

Innovation and Knowledge in Practice

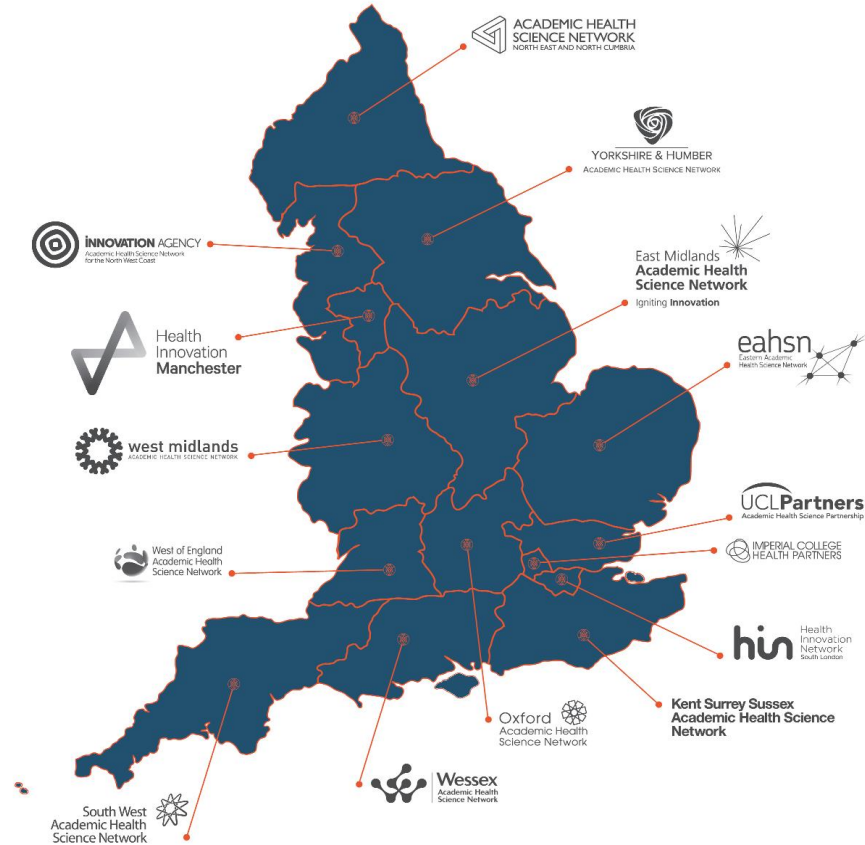
Anne Pullyblank

Medical Director

West of England Academic Health Science Network



The AHSN Network





3
Universities

5 Clinical
Commissioning
Groups

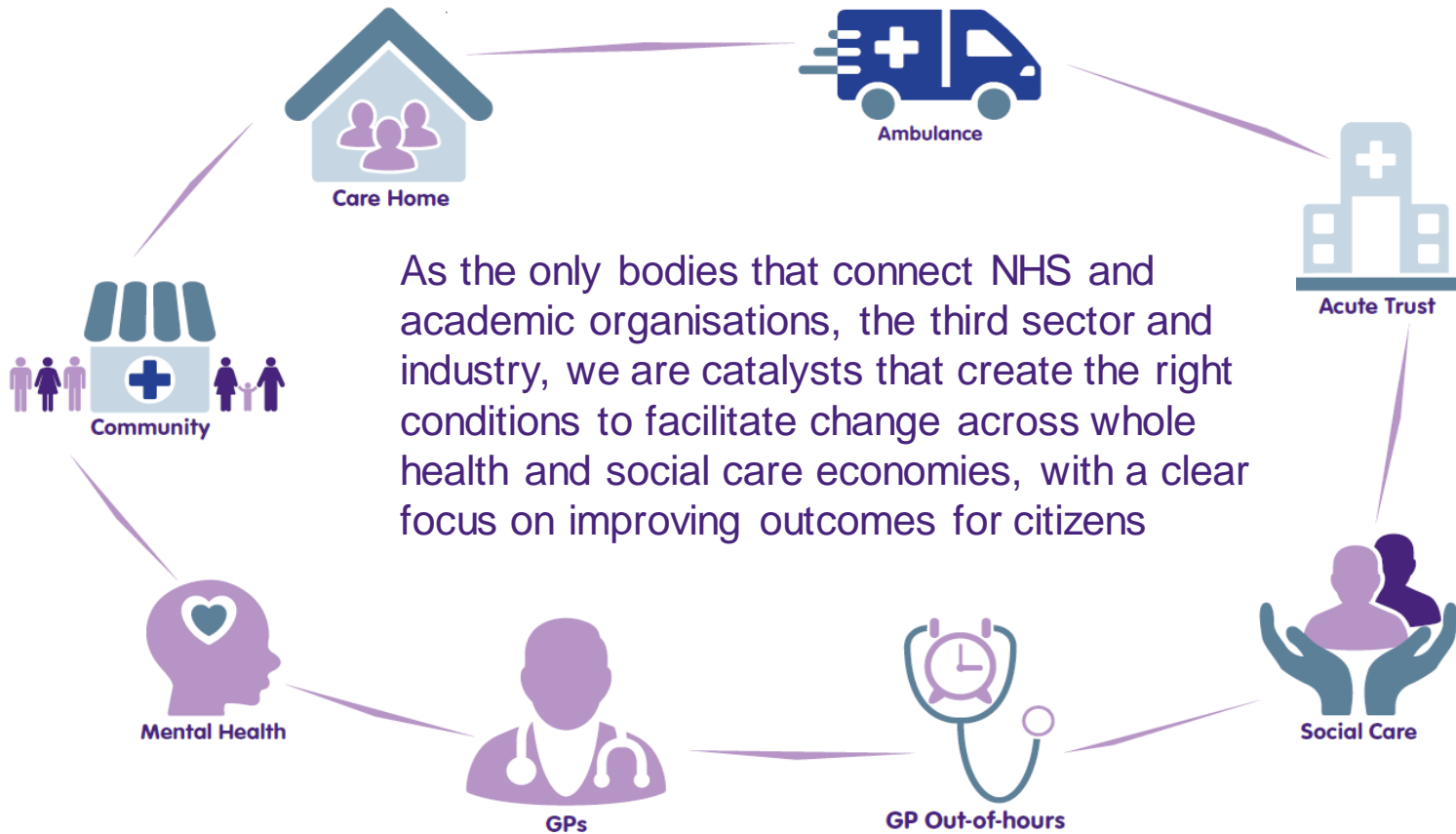
1
Ambulance
Trust

2.4
Million
residents

6 Acute
Trusts

7
Community
Service

2
Mental
Health
Trusts



As the only bodies that connect NHS and academic organisations, the third sector and industry, we are catalysts that create the right conditions to facilitate change across whole health and social care economies, with a clear focus on improving outcomes for citizens





PReCePT

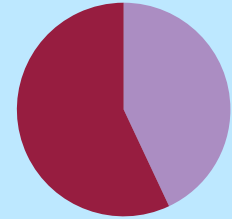
Preventing Cerebral Palsy in Pre Term Labour



In UK 1% births
premature <30
weeks
10% develop
cerebral palsy



Antenatal MgSO₄
given prior to birth
reduces risk of
cerebral palsy by
50%

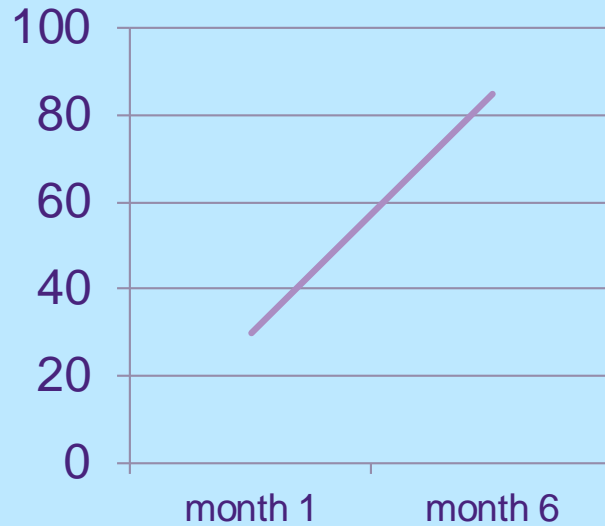


Nationally MgSO₄
administration only
43% in 2016

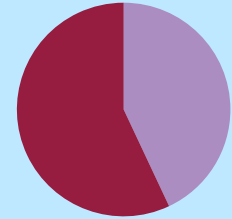


In UK 1% births
premature <30
weeks
10% develop
cerebral palsy

MgSO₄ administration



30% to 85% in 6
months in WEAHSN



Nationally MgSO₄
administration only
43% in 2016

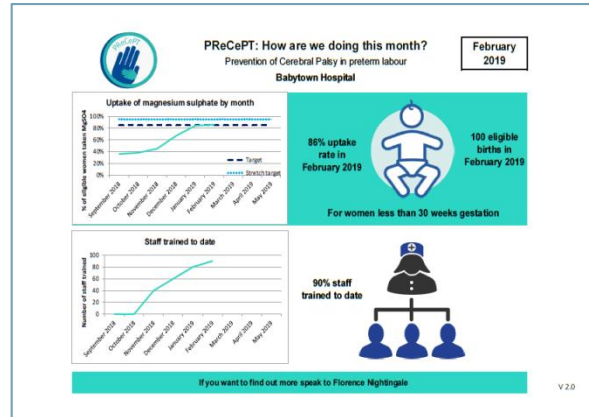
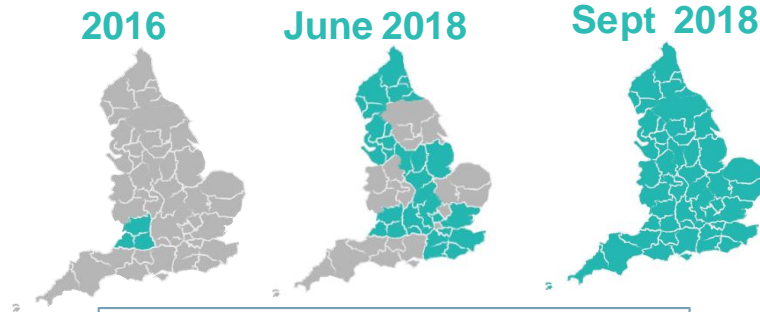
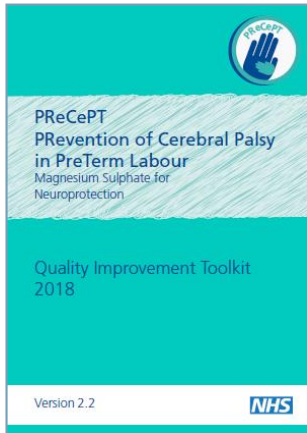


West of England
Academic Health
Science Network

PReCePT Programme Overview

NHS
England £1 Million
Funding

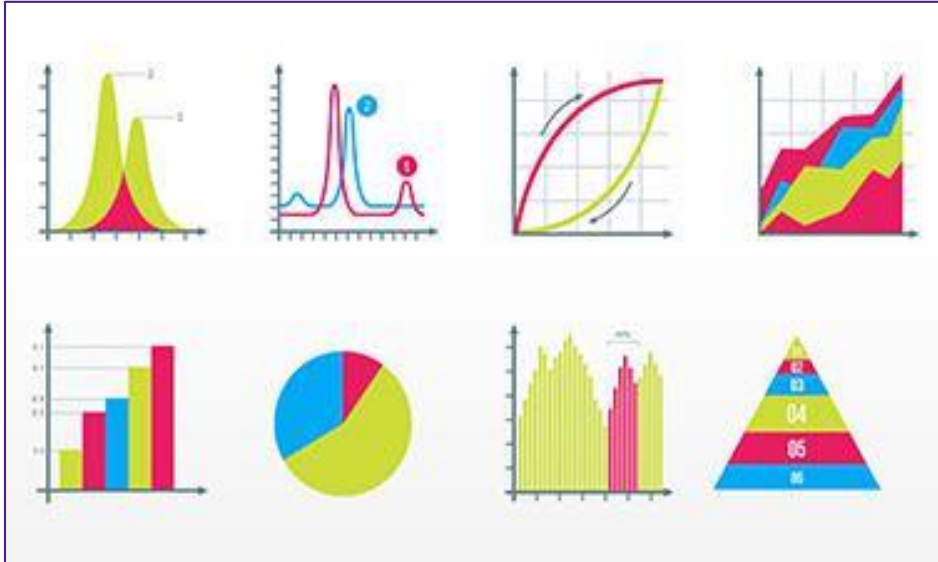
The first
perinatal QI
project
delivered at
national
scale



- Network approach
- Delivered via the AHSNs
- Standardised resources
- 90 hours midwife backfill per unit
- Regional clinical lead
- Target: **85%** (stretch target 95%) of eligible mothers receive MgSO₄ by March 2020
- **For every 37 women treated, avoid 1 case of CP**

National database: BadgerNet
Resources available via: www.ahsnnetwork/precept

Knowledge-Data



Knowledge derived from audit and routinely collected data - sometimes called statistics

The AHSN Network

Implementing Structured Judgement Reviews for Improvement



Royal College of Physicians

National Mortality Case Record Review Programme

Using the Structured Judgement Review method Data collection form



Improvement Academy
Part of the RCGP & Nuffield Health



Datix
Software for patient safety



Commissioned by
HQIP
Health Quality Improvement Partnership



West of England
Academic Health
Science Network

ReSPeCT

Recommended
Summary Plan for
Emergency Care
and Treatment

| ReSPeCT | | |
|---------|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |



West of England
Academic Health
Science Network

RESPE

Recommendations
Summary Panel
Emergency
and Treatment

TWO horizon

Home Episodes Clips Galleries More

WE NEED TO TALK
ABOUT DEATH



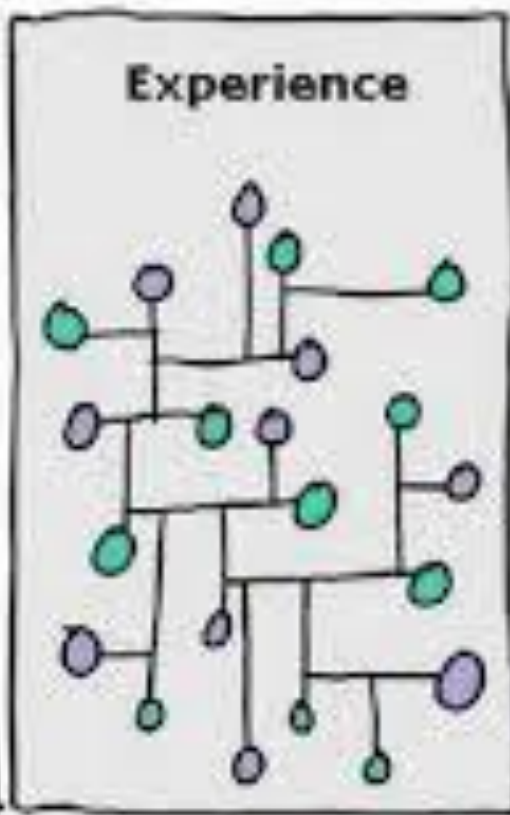
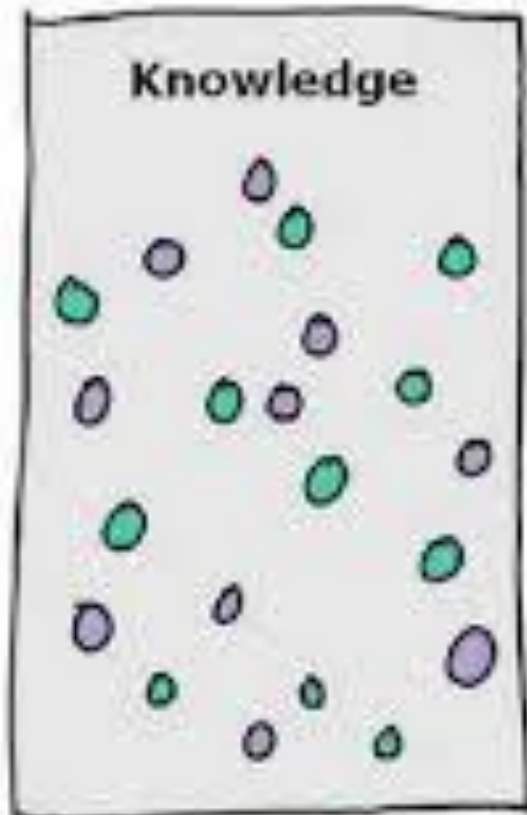
Watch now

We Need to Talk about Death 2019

Dr Kevin Fong makes a personal journey through the moral questions about death that face not just the medical profession, but each and every one of us.



West of England
Academic Health
Science Network



Support for Innovators

- Small Business Research Initiative



Innovation Academy

STP Innovation Hubs

Innovation

Spreading Innovation

- Accelerated access pathway
- Innovation and Technology tariff

Local Health & Care Record Exemplars (LHCRE)

Support for Innovators

- Small Business Research Initiative



Innovation Academy

STP Innovation Hubs

Innovation

LHCRE focusing on communicating end of life decisions across the system

Spreading Innovation

- Accelerated access pathway
- Innovation and Technology tariff



Have your vision realised

<http://www.hyvr.co.uk>





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Welcome to hyvr: have your vision realised!

hyvr is a social media platform for healthcare users, healthcare professionals and healthcare innovators to meet, collaborate and co-design healthcare products and services for the future.

In short - crowd intelligence innovation!

And it's free – free of charge, free of adverts and free of any data-sharing small print.



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[MY HIVES](#)

[ACTIVITY](#)



Ms. Jo Bangoura
Senior Project Manager

[Update profile](#)

3

Comments

0

Ideas

3

Likes



hyvr
5 days ago

OTHER

I posted a comment, how can I find it?



1



0



0

Go to your 'Home' feed and click on the 'Activity' tab.

[VIEW](#)



Jo Bangoura
Senior Project Manager, West of England Academic Health Science Network (AHSN)
5 days ago

OTHER



Create a new
post

Share information on a
topic of interest with like
minded users.

[Create a post](#)



Share an idea

Do you have an idea for a
new product, share it with
your peers and see what



Tony Goring

4 weeks ago



PALLIATIVE (END OF LIFE) CARE

We Need to Talk About death

ReSPECT - Recommended Summary Plan for Emergency Care and Treatment

10

2

2



ReSPECT is a process that creates personalised recommendations for a person's clinical care in a future emergency in which they are unable to make or express choices. It provides health and care professionals responding to that emergency with a summary of recommendations to help them to make immediate decisions about that person's care and treatment. ReSPECT can be complementary to a wider process of advance/anticipatory care planning.

Having a conversation with somebody about their end of life wishes can be an emotionally challenging subject... where do you begin?

National Early Warning Score (NEWS 2)

| 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 | |

NEWS 2 sepsis score is not validated in primary care

Alex Burns *general practitioner*

Acute GP Service, Trefiske Hospital, Truro TR1 3LQ, UK

Inada-Kim and Nsutebu urge the health system to use the NEWS 2 score in all healthcare settings.¹ They say that “a score in one setting must mean the same in any other.” The problem is that it doesn’t.

Improved communication in health systems should be encouraged, but as Bernard Shaw (maybe) said about the United Kingdom and United States, primary and secondary care will always be separated by the same language.

As with any scoring system, diagnostic test, or risk stratification tool, the predictive value is governed by the pre-test probability as well as the characteristics of the test. A NEWS score of 4 in an emergency medical setting² does not mean the same as in an ambulance call-out³ or a GP surgery, for the simple reason that serious illness is not as common in these settings.

Clinicians should observe patients and be alert to sickness, but we should acknowledge that the NEWS score is not validated

in primary care, let alone as a screening tool. We need research to establish what any warning score means in primary care; until then, we must accept that the NEWS score from primary care is spoken with a different dialect.

Competing interests: None declared.

- 1 Inada-Kim M, Nsutebu E. NEWS 2: an opportunity to standardise the management of deterioration and sepsis. *BMJ* 2018;380:k1260. 10.1136/bmj.k1260 29559439
- 2 Smith GB, Pytharch DF, Meredith P, Schmidt PE, Featherstone PL. The ability of the National Early Warning Score (NEWS) to discriminate patients at risk of early cardiac arrest, unplanned intensive care unit admission, and death. *Resuscitation* 2013;84:485-70. 10.1016/j.resuscitation.2012.12.018 23295776
- 3 Silcock DJ, Corfield AP, Gowers PA, Rooney KD. Validation of the National Early Warning Score in the prehospital setting. *Resuscitation* 2015;89:31-5. 10.1016/j.resuscitation.2014.12.029 25583148

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NEWS

Alex B

Acute GP

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Cross-system





2gether
NHS Foundation Trust **NHS**

Year 1

BrisDoc

NHS
Bath and
North East Somerset
Clinical Commissioning Group



Avon and Wiltshire
tal Health Partnership NHS Trust **NHS**

South Western Ambulance Service **NHS**
NHS Foundation Trust

Bristol
Community
Health

NSCP

Sirona
care & health

SEQOL
care • health • support

NHS
South Gloucestershire
Clinical Commissioning Group

NHS

Swindon
Clinical Commissioning Group

Gloucestershire Care Services **NHS**
NHS Trust

NHS
North Somerset
Clinical Commissioning Group

Royal United Hospitals Bath **NHS**
NHS Foundation Trust

NHS University Hospitals Bristol
NHS Foundation Trust

NHS
Bristol
Clinical Commissioning Group

Great Western Hospitals **NHS**
NHS Foundation Trust

North Bristol **NHS**
NHS Trust

Gloucestershire Hospitals **NHS**
HS Foundation Trust

medvivo
integrating health and care

NHS
Gloucestershire
Clinical Commissioning Group

care UK

Weston Area Health **NHS**
NHS Trust

Year 2: News at handover



Single Point of Access

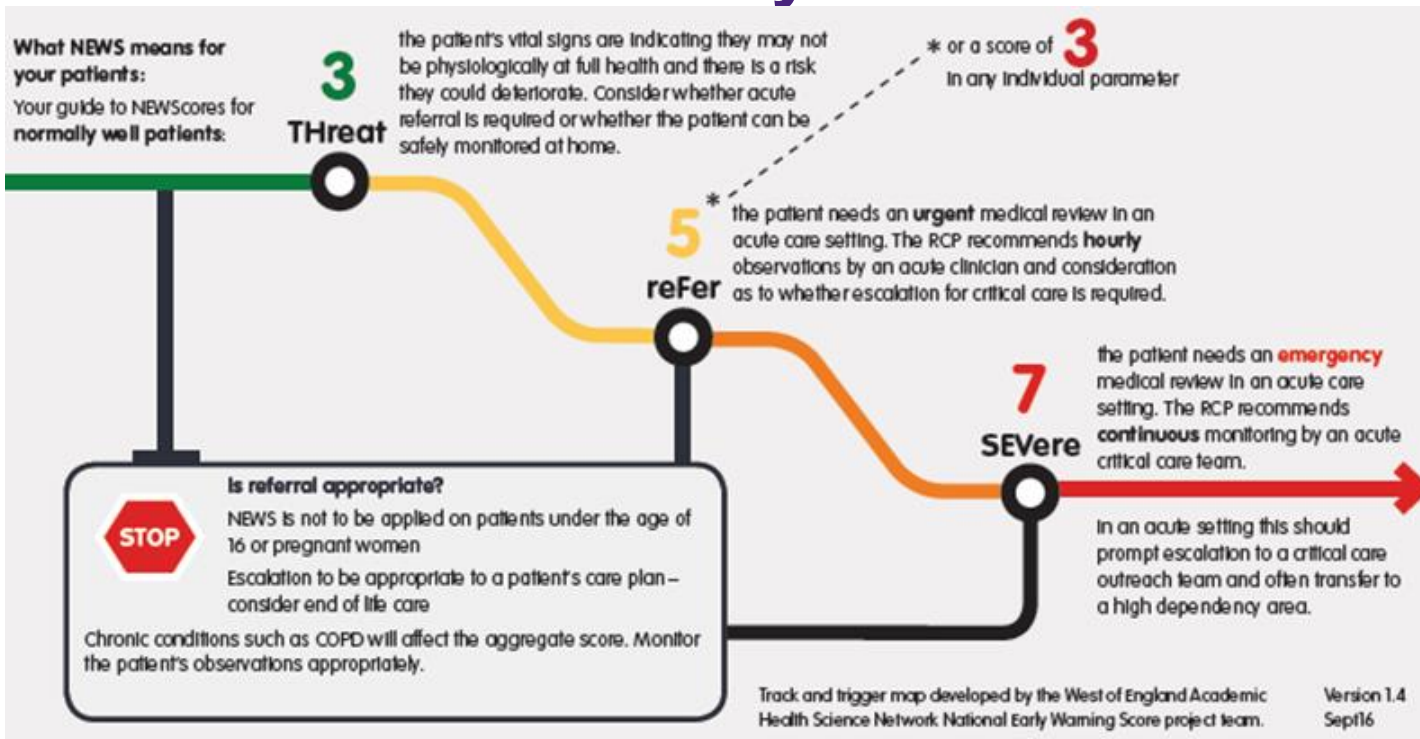
ED safety checklist

| Emergency Department Safety Checklist | | Patient Label Here |
|---------------------------------------|----------------|--------------------|
| Date | Time Booked In | |
| Admission | | |
| Admission 15 mins | | |
| Admission 30 mins | | |
| Admission 45 mins | | |
| Admission 60 mins | | |
| Admission 75 mins | | |
| Admission 90 mins | | |
| Admission 105 mins | | |
| Admission 120 mins | | |
| Admission 135 mins | | |
| Admission 150 mins | | |
| Admission 165 mins | | |
| Admission 180 mins | | |
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| Admission 2970 mins | | |
| Admission 2985 mins | | |
| Admission 3000 mins | | |



Community baseline measurement

Cross System



Digital Enablers

Templates in primary and community care systems



ortivus Dave Partlow (554 646 5465) 14:18

Observations

Vital Signs Pain Assessment

| | | |
|-------------------------|-----------------|--------|
| Time | 13:46 | Change |
| NEWS | 9 | < > |
| Sepsis | Consider Sepsis | 0/1 |
| AVPU | Unresponsive | Delete |
| Eyes | 4 | |
| Verbal | 5 | |
| Motor | 6 | |
| GCS | 15 | |
| Type | Adult | |
| Capillary Refill (secs) | >5 | |
| Resp Rate | 17 | |
| Pulse | 111 | |
| SpO2 (on air) | 98 | |
| SpO2 (on oxygen) | 98 | |
| EtCO ₂ | | |

Primary Survey
Status/History
Secondary Survey
Drug Intervention
Treatment
Discharge

ePR Messages Monitor

Ambulance ePCR



South Western Ambulance Service 
NHS Foundation Trust

 West of England
Academic Health
Science Network

Support for Innovators

- Small Business Research Initiative



Innovation Academy

Challenge Call
**'Keeping People
at Home'**
Telemedicine,
wearables etc

Innovation

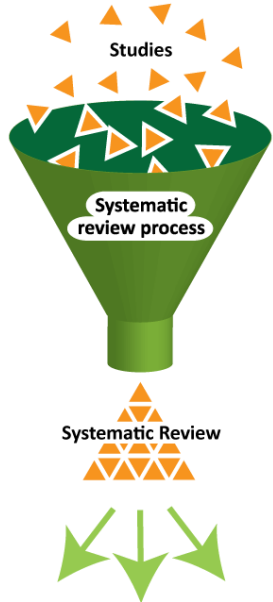
Spreading Innovation

- Accelerated access pathway
- Innovation and Technology tariff

Local Health & Care Record
Exemplars (LHCRE)

Evaluation

The Concept of a Systematic Review



Systematic Review



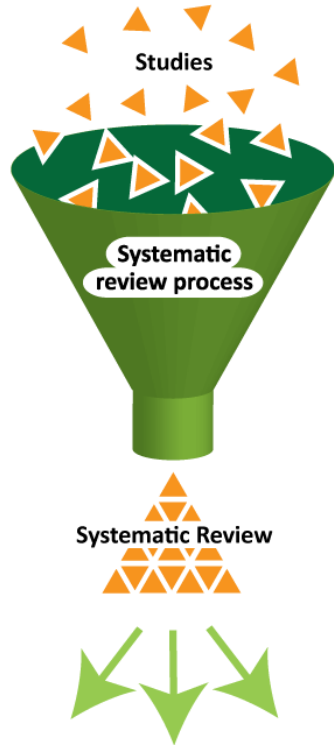
Qualitative

NHS
National Institute for Health Research
CLAHRC West



Quantitative

Systematic Review



- No evidence where EWS has been put into a prehospital system
- 17 studies (n=157 878)
- Low EWS and high EWS predict mortality

Qualitative Research



- Improved communication
 - across systems
 - across professional roles
- Supported clinical decision making & prioritisation

Knowledge-Experience. Paul's story



<https://vimeo.com/208284106>

NEWS : a common language

This chef has had 2x admissions to outbread
 & signs for cellulitis. (see enclosed).

Acutely unwell again today:

T 39.3

SpO₂ 91%

R 120

BP 140 systolic

RR 18

NEWS = 7

IMP - Signs 2° to cellulitis

GP

Ambulance
ePCR



1. Incident
NEWS 8

ED
Triage

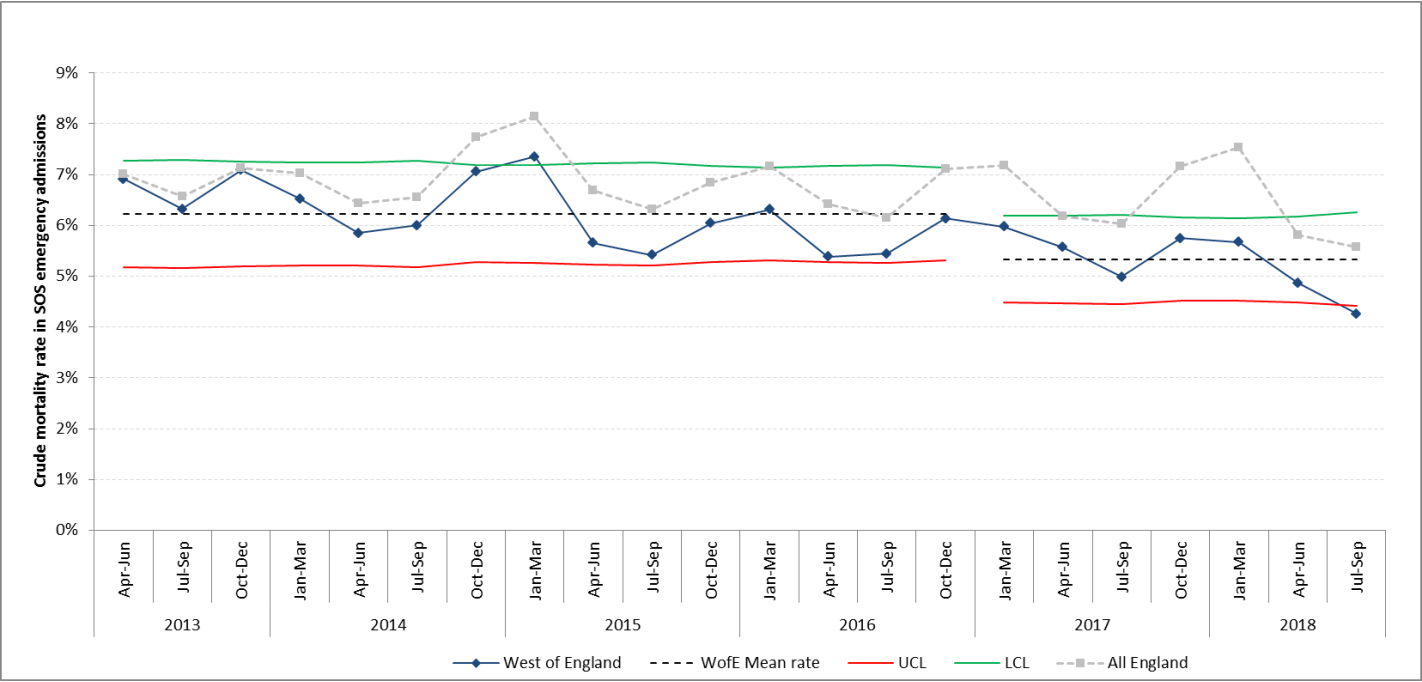
NEWS Score
2 | 2 | 2 | 9

1. Is NEWS 5 or more or 3 in one parameter? Tick
 OR does patient look sick?

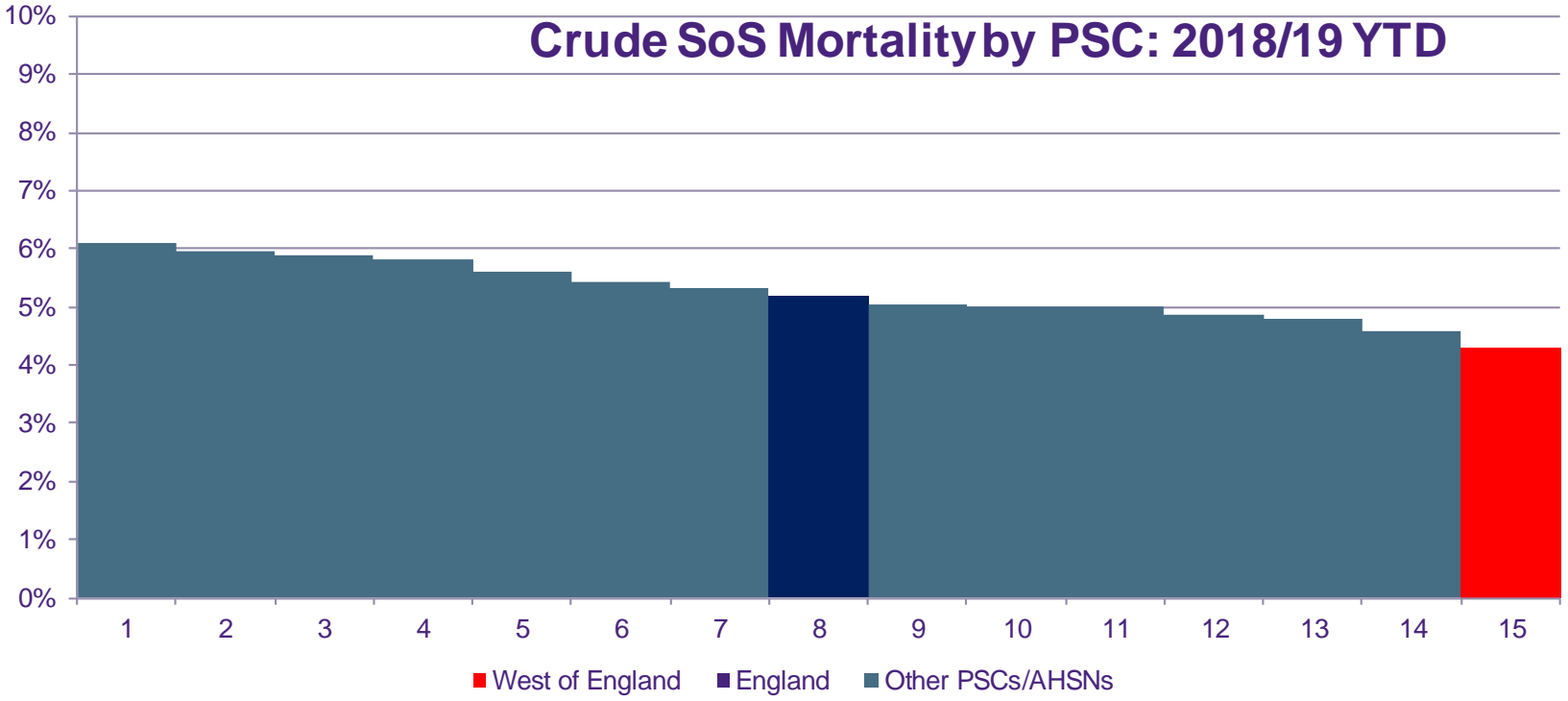
After
treatment

| | | | | |
|------|---|----|---|---|
| NEWS | 6 | 11 | 4 | 3 |
|------|---|----|---|---|

Mortality from Suspicion of Sepsis



Crude SoS Mortality by PSC: 2018/19 YTD





West of England
Academic Health
Science Network

www.weahsn.net

