Improvement project- Sepsis Recognition and Management in out of hours primary care

Dr. John Caldwell

Medical Lead

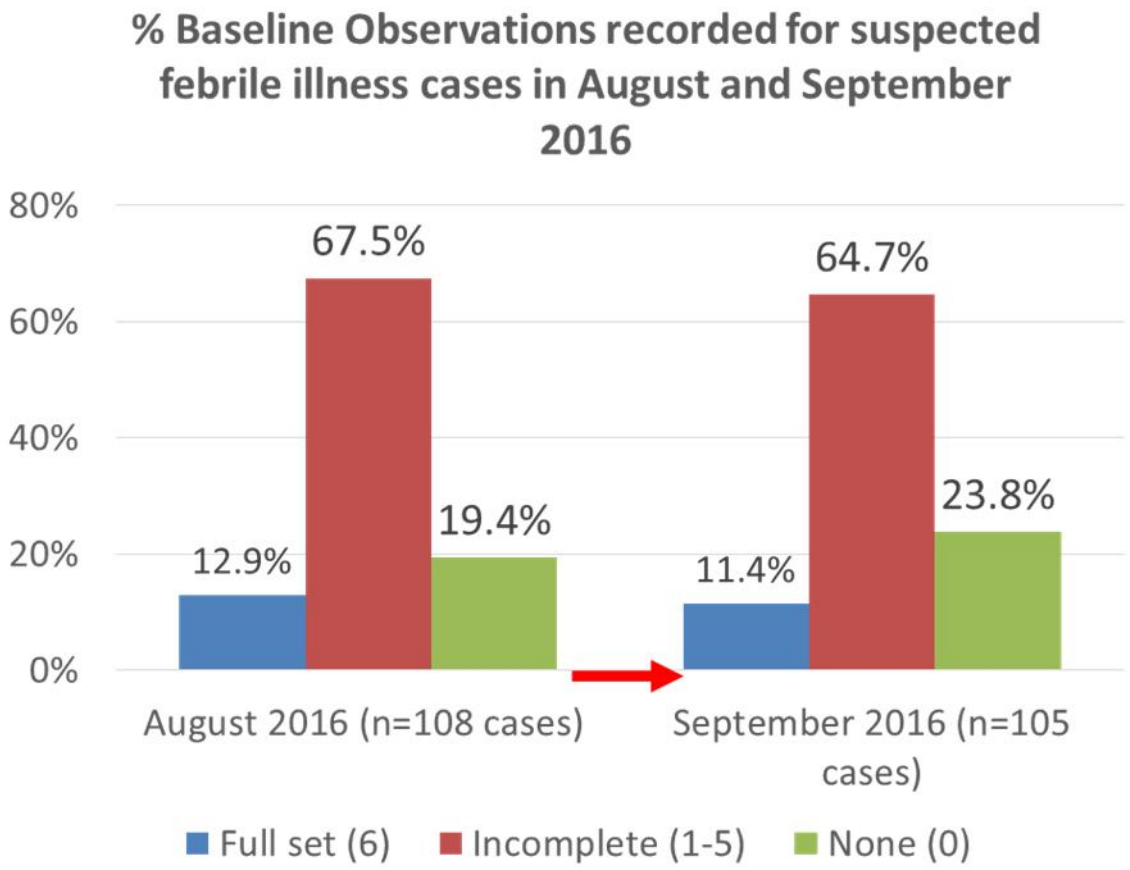
Urgent Care 24

Patient Story 1 - Missed Sepsis

- Woman age 37 who was normally fit and well called NHS 111 with symptoms of vomiting, pains in legs, fever all day, sore throat, panicky and breathing rapidly.
- No past medical history and not taken any medication. Triage history taken from third party caller. Telephone triage was done and advised a visit to UC24 urgent care centre.
- Seen in centre, examined. Looked unwell, P BP RR Temp Cervical adenopathy exudate on tonsils.
- Diagnosed with acute tonsillitis. Doctor commented in notes “very close to admitting” but decided to treat with antibiotics and safety netted to report worsening symptoms.
- The patient went to the pharmacy to collect the prescription. Collapsed in the car park. Died of sepsis.

- **We do not want this to happen again**.

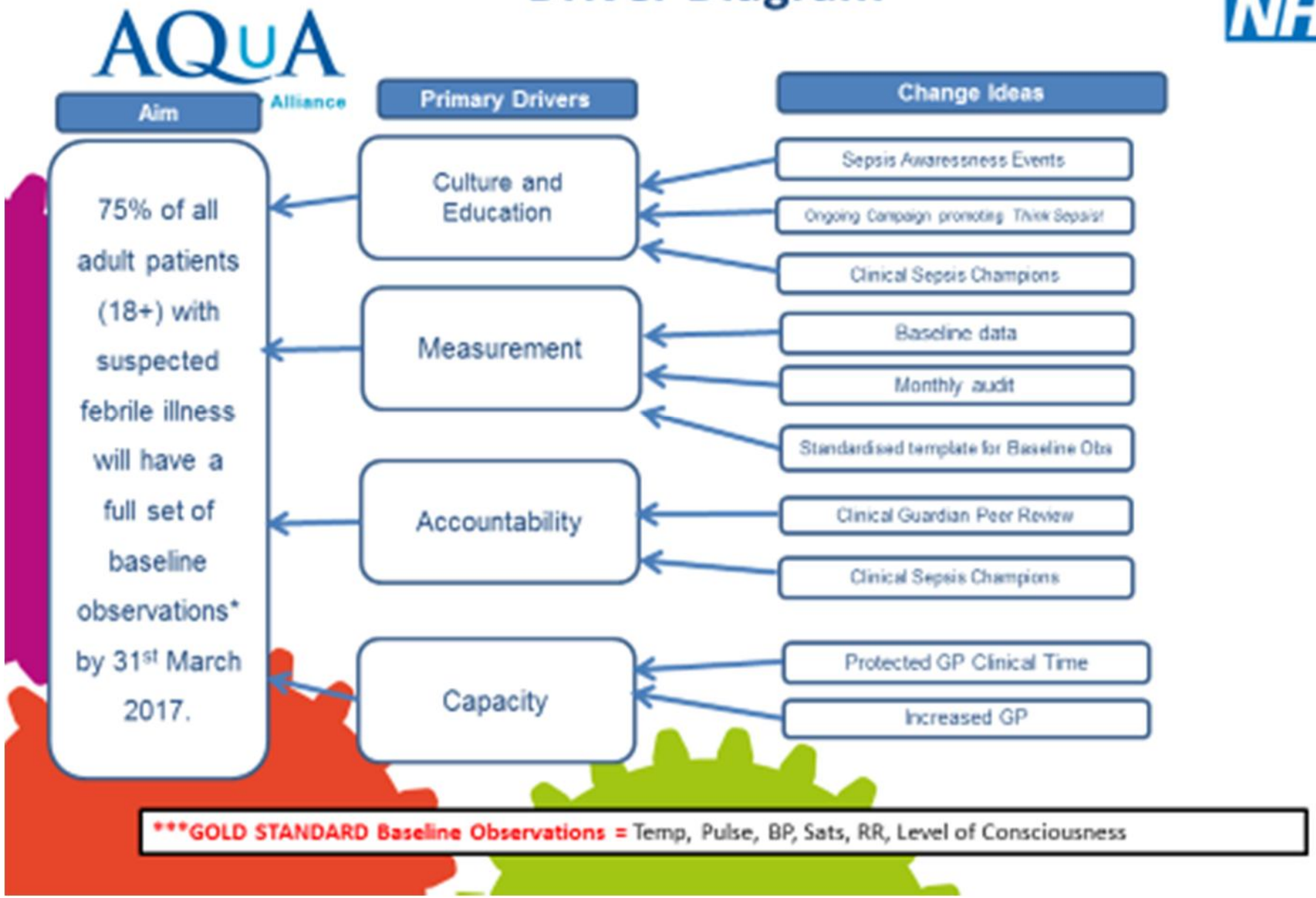
What's the Problem?



National Early Warning Score (NEWS)

PHYSIOLOGICAL PARAMETERS	3	2	1	0	1	2	3
Respiration Rate	≤8		9 - 11	12 - 20		21 - 24	≥25
Oxygen Saturations	≤91	92 - 93	94 - 95	≥96			
Any Supplemental Oxygen		Yes		No			
Temperature	≤35.0		35.1 - 36.0	36.1 - 38.0	38.1 - 39.0	≥39.1	
Systolic BP	≤90	91 - 100	101 - 110	111 - 219			≥220
Heart Rate	≤40		41 - 50	51 - 90	91 - 110	111 - 130	≥131
Consciousness Level				A			V, P, or U

Driver Diagram



PDSA 1 – Patients referred to A&E with suspected febrile illness

What did we test

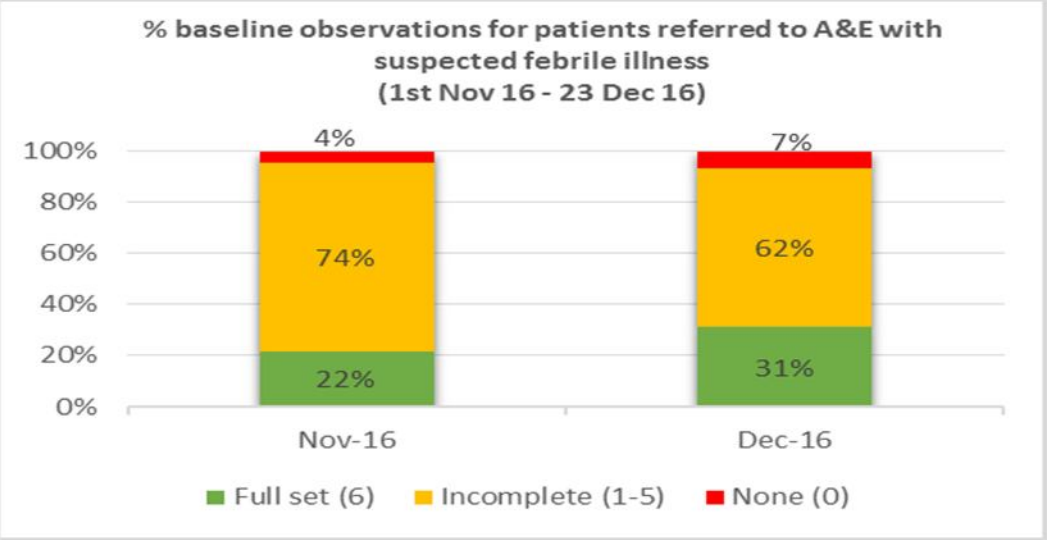
- % full set baseline observations recorded for patients with suspected febrile illness referred to A&E.
- Measure whether clinical engagement including event and awareness in November 2016 have an impact on data

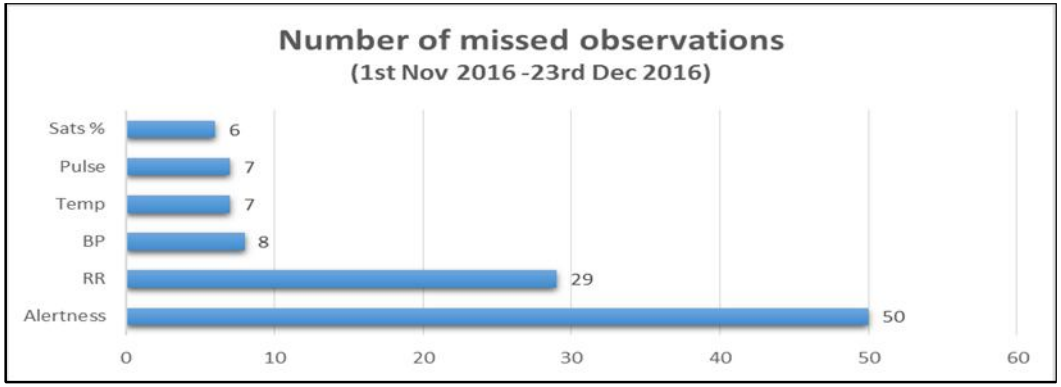
Outcome measures

- % full set obs – 22% (Nov-16), 31% (Dec-16)
- 9 patients sent to hospital with no baseline observations
- The observations most commonly missed where alertness and respiratory rate
- At engagement event clinicians said Adastra free text was *"difficult to use"*

PDSA 1 learning

- HUGE variation in free text recording
- Awareness raising may have had an impact – Reach of engagement events may be limited.
- Understand why alertness and respiratory rate were most commonly missed
- Compare like for like bi weekly data





Patient Story 2–Identified Sepsis

- Man age 84, PMH- IHD, Hypertension, Type 2 DM. Self caring.
- DH Ramipril, bisoprolol, atorvastatin, metformin, GTN spray. NKDA.
- Wife rang 111. Cough for 3 days, getting worse, hot, shivery, green phlegm, feels unwell, rambling.
- Visited at home. In bed, looks unwell, eyes closed but responds to voice, wife says confused compared with normal.
- RR 24, SpO2 92% RA, Pulse 122 reg, temp 37.8C, BP 103/67mmHg. Right basal crepitations, bronchial breathing.
- NEWS 10

Patient Story 2–Identified Sepsis

- Visiting doctor called ambulance then rang RLUH A&E Majors and pre-alerted hospital “Admission - pneumonia with sepsis”
- Patient arrived RLUH and met by pre-alerted Sepsis Team. NEWS 12 as temp now 38.7 and SpO2 94% on oxygen supplementation.
- Admitted to Resus, “Sepsis 6” bundle of care applied, IV antibiotics given 37 minutes after arrival.
- Discharged home on oral antibiotics 4 days later.
- 4 weeks post discharge GP reports returned to normal function levels

Patient Safety is the Highest Priority

- UC24 is embedding a culture of learning as a group; looking at what went well, what has not gone well and what we can do together to make real improvements to care delivery.
- Non blame culture of openness and honesty
- Looking at adverse incidents / near misses from:
- Service delivery
- Care delivery perspectives
- **Continuous learning**