Premature ageing and frailty among people living in a homeless hostel in London

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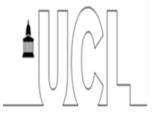
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Nick's story (age 52)

File on 4: Dying on the streets





Ann's story (age 87)



Today's Talk

- Homelessness & health in the current system
 - Multimorbidity / young olds and gaps in provision
- Elderly care concepts:
 - Frailty
 - Comprehensive Geriatric Assessment (CGA)
- Our study: frailty & geriatric conditions in people experiencing homelessness in a hostel
- Recommendations
- Discussion

Homelessness is a Health Issue Complex needs & Tri-morbidity

Substance Misuse

> 60% history of substance misuse



Mental Health

70% reach criteria for personality disorder

Physical Health

>80% at least 1 health problem, 20% > 3 health problems

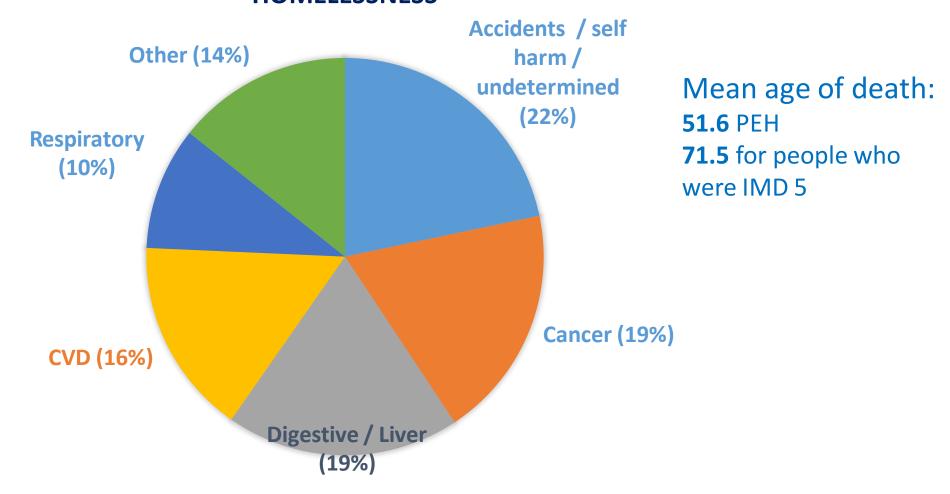
Hepatitis C – 50 x higher TB – 34 x higher Heart disease 6x higher Stroke 5x higher Epilepsy 12x higher

High rates of multimorbidity

St Mungos (2010), Homelessness, it makes you sick, Homeless Link Research (n = 700) Suzanne Fitzpatrick et al (2010) Census survey multiple exclusion homelessness in the UK (n= 1268)

Story, A. (2013) Slopes and cliffs: comparative morbidity of housed and homeless people. The Lancet. Nov 29. Volume 382. Special issue. S1-S105

CAUSE OF DEATH AMONG PEOPLE EXPERIENCING HOMELESSNESS

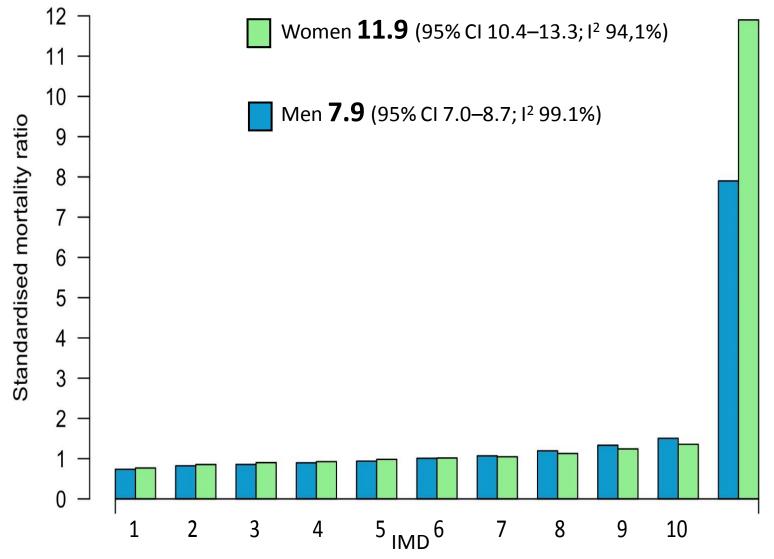


Aldridge, R. W., Menezes, D., Lewer, D., Cornes, M., Evans, H., Blackburn, R. M., ... & Hewett, N. (2019). Causes of death among homeless people: a population-based cross-sectional study of linked hospitalisation and mortality data in England. *Wellcome open research*, 4.

Homeless people are dying young

Average age of death in the UK (ONS):

45 for men (88%)
43 for women
(12%)



Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: systematic review and meta-analysis. R Aldridge, A Story, S Hwang et al, The Lancet Nov 2017

Dying as a homeless person

Deaths are often sudden, untimely and undignified, with access to palliative care being very unusual (Crisis report 2012)

Nick (age 52)



Gaps in Current systems

- Hostels & homeless services are taking burden of supporting people who are very unwell / "young olds" / people with cognitive impairment
- Lack of alternative places of care due to:
 - Young age
 - Mental health difficulties
 - Substance misuse



'Multi-morbidity and Young olds'

When I first came into this I thought this is about recovery, it's not. I mean ... realistically ... it can't be. And it isn't. Very few people recover. Specialist homelessness nurse

Most care homes are for people with dementia who are older; it's just, it's our patients just don't fit any of these like rigid things....the care homes themselves are like 'what?! 'We don't want this 29 year old"... you know?

Specialist homelessness nurse

'Multimorbidity and Young olds'

Social services say 'they're still drinking, so we're not going to give them a package of care'. Even if they're drinking, they still need to get in and out of a bath, or use a commode. Their drinking doesn't mean they're not entitled to services. **Drug and alcohol worker**

"At least three times a shift we check she's okay. It's hard...
particularly on weekends and nights when we only have two
staff... it's a big hostel [60 residents]... this isn't an
appropriate environment, but it's the best we have" Hostel
staff



- Homelessness services role is to support people into recovery
- Hostels are designed to provide temporary accommodation
- Staff left to support people with increasing complexity, with limited resources
- Staff go way over and above their role
- Often have difficulty accessing adequate social services & medical support

Concepts in elderly care - 1: Frailty

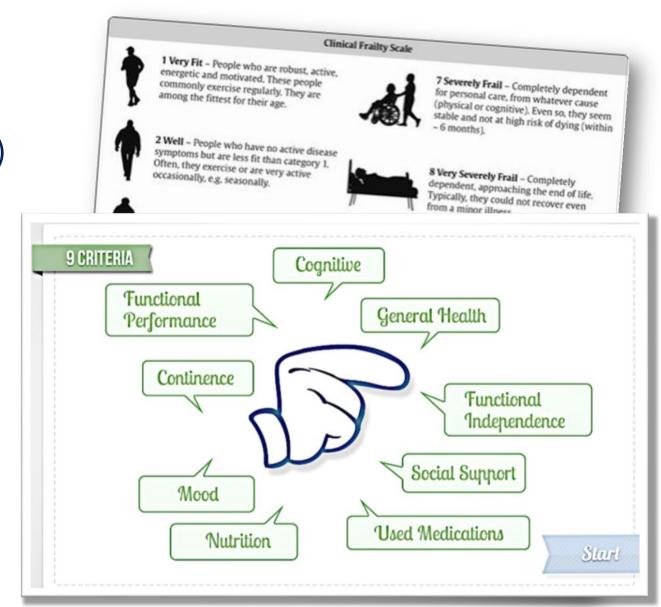
- Distinctive health state related to the ageing process in which multiple body systems gradually lose their inbuilt reserves
- Risk adverse outcomes after apparently minor events
 - Dramatic change in physical, mental, functional health
 - Institutionalisation
 - Death
- Frailty is not:
 - Age
 - Long term condition
 - Disability





Frailty

- Phenotype model
 - 1. Reduced strength
 - 2. Reduced walking speed (gait speed)
 - 3. Fatigue (self-reported exhaustion)
 - 4. Low physical activity
 - 5. Unintentional weight loss
- Cumulative deficit model
 - Rockwood frailty scale
 - Edmonton frail scale
 - EFI

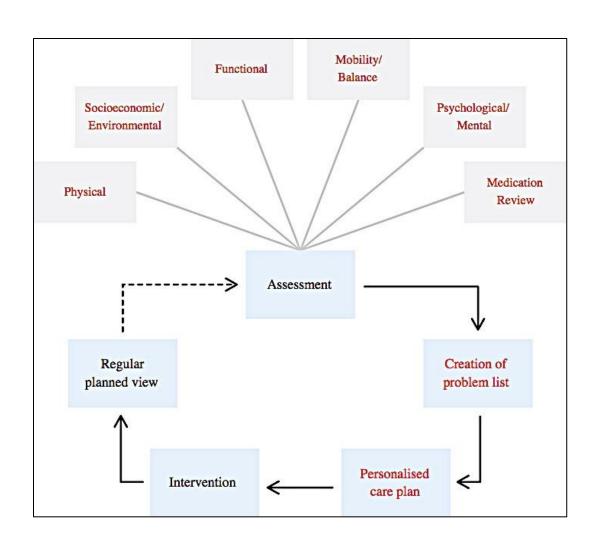


Frailty

- Varies in severity
- Frailty state is not static

- Recommendations:
 - Identification to proactively manage patients
 - Improve/maintain QOL, reduce risk of harm
 - Be patient-centred
 - Comprehensive Geriatric Assessment (CGA)

2: Comprehensive Geriatric Assessment (CGA)



- It's a process of care comprising a number of steps
 - 1. A multidimentional holistic assessment
 - 2. Create issues list and personalised care plan (patient-centred & goal-directed)
 - Interventions
 - 4. Review
- Collaboration between patient, family, carers, health professionals
- Multi-disciplinary & multi-agency

Comprehensive Geriatric Assessment (CGA)

- Will often include common
- geriatric conditions:
 - Mobility & balance
 - Falls & bone health
 - Sensory impairments
 - Cognition & mood
 - Continence
 - Weight loss & nutrition
 - End of life care



• Benefits:

- In hospital: reduces mortality & increases independent living for older people
- In community: reduces hospital admissions
- Can reverse frailty

Existing research of frailty in homelessness

- Frailty impacted by the social determinants of health
 - Impact of homelessness or extreme social exclusion unknown
- Frailty: 4 US studies and 1 pilot study in Ireland
 - 54-60% prevalence (Salem 2013, 2014, 2019; Hadefeldt 2017)
 - Some used different models of frailty
 - No UK-based studies or published information
- Geriatric conditions: US and Irish studies found geriatric conditions were common (Brown 2012; Ni Cheallaigh 2018)
 - No UK-based studies or published information

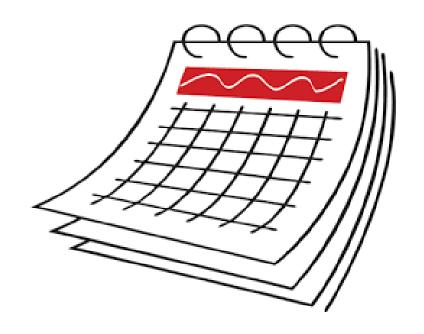
Dublin study in more detail (Ni Cheallaigh, 2018)

- Assessments of physical and cognitive health in Sundial house in Dublin
- 32 purpose-built beds providing long-term accommodation for people with entrenched homelessness and drinking, with integrated nursing care and in-reaching primary care
- 11/20 (55%) residents were frail using Rockwood scale; 4/12 (33%) residents were frail according to Frailty phenotype tests
- Multimorbidity: 27/32 (84%) had multimorbidity, and mean number of long-term conditions was 6.3
- Also found falls, social isolation, and cognitive impairment were prevalent

Our study

• Frailty, geriatric conditions and multimorbidity in people experiencing homelessness (PEH) in a hostel in London

- Conceived May-June 2018
- Protocol & Ethics Aug-Dec 2018
- Data collection Feb-Apr 2019
- Analysis Jun-Sept 2019



Frailty study

- Setting
 - 42-bed hostel in London
 - Twice-weekly in-reach Inclusion Health nurse / GP clinic
 - Single homeless people aged over 30
- Study design
 - Cross-sectional observational study
 - 1 hour interview/questionnaire with hostel residents with basic observations recorded
 - Standardised assessments for geriatric conditions
 - Based on elements included in CGA
 - Collateral questionnaire for keyworkers



Participant characteristics

- All 42 residents invited to take part
 - 2 excluded
 - 33 participants (83% of eligible residents)
- Mean age 55 years (range 38-74, SD=10)
- 91% male, 82% UK born, 45% age<16 schooling
- Smoking: 82%
- Alcohol: 73% dependent, 6% recurrent hazardous drinking
- Drugs: 36% current class A use, 24% former use
- 22% (7/31) engaged in D&A service

Participant characteristics

• Time in the hostel:

	<1 year	15 (45%)
Time in this hostel	1-2 years	9 (27%)
	>2 years	9 (27%)

• Homelessness: 85% history of rough sleeping

Lifetime homelessness (Cumulative duration: includes vulnerable	<7 years	8 (24%)
	7-13 years	8 (24%)
	14-23 years	11 (33%)
housing & hostels)	>23 years	6 (18%)
Lifetime rough sleeping (Cumulative duration)	Never	5 (15%)
	<1 year	11 (33%)
	1-5 years	5 (15%)
	>5 years	12 (36%)

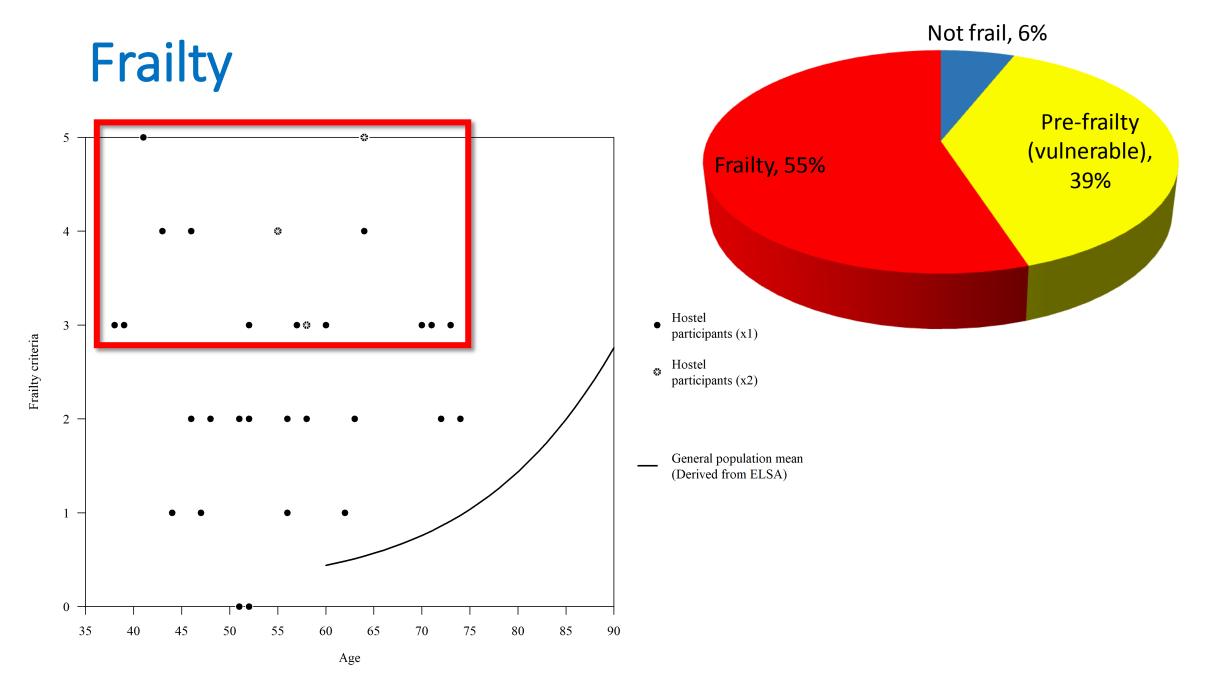
Study outcome variables

Primary outcomes

- Frailty
 - Frailty phenotype
 - Rockwood scale
 - Edmonton frailty scale
- Geriatric conditions
 - Cognitive impairment (RUDAS)
 - Falls* & fragility fracture risk (FRAX)
 - Sensory impairment
 - Vision (Snellen)
 - Hearing*
 - Mobility and balance impairment*
 - Incontinence (ISIQ-UI)
 - Orthostatic hypotension
 - Malnutrition risk (MUST)
 - Functional impairments (Katz/BIFS)
 - Low grip strength
 - Social isolation*

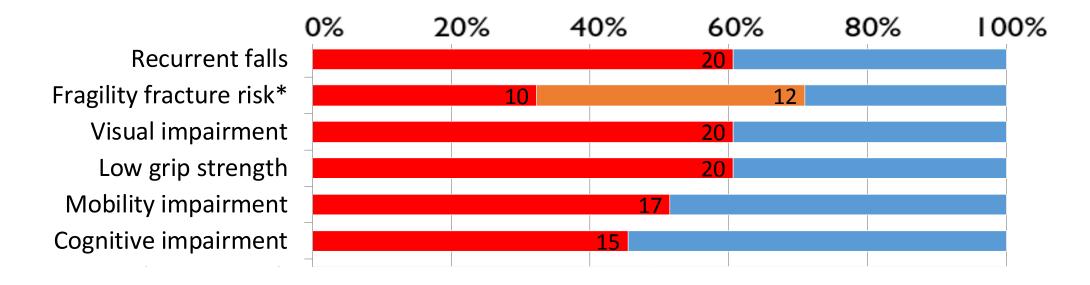
Secondary outcomes

- Multimorbidity
 - Long-term conditions
 - Traumatic brain injury (TBI)
 - Depression (PHQ-9)
 - Self-rated / KW rated overall health
- Health & social care use
 - Medications (polypharmacy)
 - GP / OP / hospital attendances
 - Care packages
 - Social support
 - Advance care planning



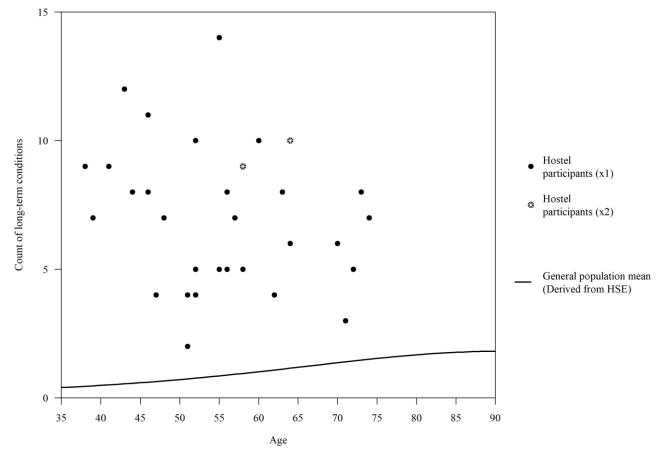
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Geriatric conditions



Multimorbidity

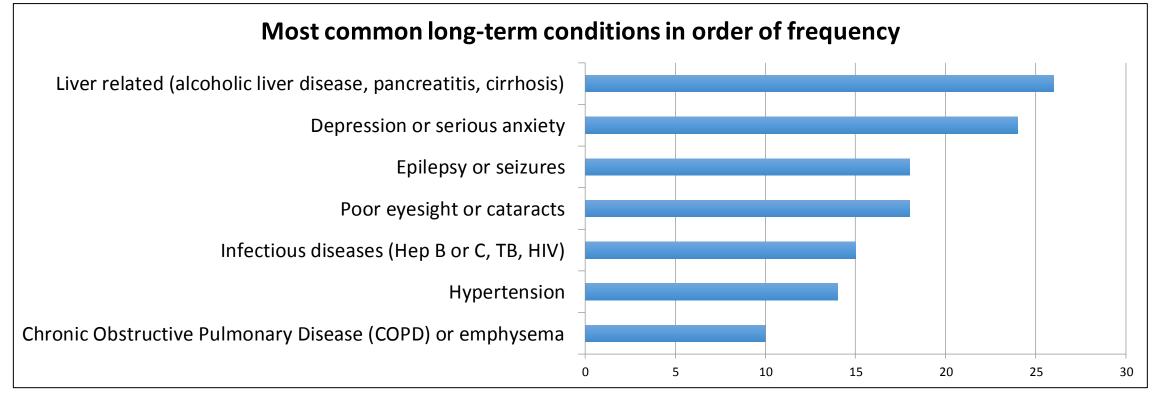
- Grouped into 39 disease categories
- 100% had multimorbidity (≥2 long-term conditions LTCs)
- Mean 7.2 LTCs (range 2-12)



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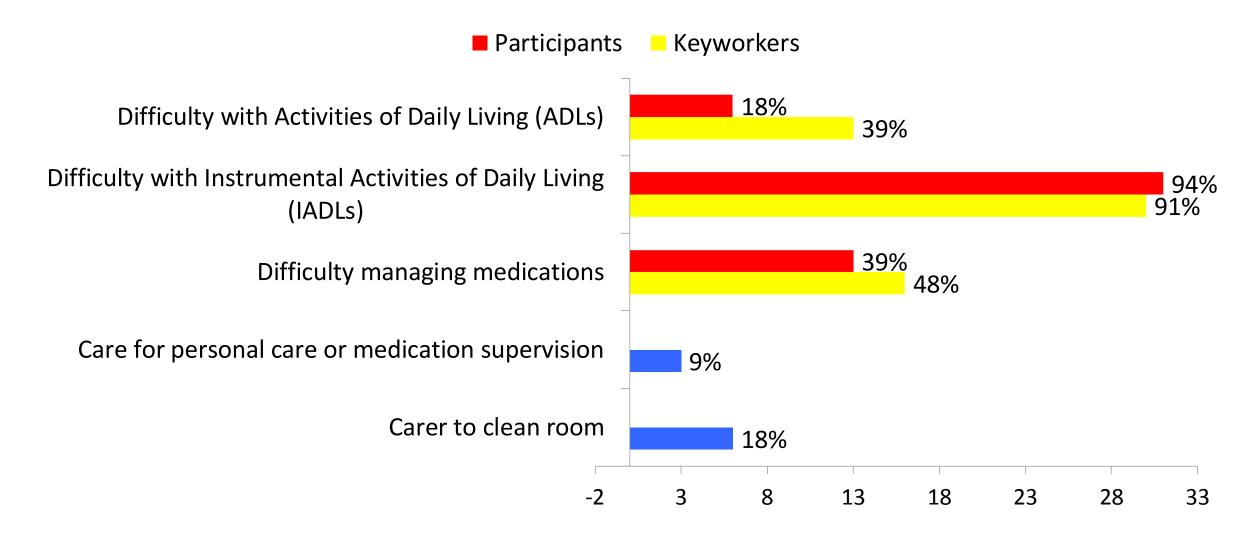
Multimorbidity

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Functional impairments



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Findings

- High frequency & premature onset of frailty and geriatric conditions
- Frailty scores comparable to 89-year-olds in the general population
- Multimorbidity far exceeded the average for even the oldest people in the general population
- Despite in-reaching clinical services, many health needs were unmet, and functional assistance often lacking





Strengths and limitations

- High response rate: Established feasibility of holistic CGA-type evaluations
- Robust tools to assess for frailty and geriatric conditions
- Fried frailty phenotype comparable to population
- Collateral information for LTCs and functional impairments

- Small sample size
 - Couldn't analyse associations between certain characteristics and geriatric conditions, or estimate wider prevalence
- Not possible to generalise to other hostels
- However:
 - All had to have a local connection to the borough
 - Other evidence that this level of complexity is rife in other hostels/boroughs

Conclusions

- People with a history of rough sleeping often have very early onset frailty, long term chronic ill health and high support needs
- Health needs of people aged between 38-74 within a hostel environment were shown to be equivalent or worse than people in their 80's or 90's
- The burden of support for very unwell people often lies with frontline hostel and outreach staff, who struggle to get adequate social services support



Recommendations:

What's needed to address the inequity in care for people experiencing homelessness

Clinical practice

- Health, Homelessness and social services sectors a multidisciplinary approach
 - Proactively think about frailty / geriatric syndromes incorporate into clinical assessments and interventions
 - Accurate functional assessments (needs may fluctuate) to help facilitate appropriate social care support
 - Consider how to support with medication supervision
 - Consideration of how to address poor nutrition, incontinence, poor vision
 - Recognising burden of hostel staff
 - Need for clinical in-reach into hostels (GP, nurses) supported by wider MDT (Palliative care, Elderly care, therapists)

Research

How best to adapt the principals of CGA to this population

Policy

- A national and local integrated homelessness strategy (including health, social care, public health & housing
- Need for alternative places of care with more wraparound support
- Choice in place of care, and care in place of choice



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Listen to and involve people with lived experience

With thanks to:

Staff and residents working in the London Hostel

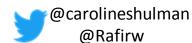
Pathway: Dr Nigel Hewett

Marie Curie Palliative Care Research Department, UCL: Dr Briony Hudson,

Dr Megan Armstrong

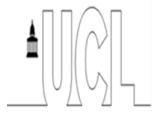
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Useful Resources

Homeless Link to find out about homeless hostels and day centers in your area http://www.homeless.org.uk

British Geriatrics Society website for "Fit for Frailty" and "Comprehensive Geriatric Assessment toolkit" http://www.bgs.org.uk

London Housing Foundation Atlas to identify homeless services https://lhf.org.uk/atlas/

Advocating for homeless people around GP registration https://www.healthylondon.org/homeless/healthcare-cards





Reporting a rough sleeper: http://www.streetlink.org.uk

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