q2 17/18

TheAHSNNetwork

Local to national impact

Working with members, STP and ICS on local work and priorities

Linked to alignment with regional PS teams - but not duplicating - focussing on impact not delivery of business as usual expectations i.e. system wide use of NEWS2 not hand washing audit compliance

As trusted system change partners:

- So the local feeds the pipeline
- Offers opportunities for test bed sites
- Meets their priority needs and interests
- Feeds real world evaluation and testing
- Linking with ARCs and evaluators in HEI

The AHSN Network

Aligning our work

- There is a strong alignment of purpose and integration of PSCs within the AHSNs, manifesting itself in the successful delivery of the national programmes.

- Our ‘matrix’ approach to patient safety cuts across our two key themes of improvement and innovation, seeing all our work through the lens of safety.

- This is of particular relevance to the AHSN medicines optimisation, digital, genomics and AI workstreams, where opportunities for reduction of harm are key elements.

Real world evaluation

Episcissors-60 part of the ITT 2017-2019 to incentivise spread and adoption of transformational innovation

Real world validation demonstrated **no reduction in OASI rates, no increase in episiotomy** rates BUT may be associated with **small increase in delivery blood loss**

Led to recommendations:

- High quality evidence of clinical and/or cost effectiveness should be available before innovations are systematically adopted across the NHS
- Systematic adoption of innovations should be accompanied by a surveillance mechanism
- Inclusion of episcissors-60 in the NHS Innovation Tariff should be reconsidered

The AHSN Network

Transfer of care around medicines

It is estimated that 60% of patients have three or more changes made to their medicines during a hospital stay. The transfer of care process is associated with an increased risk of adverse effects (AEDs)

PharmOutcomes Discharge Referral Savings Calculator

Published longitudinal studies based upon the active referral of patients discharged from hospital to community pharmacy in Newcastle and on the Isle of Wight have allowed Pinnacle Health to develop this simulation for Trusts and CCGs to estimate the savings available to their organisations by engaging with Local Pharmaceutical Committees and their local community pharmacists to provide this care for their shared patients cohort.

Number of patients expected to be referred in a year	2600
Is there a domiciliary service commissioned locally?	• No ○ Yes
Potential Annual Savings to the Hospital Trust	£623,116
Potential Annual Savings to the Clinical Commissioning Group	£734,802
Local Health Economy Potential Savings	£1,357,917

Downloaded from http://bmjopen.bmj.com/ on October 17, 2016 - Published by group.bmj.com

Open Access Research

BMJ Open

New transfer of care initiative of electronic referral from hospital to community pharmacy in England: a formative service evaluation

Hamde Nazar,[1] Steven Brice,[2] Nasima Akhter,[3] Adetayo Kasim,[3] Ann Gunning,[4] Sarah P Slight,[1] Neil W Watson[2]

To cite: Nazar H, Brice S, Akhter N, et al. New transfer of care initiative of electronic referral from hospital to community pharmacy in England: a formative service evaluation. BMJ Open 2016;6:e012532. doi:10.1136/bmjopen-2016-012532

▸ Prepublication history and additional material is available. To view please visit the journal (http://dx.doi.org/10.1136/bmjopen-2016-012532).

Received 5 May 2016
Revised 2 August 2016
Accepted 25 August 2016

CrossMark

[1]School of Medicine, Pharmacy and Health, Durham University, Stockton-On-Tees, UK
[2]Pharmacy Department, Newcastle-upon-Tyne NHS Foundation Trust, Newcastle-upon-Tyne, UK
[3]Wolfson Research Institute for Health and Wellbeing, Durham University, Stockton-on-Tees, UK
[4]Head of Services and Support, North of Tyne Local Pharmaceutical Committee, Newcastle-upon-Tyne, UK

Correspondence to
Dr Hamde Nazar; hamde.nazar@durham.ac.uk

ABSTRACT

Objectives: To evaluate an electronic patient referral system from one UK hospital Trust to community pharmacies across the North East of England.

Setting: Two hospital sites in Newcastle-upon-Tyne and 207 community pharmacies.

Participants: Inpatients who were considered to benefit from on-going support and continuity of care after leaving hospital.

Intervention: Electronic transmission of an information related to patient's medicines to their nominated community pharmacy. Community pharmacists to provide a follow-up consultation tailored to the individual patient needs.

Primary and secondary outcomes: Number of referrals made to and received by different types of pharmacies; reasons for referrals; accepted/completed and rejected referred rates; reasons for rejections by community pharmacists; time to action referrals; details of the follow-up consultations; readmission rates at 30, 60 and 90 days post referral and number of hospital bed days.

Results: 2029 inpatients were referred over a 13-month period (1 July 2014–31 July 2015). Only 31% (n=619) of these patients participated in a follow-up consultation; 47% (n=955) of referrals were rejected by community pharmacies with the most common reason being 'patient was uncontactable' (35%, n=138). Most referrals were accepted/completed within 7 days of receipt and most rejections were made >2 weeks after referral receipt. Most referred patients were over 60 years of age and referred for a Medicines Use Review (MUR) or enrolment for the New Medicines Service (NMS). Those patients who received a community pharmacist follow-up consultation had statistically significant lower rates of readmissions and shorter hospital stays than those patients without a follow-up consultation.

Conclusions: Hospital pharmacy staff were able to use an information technology (IT) platform to improve the coordination of care for patients transitioning back home from hospital. Community pharmacists were able to contact the majority of patients and results indicate that patients receiving a follow-up consultation may have lower rates of readmission and shorter hospital stays.

Strengths and limitations of the study

- This study provides a detailed description of how an electronic referral system between hospital and community pharmacies across the North East of England was implemented.
- This study demonstrates that inpatients can be effectively referred to their nominated community pharmacist and receive a follow-up consultation tailored to their needs after discharge from the hospital.
- The study demonstrates that routine data collection during this evaluative period requires critical analysis and additional qualitative work to understand fully the operational and implementation aspects of the service, for example, complex reasons for the recorded rates of non-completion of referrals.
- There are no routinely recorded data at the community pharmacist follow-up consultation to allow specific economic, clinical or humanistic outcomes to be determined. However, service continual improvements are being made towards achieving this.
- A well-structured clinical trial of this intervention is required to investigate the impact on patients as they transition between healthcare settings.

INTRODUCTION

The continuity of patient care when transitioning from one healthcare setting to another is a national priority.[1] A range of interventions have been designed, trialled and tested to improve the quality and safety of this transfer process.[2-6] Successful interventions have incorporated activities such as medication reconciliation; quick, clear and structured discharge summaries; discharge planning; follow-up between hospital and

Scaling up a pharmacist-led IT intervention for medication errors in general practice (‘PINCER’)

- **Reduced error rates by up to 50%**. An economic analysis showed introducing PINCER was cost effective
- **Scaled up to general practices** in the East Midlands using a large-scale Quality Improvement Collaborative (QIC), with Health Foundation and East Midlands AHSN funding and support
- **Scale-up so far has identified an estimated 21,636** instances of potentially dangerous prescriptions across 11 prescribing indicators – enabling action to be taken

General practice prescribing error rates are estimated to be 5%, with serious errors affecting 1 in 500 of all prescription items

TheAHSNNetwork

Improvement Programmes

TheAHSNNetwork

Harm in key areas reduced by 50% through effective improvement programmes

Initiatives now - starting point is to build on work already planned or underway

Patient Safety Collaboratives

The Patient Safety Measurement Unit

Maternity and Neonatal Safety Collaborative

Intention to deliver **WHO 'medication without harm' challenge** and **Mental health PS programme**

Clear ROI for some focused projects

Proposed initiatives of the future - based on PSC programme and development of national QI work

Recommissioned **Patient Safety Collaborative programme**

Build on partnership work on **deterioration**

Whole system **falls and fracture prevention**

Building on **maternity and neonatal safety**

Medicines safety and **Mental health safety** programmes

Whole system approach to reducing **Never Events**

Pressure ulcer/ Infection Prevention and Control improvement work

TheAHSNNetwork

Physical deterioration

- PSCs have supported the wide-scale implementation of NEWS2 across acute and ambulance sectors in England as part of the NPSC programme.
- With AHSN support, testing of early warning systems outside of the acute sectors has successfully led to a scale up of tools such as Significant 7, or Stop and Watch and RESTORE2. We are already establishing system-wide improvements in the early detection of deterioration.

100%
OF AMBULANCE TRUSTS
are using NEWS2 in all or part of the organisation

31 out of 32 (97%) of the acute trusts who have not yet implemented NEWS2 are planning to do so.

NEWS2 Systems currently in use	No. of Responses Acute Trusts		No. of Responses Ambulance Trusts	
Paper	38	40%	2	20%
Electronic	30	31%	4	40%
A mix of both	28	29%	4	40%

Challenges faced with NEWS2 Implementation	No. of Responses Acute Trusts		No. of Responses Ambulance Trusts	
Training	34	32%	3	30%
Information technology	21	20%	3	30%
Clinical concerns	26	24%	2	20%
Other	26	24%	2	20%

SBARD Escalation Tool and Action Tracker
(get your message across)
REMEMBER TO SAY:
The residents TOTAL NEWS SCORE is... This is... ABOVE REFERENCE for them

The AHSN Network

Whole-system falls and fracture prevention

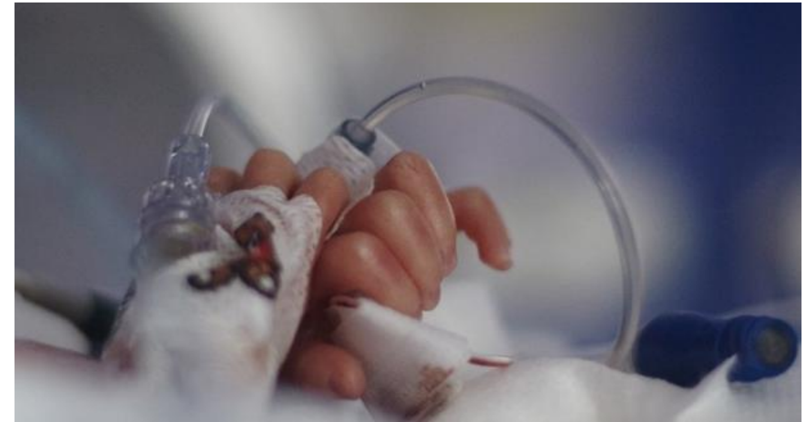
- We have many examples of work to reduce falls across the system, such as Yorkshire and Humber safety huddles –showing impact by reducing the number of falls and therefore harm and savings to the system.
- Our partnership working with care homes has enabled us to make progress in this sector by reducing and preventing falls.
- There is significant potential for us to capitalise on this nationally by aligning activity and resources with the wider AHSN Network and the frailty programmes AHSNs are invested in.

TheAHSNNetwork

Maternity and neonatal safety

- AHSNs have been supporting the national Maternal and Neonatal Health Safety Collaborative (MNHSC) through the 15 Patient Safety Collaboratives since year one in 2016.

- With the MNHSC entering its third, maternity and neonatal services across England will receive continued support through the Local Learning Systems organised by PSCs developing system-wide improvement programmes.



The AHSN Network

TCAM
Transfer of Care Around Medicines

Medicines safety

- The AHSN Medicines Optimisation programme has identified a number of innovative and impactful programmes of work such as Transfer of Care Around Medicines (TCAM), to prevent harm at transitions of care.
- Working with industry through our innovation exchange teams, AHSNs have developed robotic systems to improve medication safety as well as reduce waste and improve productivity.
- Supporting medicines safety through national programmes of work such as PINCER.
- Developing AHSN polypharmacy programmes.

Primary care

- PSCs supported the development of the Patient Reported Experiences and Outcomes of Safety in Primary Care (PREOS-PC) questionnaire, the first large-scale survey to evaluate the safety of general practices in England as experienced by the patients themselves, leading to safety improvements.

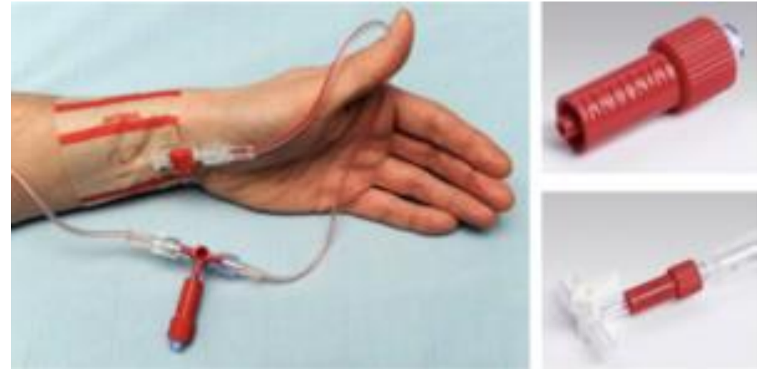
- The Atrial Fibrillation programme is an example of how the 15 AHSNS have collaborated to deliver a successful programme across primary care, delivering impactful results.

Care homes

- AHSNs' work in the care home sector includes the development of nutrition toolkits, hydration resources, training, dementia screening and many more.
- The Network has multiple examples of impactful work to reduce pressure ulcers and infections in care homes.
- AHSNS have been working internationally to support the development of a universal benchmarking tool LPZ. Developed in the Netherlands, it is now used throughout the world has been successfully introduced to the UK.

Never Events

- Our work with industry and clinical entrepreneurs has already led to innovations being rolled out such as Wiresafe (to prevent retained guide wires), Non-Injectable Arterial Connectors (NIC) (to prevent wrong route administration), with other innovations in the pipeline.

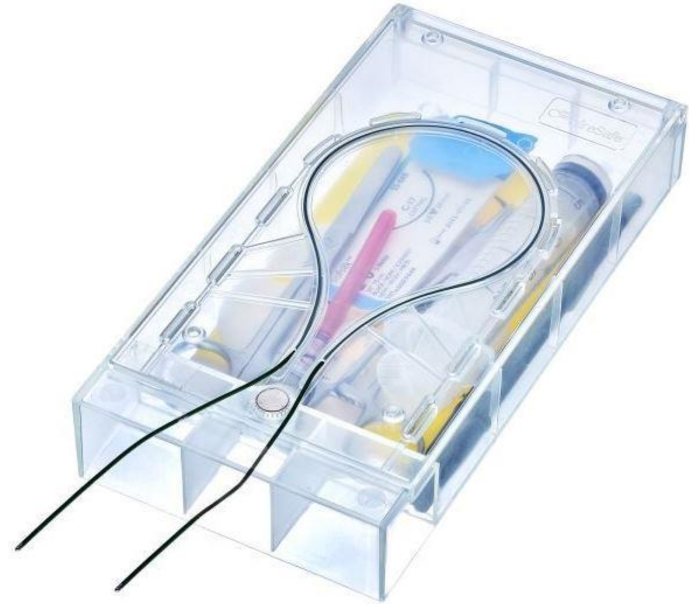


- Through our local networks, AHSNs support the development of solutions to prevent never events and work with Regional Teams to share learning across England.

TheAHSNNetwork

Wiresafe

- The locked pack is an engineered solution designed to prevent retained guidewires.
- Further development through partnerships with industry and research.



[Preventing Retained Central Venous Catheter Guidewires: A Randomized Controlled Simulation Study Using a Human Factors Approach. Anesthesiology 2017 Aug 11]

TheAHSNNetwork

Mental Health

- AHSNs are already working to support improvements in mental health. The South of England mental Health Collaborative, supported by the AHSNs has been active for a number of years supporting local improvements.

- Elsewhere a number of other AHSNs are developing innovative programmes to prevent people with mental health problems dying prematurely from physical conditions

TheAHSNNetwork

Just culture and workforce

- Every PSC has been working developing tools and resources to support cultural change from diagnostic tools such as Safety Climate Surveys, Safety Huddles, Learning from Excellence and use of Appreciative Inquiry methods.

- Impacts are seen through the way staff use these methods to improve care, i.e. sepsis management, supporting staff following harm events (PRAISE), i.e. second victimhood support, and reducing harm through safety huddles.

TheAHSNNetwork

Second victimhood

Supporting staff involved in harm

- Second victimhood is estimated to affect between 10 and 43% of healthcare professionals.
- Aim: Provide support and wellbeing interventions to workplace staff.

Tier 3: Referral Network - Access to professional support & guidance via Amica

Tier 2: Trained Peer Supporters - who provide 1:1 crisis intervention, support, mentoring & debriefing

Tier 1: Local Support - Training local leaders on supportive leadership human factors

Spread of this model across the region, HSIB and Lancashire Police Force and expressions of interest from two other AHSNs.