

### Enhancing Health in Care Homes through Technology & NEWS

### a journey shared

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## Setting the Scene

### **Care Homes**

- Gateshead; 1613 beds, occupancy 92%
- Newcastle; 1938 beds, occupancy 87%

### Population

- Gateshead; 202,419
- Newcastle; 268,064

### **Care Home Population**

- Ncle/Ghd 0.85%
- Average age 85
- Average length of residency 2 years



### From the Model to Vanguard











Student Internship #carehomesmatter conferences





# **Clinical Engagement Superstars**





# **Establishing Understanding**

- Royal College of Physicians' (2012) national working party was unconvinced that it was necessary to apply an arbitrary weighting to the NEWS aggregate score on the basis of age.
- Frailty, mobility and cognitive impairment affect how acute illness presents and has not been investigated thus far (Hodgson, Cook, Thompson, Abbott Brailey 2016).
- EWS tools were originally designed to detect critically ill patients at risk of catastrophic deterioration, but there is now evidence it can be used in a range of settings e.g. emergency departments (Capan et al 2015) – but the use of NEWS in care homes was limited.



### **Evaluation Plan**

- 1. Assess the relationship between NEWS score and frailty, cognitive impairment, dependency, functional ability and treatment outcomes
- 2. Explore care home staff, NHS community nurses and GPs' understanding of the factors that are key determinants of the presentation of acute illness in frail older people
- 3. Explore care home staff, NHS community nurses and GPs' views, experiences and barriers to the use of NEWS
- Examine the impact of the introduction of NEWS on clinical decision-making process in relation to treatment of the acutely ill older care home resident



### Evaluation 1: data

[2 care homes [161 patients], demographic data]

- Baseline and trigger measurements of:
  - NEWS
  - Clinical Frailty Scale [CFS]
  - 4 AT Delirium tool
  - Barthel ADL index



### Evaluation 1: data

- Hospital Admission
  - time and day of admission
  - admission route
  - number of moves within the hospital
  - length of stay in hospital
  - functional ability and treatment
  - discharge destination



### **Evaluation 1: findings**

 There is a statistically significant link between the National Early Warning Score and hospital admissions

 Barthel was also found to be a statistically significant indicator and is worthy of attention



### Evaluation 2: understanding presentation

"If they stopped eating. More tired than usual." (Carer)

"The loss of appetite, not drinking...." (Carer)

"It can be, you know, high temperature, thirsty, coughing, or not eating and drinking. The resident might say, "I'm no longer able to walk." ... All in all, as we can take that it gives the good picture of what the resident is." (Nurse)

### knowing the person



### **Evaluation 2: findings**

- Knowing the person is valuable but its perceived subjectivity makes care home staff feel insecure
- Lack of concrete information [NEWS] was seen as a weakness in communication

*'it's quite hard because you notice something the matter with the lady or gentleman that you're looking after but obviously the doctors are, like, well... you know, they're not 100% sure' (carer)* 

A3 POSTER

FLOW

DIAGRAM

INFORMATION LEAFLET







Introduction Gateshead; Clinical Educator Newcastle; Care Home Team

https://www.enhancedcare.org/newstechnology



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- Time consuming
- Underestimated time needed to prepare
  - adapting materials
  - identifying care homes
  - identifying staff
  - purchasing additional equipment
  - developing and refining training materials
  - agreeing response tool [fit with local services]

we got more efficient



• The relationship between the care home staff and the practice educator was key in the success of it

"Because she used to say, "Well, you'll practice on another carer." And then if we got, like, stuck a bit, she would go, "Right, settle down "Because obviously I'd never used anything like that before. [Carer]

But it's sort of like... When she did our... Our final observations with us, and you were sort of in a room on your own with her, it was better then. Because when there's other people there, you feel as if you're under pressure." [Carer]

progress and momentum stalls without the practice educator

 Additional monitoring was also carried out frequently for residents and was seen as providing extra detail in the personalised care given and could be shared with or carried out on request of health care partners

"I think, to a lot of people ..... I mean, the people that I've seen .... With something like that, it kind of, ... it makes things a bit calmer, I think. I think it settles people down because you know that it's all there. You're not having to worry about finding pieces of paper, pens ... it's all there. It's all registered " (carer)



 The formalisation of NEWS were perceived as having multiple benefits - not just supplementing and replacing perceived subjective judgements – but also in improving decision making and reducing inefficient referrals

" It would have just been hearsay, sort of thing. And now we've got it all down on paper, exactly, and then we pass it on to them and then ... then we go from that" (carer)

"Just putting our mind at rest, and obviously that tells you ..... It knows better than us, .... So, like, it tells .... If we think they need the GP, but they might not, whereas that is telling you, like, you need to contact them or they're fine" (carer)



### Evaluation 4: decision making & treatment

 More information sharing at the point of first contact improves decision making

*"we get the diagnosis quicker now, than what we did before " (carer)* 

" and whenever I tell all the doctors, even out of hours doctors on Saturday and Sunday, once I told them the score, it's like straightaway they understand, and then can make their decision, whether they need to come or not"



### Impact: national EHCH dashboard

#### National EHCH Dashboard

		NGCCG	Vanguard 6 Care Homes	Non Vanguard Care Homes
change on baseline period	Emergency Admissions	-3.2%	-1.4%	6.7%
	Bed Days	-15.2%	-4.%	1.4%

- 8.8% decrease 999 calls resulting in conveyance to hospital with overall decrease in number of 999 calls
- 3% decrease A&E attendances
- 34.7% decrease in non-elective admissions for care home residents with a urine infection
- 16.6% decrease in non-elective admissions for care home residents with a chest infections
- 26% decrease in oral nutritional supplement prescribing (15,000 less prescriptions)
- £41k less spending on low dose antipsychotics
- 11% more dying in place of choice, improved recording means we now have a baseline to further increase this



### Impact: National EHCH Dashboard [Dec 18]

		NGCCG	Other Vanguard Care Home Sites [collective]	Non Vanguard Care Homes
change on baseline period [2015]	Emergency Admissions	+ 2%	+ 6.4%	+ 11%
	Total Hospital Bed Days	- 8%	+ 1%	+ 2%
	Emergency Bed Days	- 10%	- 0.8%	+ 3%

"As with the Vanguard 6 cohort Newcastle Gateshead have seen an increase in emergency admissions in recent quarters, but since the base year [2015] growth is around 2%, which is lower than the cohort average and substantially lower than the 11% increase for the non -Vanguard sites. For emergency bed days NG have had a reduction of 10% since base year, compared to a growth for the non-Vanguard sites."



## Impact: financial

Care home	SAVINGS		
<ul> <li>Care nome partnership</li> <li>Link practice</li> <li>Lead GP</li> <li>Ward round</li> </ul>	Reduction Emergency Admissions Bed Days	£8,942,731	
<ul><li>Nurse Specialists</li><li>Virtual ward</li></ul>	Investment	£ 1897,268	
	Net Savings	£7, 045, 463	



# Summary

- 1. Introducing NEWS to care homes has to be set within the context of frailty
- 2. There needs to be a point of contact for care home staff post training and thereafter when using the equipment
- 3. The most successful introduction is where there is a well embedded enhanced care model i.e. link practice, lead GP and aligned OPSN
- 4. For sustainability, in future, training would be best provided by the aligned enhanced care team rather than a lone clinical educator
- 5. There is a statistically significant link between the National Early Warning Score and hospital admissions but Barthel was also found to be a statistically significant indicator and is worthy of attention
- 6. In terms of providing optimum enhanced care for older people living in care homes, NEWS is only one tool in the box that must be used
- 7. The next stage of this work should include the development of an exemplar 'SBAR' type template to include e.g. verified grade of frailty as per the primary care record, gut feel and NEWS

