Frailty Response Unit – clinical and operational perspectives

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Frailty Response Unit

- Collaboration between Industry (Abbott)/NHS (SCAS/OUH)
- Cross-specialty working (SCAS-AAU-ED-Biochemistry)
- Joint funding:
  - £60k – CCG (Winter Pressures)
  - £8k – Abbott (iStat/wireless router/cartridges)

Frailty Response Unit

- Rapid Response Vehicle with on-board wireless connected POCT
- Staffed by Senior Paramedic/Specialist Practitioner
- Decision support by telephone from senior physician based in Ambulatory Assessment Unit

Population for inclusion

- Patients over age of 65 or with known frailty syndrome
  - Fall (from standing, without obvious injury)
  - Collapse
  - Confusion
  - Reduced mobility
  - Suspected infection/sepsis
- Priority given to patients with pre-existing strong care support environment
  - Nursing home
  - Care home
  - 24 hr carer
  - Lives with supportive family (or nearby)

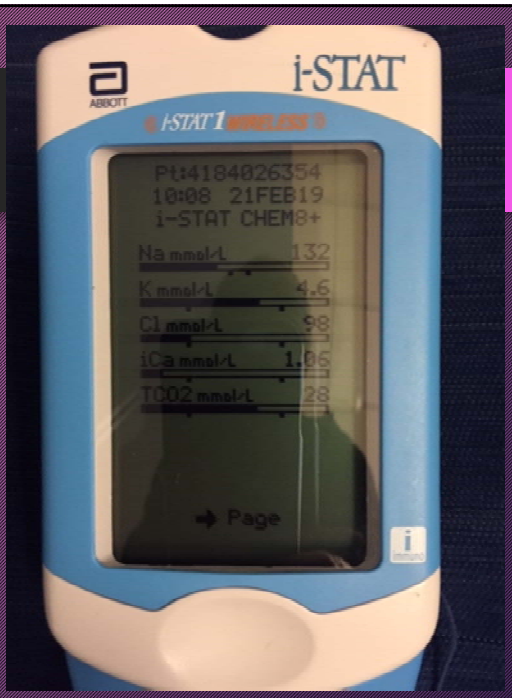
Study procedure (1)

- Suitable patient for study inclusion identified by Call Handler and Frailty Response Unit dispatched
- Assessed at scene by SP – 3 courses of action:
  1. treat/transfer if critically unwell as per usual practice
  2. treat/refer to community services as per usual practice
  3. if not critically unwell but potentially requiring transfer for assessment in secondary care - take bloods for POCT in addition to usual Ix (urinalysis, ECG, BM)

iStat Point-of-Care Testing (wireless)

Results screen

- Takes 10mins to process results
- Visible on screen
- Can be printed
- Transmit wirelessly to OUH via router in car



Study procedure (2)

- Results obtained and discussed with **senior physician in AAU** by telephone for decision support
- Decision made to:
  - Leave patient at home without further intervention
  - Leave patient at home with further intervention from community/outreach services (e.g. Primary Care/AHAH)
  - Transfer to OUH for further assessment/treatment

Point- of-Care Testing Panel

- This should include:
- Chem 8 = Hb, Na, K, Ur, Cr, iCa, glucose
- CG4+ = VBG + lactate

- (Blood tests to be included alongside usual bedside investigations such as ECG, urinalysis, BM)

Case 1

- 85 F living in a care home, known dementia
- Collapse ? cause, TLOC, low responsiveness for approx. 2 mins. Staff had made minimal effort to stimulate the Pt.
- Pt appeared sweaty - GCS 14 (normal), obs and ECG normal
- POCT results reviewed by Consultant in AAU - all normal range
- Further ECG after an hour – no changes
- Pt was deemed able to stay at home
- Comment from AAU – 'very reassuring' to have the availability of the i-Stat during this visit

Case 2

- 90 yr old man - PMH: COPD, Leg Ulcers, BPH
- Fallen at home -no injury but on the floor 4 hours+
- Meds: apixaban, bisoprolol, furosemide, lisinopril, spironolactone, tamsulosin
- RR 20, P 110, BP 90 systolic, Temp 36.5, GCS 15, NEWS2 5, BM 7.6, Urinalysis Blood+ , ECG - AF, LBBB
- Eating and drinking normally, feels well
- Very weak, unable to stand unaided, can weight bear but not walking
- POCT blood tests taken - normal
- Pt transferred to EAU following discussion with AAU Consultant

Challenges/limitations

- Staffing of vehicle
- Staff concerns
- Appropriate dispatch
- Limitations of panel of tests
- Limited comparison – observational study
- Has been tried elsewhere unsuccessfully…

Future plans

- Complete the project! (3/12)
- ?NIHR HTA Grant
- Acute Hospital at Home (AHAH)
- Palliative Care Outreach