

*The***AHSN***Network*

National Early Warning Scores & The National Deteriorating Patient Safety Improvement Programme

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The AHSN Network

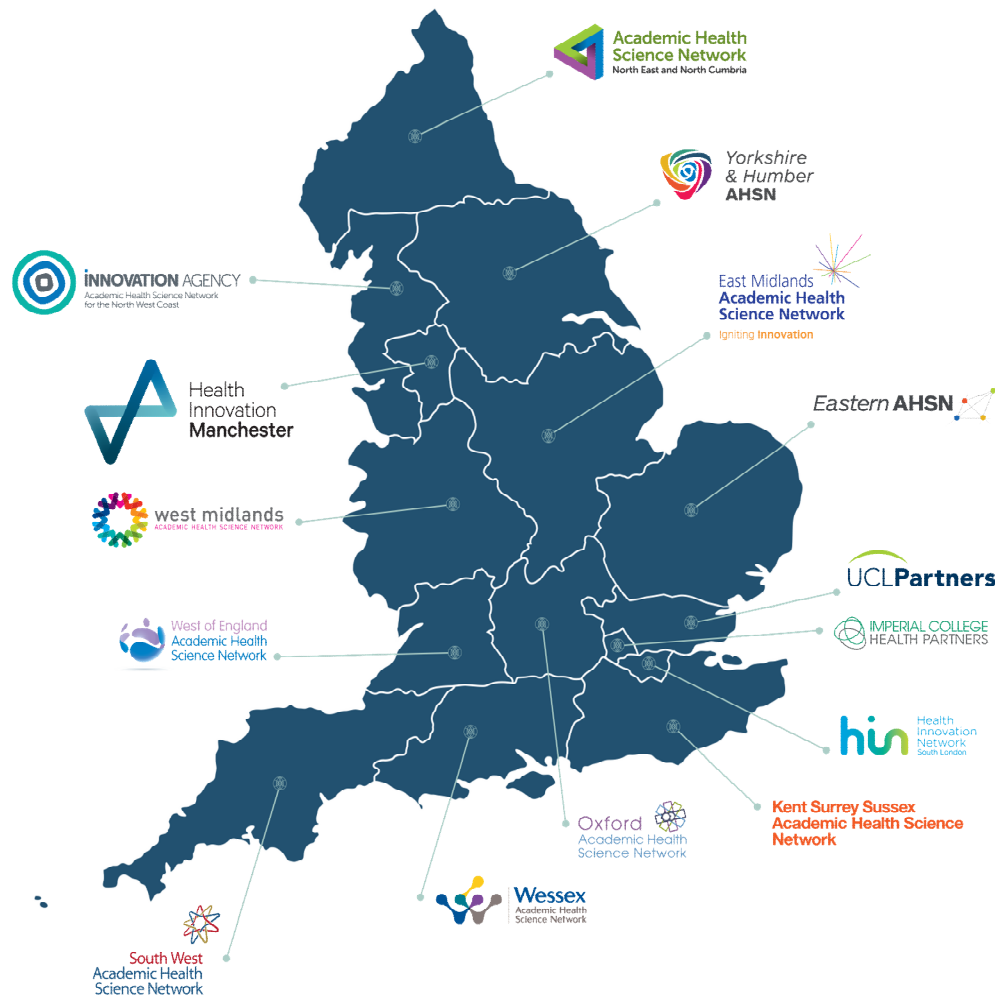
Find details for your regional AHSN at
www.ahsnnetwork.com

For case studies on innovations supported
by the AHSNs visit our Atlas of Solutions
in Healthcare at **atlas.ahsnnetwork.com**

✉ info@ahsnnetwork.com

🐦 @AHSNNetwork

in The AHSN Network



AHSNs work locally

Fostering collaboration and partnerships between all organisations involved in healthcare: NHS, academia, social care, third sector and industry.

Identifying and responding to common local priorities by helping make effective use of resources across STPs and ICSs.

Building capacity and providing expertise across a range of areas: patient safety, public engagement, informatics and evaluation.

Supporting the spread of local innovations and 'importing' what's working best from other areas.





At least

4,381

clinical teams are actively using innovations through AHSN adoption and spread programmes



131

acute trusts across all 15 PSCs now have a policy for the management of acute deterioration



£152 million

of inward investment has been leveraged, **£144 million** by AHSNs and £8 million by the NHS Innovation Accelerator



188 jobs

have been safeguarded, **170** by companies supported by AHSNs and 18 by the NHS Innovation Accelerator



More than

230,000 people

have benefitted from innovations on the Innovation and Technology Tariff and Payment programmes (ITT and ITP)



100%

of ambulance trusts and **95%** of acute trusts are using NEWS2 in all or part of their organisation



691 jobs

have been created, **558** by companies supported by AHSNs and 133 by the NHS Innovation Accelerator



2,605

companies have been supported by AHSNs with **3,630** innovations

Examples of impact

Through many partnership projects around the country, we have tested new ideas and ways of working with potential to make a big impact on patient safety and reduced costs.

**Standardised benchmarking tool
for care homes:** predicted

**£4.5 million
savings**

by reducing pressure sores over
three years (500 care homes),
saving £3,440 per home

SoS dashboard: Recorded a drop
in length of stay for sepsis from
11.6 to 11.0 days, with

**404 fewer cardiac arrests
and sepsis mortality
down from 16.9% to 13.7%**

between April 2015 and
September 2018 across England

Safety huddles aimed at falls:

107%

return on investment

giving £2 back for every £1 spent

**Catheter Associated Urinary
Tract Infection Collaborative:**
achieved a

30% reduction

across the participating trusts

Hydration project: reduction in
hospital admissions, falls and AKI
projects resulted in

**30-day mortality
reduction by 47%**

Mental health: Potential cost
savings from improving the quality
of health checks for people with a
serious mental illness estimated at

**£11.3 million
in 10 years**

in one area alone

**Emergency
Laparotomy Collaborative:**
The impact of the original work
showed a reduction in

**30-day mortality from
9.8% to 8.2%
and a
length of stay reduction
from 20.2 days to 18.9 days**

The NHS Patient Safety Strategy
aims to save

**1,000 extra lives
and £100 million**

every year from 2023/24
excluding litigation costs

**The AHSN Network will make a
significant contribution to this.**



We will support the foundations of the national strategy



We will work alongside the Regional Patient Safety Teams



The PSCs will deliver the patient safety strategy improvements



We will support the capacity and capability and leadership development programmes



We will work with our members, Sustainability and Transformation Partnerships (STPs) and Integrated Care Systems (ICSs)



We will build on the operational and strategic relationships we have with other national bodies, including Health Foundation and Health Education England



National Early Warning Score

| Physiological parameter | Score | | | | | | |
|--------------------------------|-------|--------|-----------|---------------------|-----------------|-----------------|---------------|
| | 3 | 2 | 1 | 0 | 1 | 2 | 3 |
| Respiration rate (per minute) | ≤8 | | 9–11 | 12–20 | | 21–24 | ≥25 |
| SpO ₂ Scale 1 (%) | ≤91 | 92–93 | 94–95 | ≥96 | | | |
| SpO ₂ Scale 2 (%) | ≤83 | 84–85 | 86–87 | 88–92 ≥93 on air | 93–94 on oxygen | 95–96 on oxygen | ≥97 on oxygen |
| Air or oxygen? | | Oxygen | | Air | | | |
| Systolic blood pressure (mmHg) | ≤90 | 91–100 | 101–110 | 111–219 | | | ≥220 |
| Pulse (per minute) | ≤40 | | 41–50 | 51–90 | 91–110 | 111–130 | ≥131 |
| Consciousness | | | | Alert | | | CVPU |
| Temperature (°C) | ≤35.0 | | 35.1–36.0 | 36.1–38.0 | 38.1–39.0 | ≥39.1 | |

What NEWS means for your patients:

Your guide to NEWScores for normally well patients:

3
Threat

the patient's vital signs are indicating they may not be physiologically at full health and there is a risk they could deteriorate. Consider whether acute referral is required or whether the patient can be safely monitored at home.

* or a score of **3** in any individual parameter

5
reFer

* the patient needs an **urgent** medical review in an acute care setting. The RCP recommends **hourly** observations by an acute clinician and consideration as to whether escalation for critical care is required.

7
SEVere

the patient needs an **emergency** medical review in an acute care setting. The RCP recommends **continuous** monitoring by an acute critical care team.

In an acute setting this should prompt escalation to a critical care outreach team and often transfer to a high dependency area.

Is referral appropriate?

STOP

NEWS is not to be applied on patients under the age of 16 or pregnant women

Escalation to be appropriate to a patient's care plan – consider end of life care

Chronic conditions such as COPD will affect the aggregate score. Monitor the patient's observations appropriately.

Track and trigger map developed by the West of England Academic Health Science Network National Early Warning Score project team.

Version 1.6
Oct16

Cross-system



NEWS at handover



Single point of access

[illegible]

ED safety checklist



Community baseline measurement



West of England
Academic Health
Science Network



SystemOne CCG Reporting GREVILLE-HEYGATE, Robert (Dr) (Administrator) Arden's Ltd - Organisation Groups

Patient Appointments Reporting Audit Setup Clinical Tools Workflow User System Help

Tasks Notify M Templates Protocols Word T... Reports Views Auto Con More

New Group Join Group Leave Group Amend Group Transfer Ownership Invite Organisations Delete Group

☐ Only show groups this organisation has joined

Function / specialty Templates

Description Templates

Membership terms ☒ Other organisations can freely join this group ☐ Membership must be approved

☐ Allow reporting across entire group - makes patient identifiable data viewable

☐ Restrict group-wide reporting to group owner

☒ Only group owner can publish templates, reports etc. to group

☐ Always share all patient data between group members

☐ Enable federated working

Group owner Arden's Ltd (NHS Wiltshire CCG)

Shared Administration You have been a member since 12 Feb 2017

Feature

Appointments, Rotas and Visits ☐ Share with Owner ☐ Share with All Members

Appointment Reports ☐

Patient Record Access ☐

Access Audit Trails ☐

Immunology & Radiology ☐

Links ☐

Registration Links Processing ☐

Membership: Shared Content ☐

Join type: Templates

Join Name T ☐

Category Arden's Ltd / Scores ☐

Description Arden's Ltd Copyright 2013. ☐

Active At ☐

Tree Legend

- Wiltshire Health Services Ltd (Trust Group)
 - Wiltshire And Dorset
 - Wiltshire
 - AgarMatic Diabetes (Arden's)
 - Arden's IBIS Health Checks
 - EMA (Arden's)
 - EMA IBIS Contract Letters (Arden's)
 - Devices Strategic Reporting Group
 - GP Practice Account
 - Great Wiltshire Hospital
 - Medivox ATC
 - Medivox Service Provider Group
 - Old Orchard Partnership
 - Risk Stratification Extract - Wiltshire
 - SFA Group
 - WILTSHIRE (Arden's)
 - Join Group
 - Leave Group
 - Amend Group
 - Transfer Ownership
 - Invite Organisations
 - Delete Group
 - Wiltshire Health Manager
 - Wiltshire CCG (Trust Group)
 - Wiltshire GP Practices
 - Wiltshire Community NHS Trust
 - Wiltshire NHS Foundation Trust
 - Wiltshire NHS Foundation Trust



National Deteriorating Patient Safety Improvement Programme



Improving patient safety across England

- National Patient Safety Improvement Programme (NPSIP) funded by NHSE/I
- Delivered locally by 15 PSCs hosted by the Academic Health Science Networks
- Aim is continuous improvement in patient safety through quality improvement
- Key priorities 2019/20: four national workstreams with potential to make a significant impact on patient safety:
 - ✓ Deterioration
 - ✓ Medications safety
 - ✓ Maternity and neonatal safety
 - ✓ Adoption and spread
- This programme supports improvement and delivery outlined in the NHS Patient Safety Strategy

Sample Charts from SOS Insights Dashboard showing Wessex AHSN* Data

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

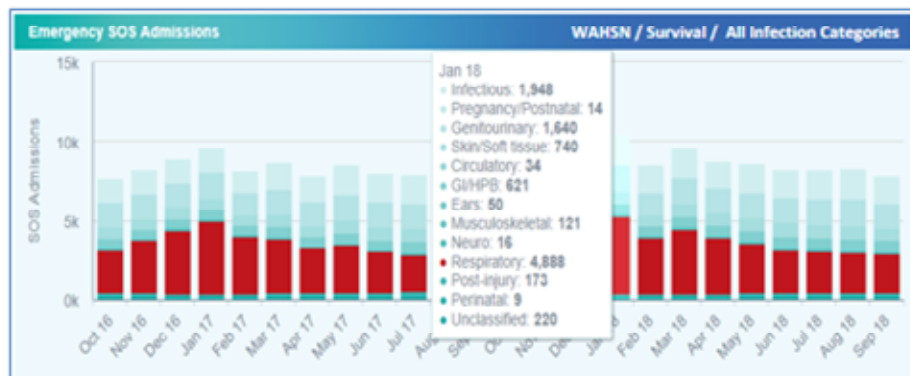


Chart A Breakdown of SOS Admissions by Infection Category showing impact of each category according to filters set. Within Wessex, at AHSN level, Respiratory, Infectious & Genitourinary are top three categories accounting for 80% of cases by Pareto Analysis.

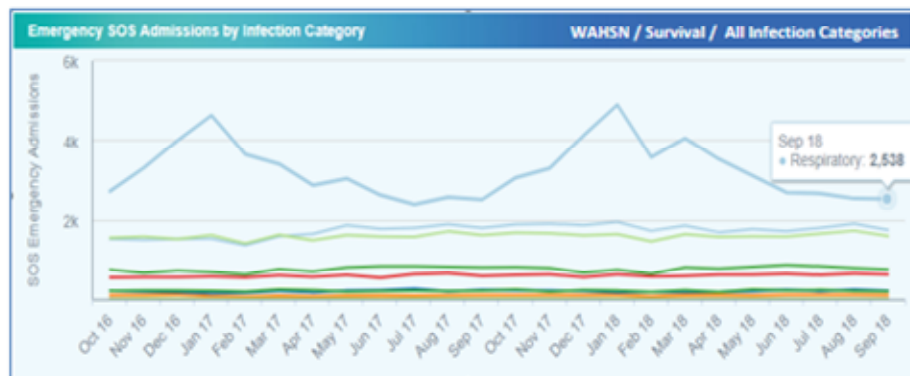


Chart B Most significant (numerically) SOS Admissions over time, showing seasonal trends by Infection Category. Wessex data demonstrates seasonal pattern in top category (Respiratory) of SOS cases (see Chart C for operational impact).



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.

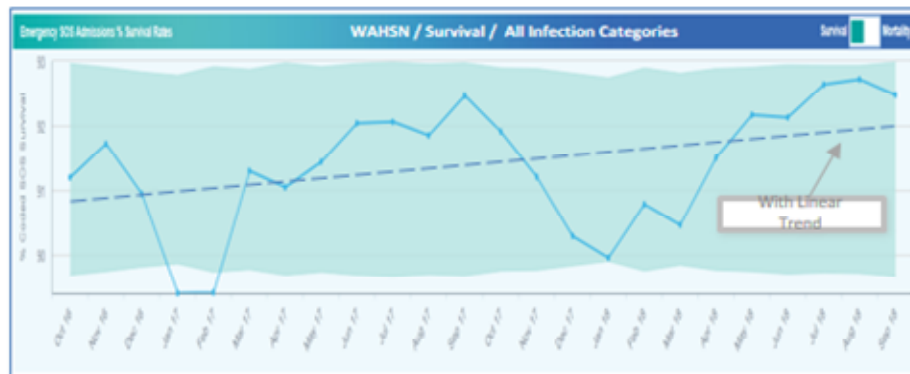
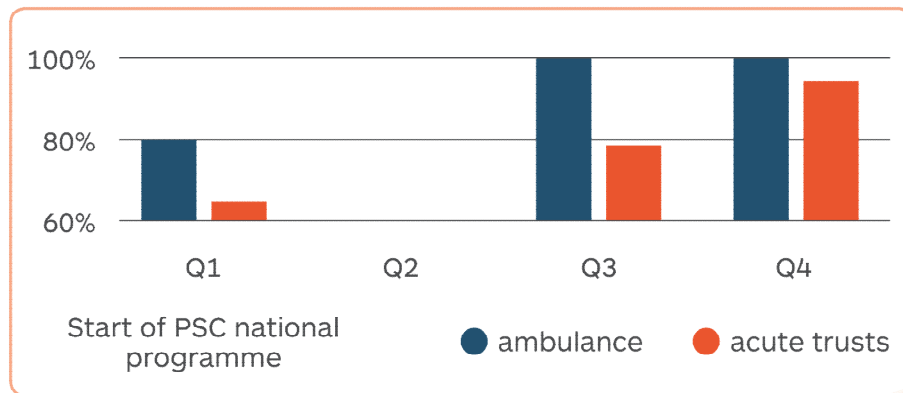


Chart D SPC chart showing seasonal trends in Survival rates over last 2 years. Linear Trend line indicates improvement in survival outcomes (reducing mortality) over this period which are potentially linked to the PSC Deteriorating Patient Workstream interventions.

Deterioration workstream

- The focus to date has been improving management of physical deterioration, recognition and timely response/escalation in acute and ambulance trusts, with support for adoption of NEWS2.
- Communication, standardisation and common terminology is a critical component.
- In June, the national NEWS2 survey was ambulance 100% and acute 96%.
- The focus this year is to expand support to non-acute care settings such as community care, primary care and care homes.
- Build on the work already ongoing.

Managing deterioration



A graph showing the uptake of the National Early Warning Score (NEWS2) across England in 2018, led by Patient Safety Collaboratives.



A chart showing the planned spread of deterioration tools by AHSNs across non-acute health and care sectors

Tools available



Podcasts

www.weahsn.net/news/patient-safety-podcasts/



Toolkits

www.weahsn.net/what-we-do/enhancing-patient-safety/the-deteriorating-patient/

Paul's story



*The***AHSN***Network*

Patient safety in partnership

**Our plan for a safer
future 2019-2025**

www.ahsnnetwork.com/patient-safety-plan

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Improving safety in care homes

A summary of Academic Health Science
Network projects and innovations

www.ahsnnetwork.com/care-homes-report

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