Clinical Pathways



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Key Finding 1:

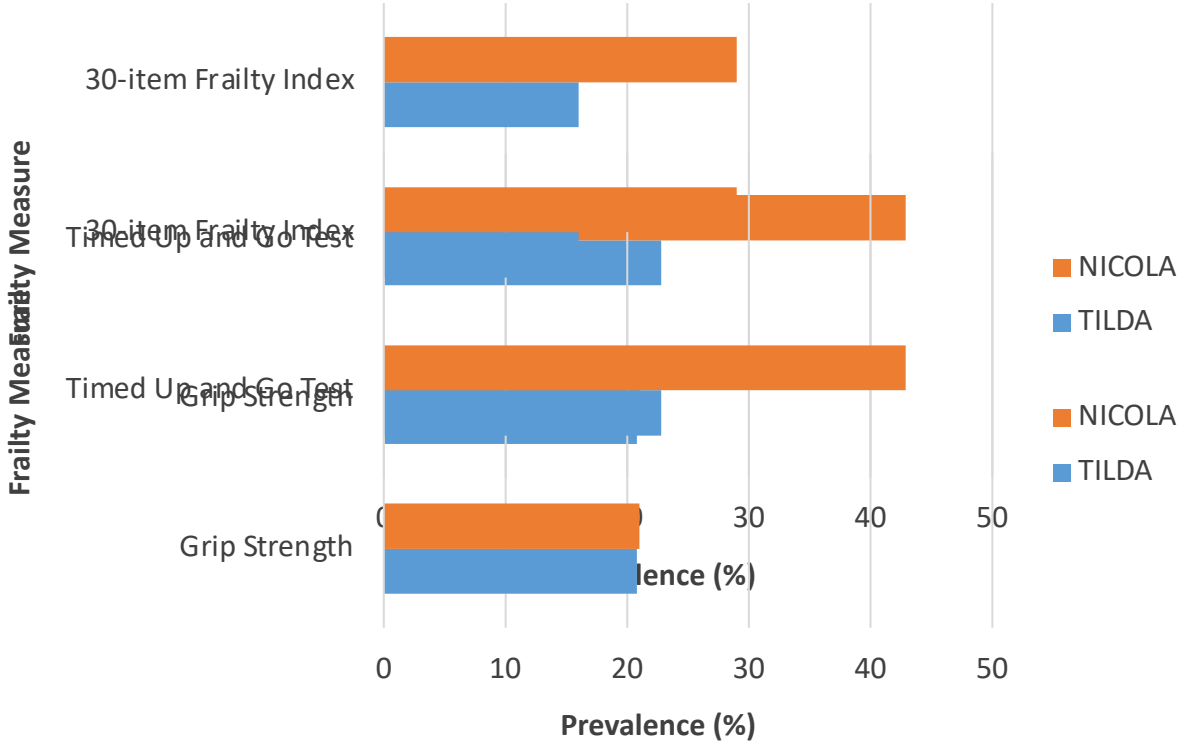
There is a high prevalence of frailty in the older population of Northern Ireland.

Frailty Status	N	%	%*
Robust	2821	34.5	35.2
Pre-Frail	2942	36.0	35.8
Frail	2420	29.6	29.0

*Weighted by sex, age, and geographical location to make analysis representative of NI population.

Collard RM, Boter H, Schoevers RA, Oude Voshaar RC. Prevalence of frailty in community-dwelling older persons: a systematic review. *J Am Geriatr Soc.* 2012;60(8):1487-92.
O'Caoimh R, Sezgin D, O'Donovan MR, Molloy DW, Clegg A, Rockwood K, et al. Prevalence of frailty in 62 countries across the world: a systematic review and meta-analysis of population-level studies. *Age Ageing.* 2021;50(1):96-104.

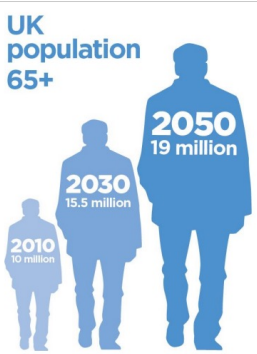
- In fact, the proportion identified as frail was approximately double.
- Grip strength was similar between the studies, likely due to the additional level of adjustment.

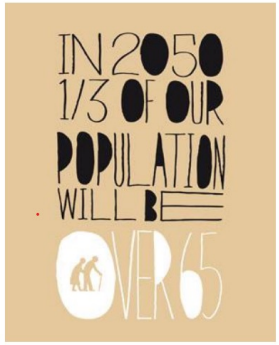


Key Finding 5:

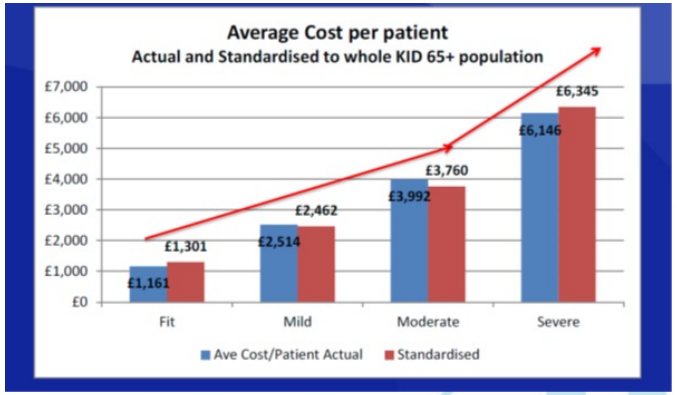
Older adults in Northern Ireland are frailer than their counterparts in the Republic of Ireland.

Why is frailty important?





- Frailty is potentially reversible
  - Exercise – resistance, balance, tai-chi
    - Multicomponent programmes 30-45 min programmes x5/week for 5 months
    - Tai chi – 45mins, >2 per week, >12 weeks
  - Nutrition – Vitamin D, Mediterranean diet, food first
  - Social engagement – group based activities often better
  - Medication reviews – improves quality of life, better economic outcomes



- Proactive management improves outcomes
  - Evidence from surgical care around risk assessment, shared decision making, CGA, proactive care improving outcomes in #NOF, vascular, colorectal surgery

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Challenges





- Devious / they lie
- Poor historian’s
- Co-morbidities
- Socially isolated
- Polypharmacy
- Advanced care plans
- Paramedic education – traditional training
- ECR access



Treatment of others?

- Lack of exercise/movement
- Intermittent light
- Intermittent noise
- Lack of control of environmental manipulation
- Sensory deprivation
- Poor sleep
- Controlled fear
- Disorientation



NIAS chief complaints – 2019

Why we need to change…

1	HCP ADMISSION	68,543	31.78%
2	**FALLS**	23,121	10.72%
3	SICK PERSON (Specific Diagnosis)	14,292	6.63%
4	BREATHING PROBLEMS	12,804	5.94%
5	CHEST PAIN (Non-Traumatic)	12,789	5.93%
6	UNCONSCIOUS / FAINTING (Near)	10,193	4.73%
7	CONVULSIONS / FITTING	8,275	3.84%
8	OVERDOSE / POISONING (Ingestion)	6,552	3.04%
9	PSYCH / ABN BEHAVIOUR / SUICIDE AT	6,441	2.99%
10	ABDOMINAL PAIN/PROBLEMS	5,319	2.47%
11	AMPDS Manual Over-ride	5,215	2.42%
12	TRAFFIC / TRANSPORTATION INCIDENTS	5,025	2.33%
13	HAEMORRHAGE / LACERATIONS	4,751	2.20%
14	STROKE (CVA)	4,670	2.16%
15	**TRAUMATIC INJURIES (Specific)**	4,207	1.95%
16	ASSAULT / SEXUAL ASSAULT	3,944	1.83%
17	UNKNOWN	2,968	1.38%
18	CARDIAC / RESPIRATORY ARREST/DEATH	2,148	1.00%
19	Unknown - User Left Call	1,888	0.88%
20	DIABETIC PROBLEMS	1,837	0.85%

Traditional model



Our current clinical assets









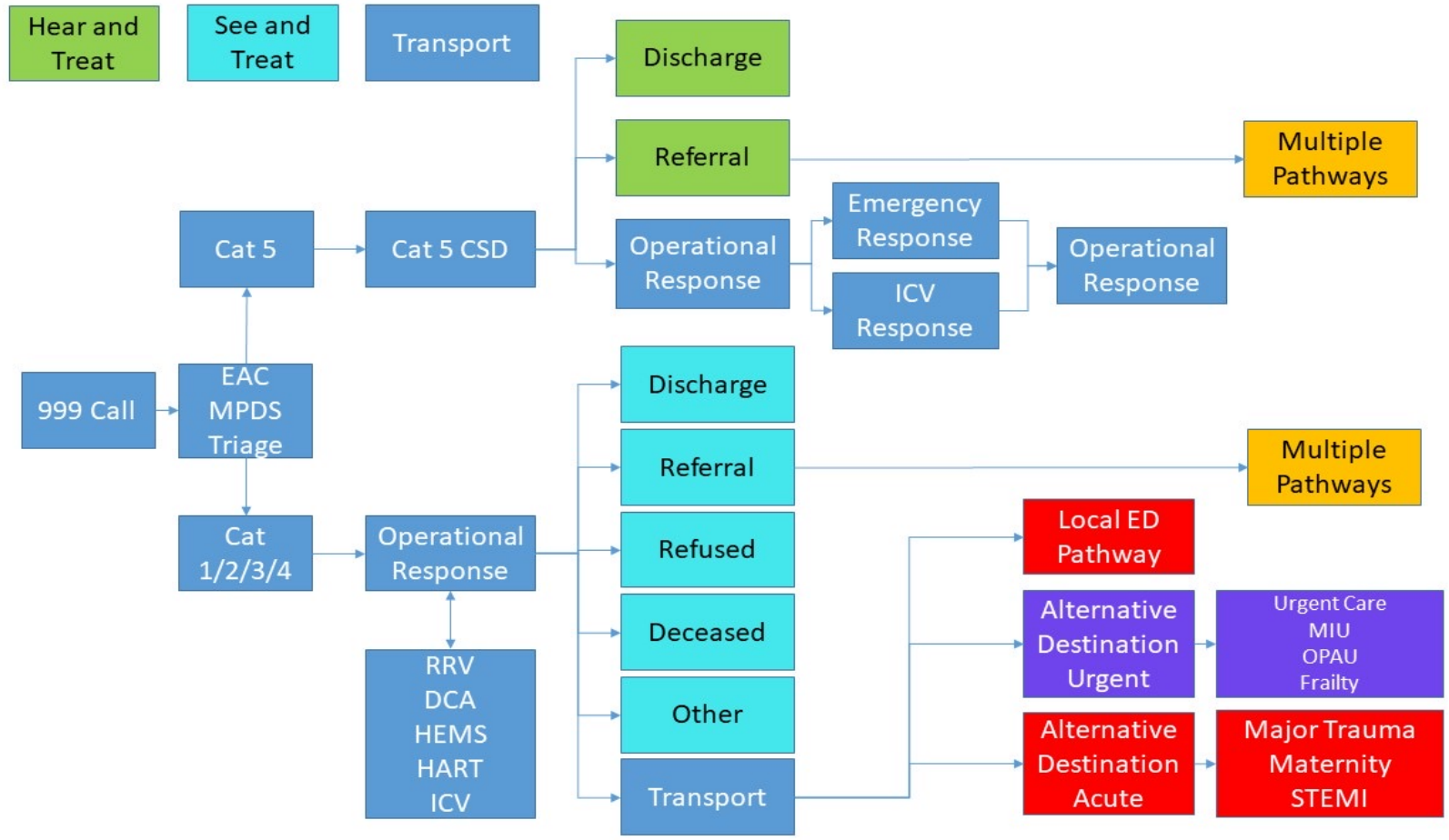




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What are we changing to?

"Patient Care Pathway"



Benefits of identifying it in pre-hospital practice

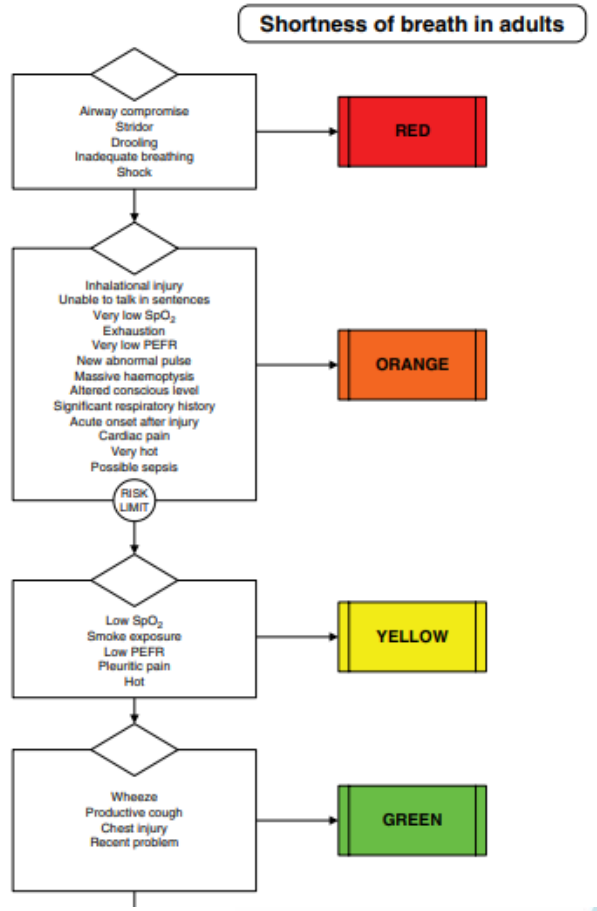
- Aid clinical decision making – hospital vs community care
- Ability to include in handover at hospital arrival
  - Trigger actions given long ED waits
- Trigger a CGA
  - In ED or early after



Clinical decision making tools

- NEWS2
- CFS
- Manchester Triage System
- Experience
- JRCALC Plus App





NEW score	Clinical risk	Response
Aggregate score 0–4	Low	Ward-based response
Red score Score of 3 in any individual parameter	Low–medium	Urgent ward-based response*
Aggregate score 5–6	Medium	Key threshold for urgent response*
Aggregate score 7 or more	High	Urgent or emergency response**

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N.I.A.S.

Clinical decision making support

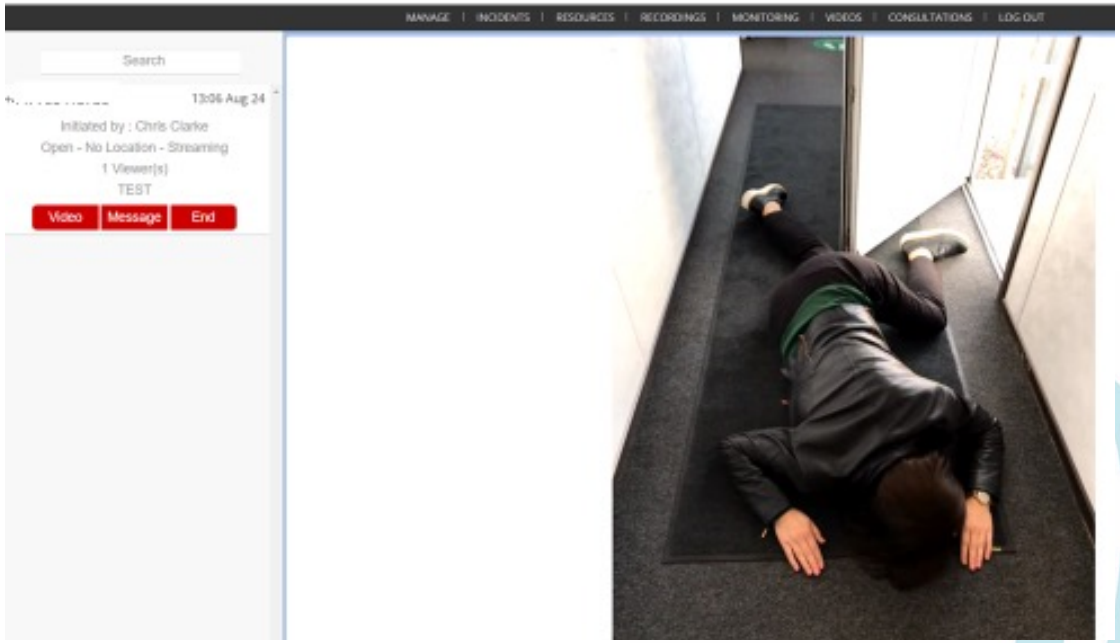
- **CSD**
- **CSO**
- **Peers**
- **Guidelines and governance**
- **Other HCPs *(referral pathways)***
- **Senior clinical support *(future goal)***



Assessment (Hear & Treat)

- Clinical Support Desk (CSD) – remote clinical assessment
  - Manchester Triage System
  - GoodSam
  - *Reducing avoidable conveyance as an initial step in supporting access to appropriate care*

GoodSam live feed to the control room:



Non – ED Pathways

Hospital at Home

- **Hospital-level diagnostics,** (such as endoscopy, radiology, or cardiology) and may include bedside tests such as POC blood tests and point of care ultrasound (POCUS).
- **Hospital level interventions** (IV abx, IV diuretics, SC fluids, home oxygen, chest physiotherapy, nebulisers, SLT etc)
- Can include **daily input** from a multidisciplinary team and sometimes multiple visits and provisions for 24 hour cover with the ability to respond to urgent visits.
- **Consultant led** service to deliver acute care for frail older people in the community.
- Comprehensive **Geriatric Assessment** provided by the MDT
- Hospital at Home patients have **equity of access** to other specialty advice as though an inpatient.

Non – ED Pathways

Direct Assessment Units - DAUs

- Antrim Area Hospital
- Daisy Hill Hospital
- Downe Hospital (Downpatrick)*
    - *See SPoC guideline*

In discussions:

- Causeway Hospital
- Altnagelvin Hospital

- OPAUs restarting



Non – ED Pathways

Urgent Care Centres

- Royal Victoria Hospital UCC
- Downe Hospital (Downpatrick)
    - See SPoC referral guideline
- Lagan Valley Lisburn (phone first)

- Varied times
- Varied clinical criteria



Alternative transport or discharge



- Where patients **do not require immediate conveyance** and there is **no requirement for on-going treatment or assessment** from the referring clinician, then **Paramedics** are authorised to, and should, explore alternative transport options in order to release emergency response resources.
- This may include self/ family transport, requesting ICV/PCS to convey within an agreed time frame, contracted taxi providers.



- Only **Paramedics** can independently discharge a patient from scene.



Questions?

Thanks for listening