Frailty and the value of a human in Covid times (Dawn Goodwin, Clifford Shelton, Kate Weiner)

At the outset of the COVID-19 pandemic in the UK, the National Institute for Health and Care Excellence (NICE) produced a rapid guideline (2020) for managing critical care in adults that made frailty pivotal to assessments. The stated purpose of the guideline was 'to maximise the safety of patients who need critical care during the COVID-19 pandemic ...[and] enable services to make the best use of NHS resources'. Consequently, *frailty* became key to both avoiding interventions deemed likely to cause more harm than good, and, implicitly, to rationing access to care in the context of concerns about the NHS being overwhelmed (Lewis et al, 2020).

What is frailty, how did it become a central construct for making care assessments during the pandemic, and what are the implications of the increasing currency of this concept within healthcare? In this chapter we will try to address these questions drawing on published academic research, recent media, government reports and excerpts from ethnographic research undertaken on hospital wards before the onset of the pandemic (Shelton 2019).

While frailty has long existed in the vernacular, over the last two decades it has emerged as a clinical object around which healthcare is increasingly being organised. Clinical conceptualisations of frailty have consolidated around a phenotype (Fried *et al.*, 2001), and a deficit accumulation model (Rockwood *et al.*, 1999). The phenotype depicts frailty as a syndrome identifiable by key characteristics such as weight loss, weakness, and slow walking speed. The deficit accumulation model has had various incarnations, first as an index of the number of deficits, to more recently the Clinical Frailty Scale (CFS), a more qualitative approach that positions people on a functional continuum, with assessments aided by descriptors and illustrations (see figure 1).

Efforts to define frailty have transformed it from something which 'we know when we see' into something that can be measured, evaluated, and institutionalised by incorporation into policies, checklists and specific frailty clinics (Nicholson, Gordon and Tinker, 2017; Tomkow, 2020). As a clinical concept, frailty is used increasingly for planning and making prognoses, far beyond its origins in geriatric medicine. For example, in England in 2017/18, routine frailty screening for patients aged 65 and over was contractually introduced in general practice (NHS, no date), resulting in individuals being automatically categorised as frail, prefrail or robust according to electronic health data (Tomkow, 2020).

Social science studies have repeatedly problematised the language of frailty, showing the term to have multiple and evolving meanings (Tomkow, 2020) but nevertheless to be consistently understood by those labelled as frail as pejorative, stigmatising and disempowering (Grenier, 2007; Shaw *et al.*, 2018; Tomkow, 2020). Concerns are now being raised about the unintended consequences of structuring care around a concept with such negative connotations amongst patients and the public (Nicholson et al., 2017; Pickard *et al.*, 2019; Tomkow, 2020).

Some have suggested that it is the way in which frailty is understood and operationalised in general healthcare settings that is problematic. Research sponsored by Age UK and British Geriatric Society (BritainThinks, 2015: 3) identified that specialists in older people's care conceive frailty as 'a spectrum of physical and mental health states' on which people can move up and down, as part of a more comprehensive assessment. However, other clinicians and older people themselves understand frailty as a significant and irreversible loss of independence, and clinicians use it as a shorthand for a person with significant needs (Shaw *et al.*, 2018). In short, it is suggested that those who are not specialists in elderly care conceive frailty in a way that mixes a clinical understanding with the negative connotations of lay understandings (Cluley *et al.*, 2020). Given the enthusiasm for incorporating assessments of frailty into routine care, this raises questions about whether these assessments lack appropriate nuance, and how such understandings inform care.

Here we would like to contrast Cliff's detailed observations of how frailty might come to be invoked in clinical decisions with reports of how it has been operationalised during the pandemic. Cliff's ethnography explored anaesthesia for hip fracture repair. In this extract, two clinicians' attempt to balance the risks of a challenging case. The patient Quintin (a pseudonym) is 76 years old and has heart failure, diabetes, chronic kidney disease, hypertension and is clinically obese. He is on the cardiology ward because of a suspected heart attack, thought to have caused a fall, leading to his broken hip. During his short hospital stay he has become confused and increasingly breathless. If he doesn't have an operation to fix the fracture, he is unlikely to survive because of the effects of immobility, pain and inflammation. However, an operation also carries significant risk.

Briar, the consultant anaesthetist, steps back from the bed a couple of paces and talks to me, quietly - 'He's a bit wheezy... he doesn't pass the end of the bed test, if you know what I mean?' We head to the desk and Briar flicks through Quintin's notes, pointing out some diagnoses and test results. He summarises his train of thought: 'It's a difficult one... My gut feeling is that he might not survive an anaesthetic... But if we leave him, he's just going to get pneumonia and die anyway....'

Briar consults with the intensive care consultant Amos. They go to see Quintin together, and Amos makes some brief examinations. They go to the desk. A cardiologist is sat there, reviewing Quintin's notes. He hands them to Amos who flicks through them and points to an arterial blood gas result. 'He looks like death warmed-up.' Briar comments on the arterial blood gas result, 'he's got type-two respiratory failure.' The cardiologist makes a suggestion — 'he could have a spinal [anaesthetic]? That doesn't affect respiration.' 'More than you think,' replies Briar 'the diaphragm keeps working, but the intercostals...' Amos joins in — 'and lying them flat... They look like death warmed-up, then you shake them up a bit, reaming [cutting] bone, transfusing, the rest...'

Briar draws the discussion to a conclusion - 'We could palliate him? What do you think Amos?' 'I think he'll die in theatre', Amos replies, 'he's frail, using a frame and chair at home, diabetic, heart failure, renal failure, morbidly obese with [obstructive sleep apnoea]. I can't see you making any of that any better.' 'I thought you'd say that,'

replies Briar. He didn't want to take Quintin to theatre if it would commit him to an intensive care stay that he wouldn't survive.

Quintin didn't have an operation, and sadly died two days following this encounter.

In this extract, two expert clinicians have a dilemma – do they take Quintin to theatre and risk him dying on the operating table or shortly afterwards? Or do they decline the operation knowing that he is unlikely to recover without it? In arriving at a decision, they make use of the concept of 'frailty'. But what do they mean by this? Here, no formal tools are used, and frailty is not quantified. Emphasis is placed on 'the end of the bed test', a term that suggests that clinical assessment is based on how the patient looks 'from the end of the bed'. Yet this term belies the tacit and nuanced assessment of the clinicians based on their clinical knowledge and extensive experience.

Briar and Amos are not concerned with frailty in a general sense. Indeed, most patients with hip fracture are classed as frail. Instead, they are concerned with the patient's capacity to withstand stressors that they know they will apply in the course of their work, such as circulation and breathing changes induced by anaesthetic drugs, and the ongoing stresses of a post-operative critical care admission. In Quintin's case, the clinicians articulate their concerns with reference to his breathlessness and his pallor – implying respiratory and circulatory vulnerability to the stresses of anaesthesia and surgery.

Is an insufficiently 'clinical' conception of frailty the problem, with abbreviated frailty assessments lacking nuance and assuming a pessimistic trajectory? We suggest that frailty is likely to be understood differentially, driven by the specific needs of a particular healthcare setting and sufficient for the purposes at hand. For geriatric medicine, frailty assessments are part of a more comprehensive assessment and extensively integrated into care planning. In general practice, they are computer-generated scores to target preventative interventions, and in anaesthesia and critical care, frailty assessments are specific to the particular demands of surgery and anaesthesia.

So what does this mean for how frailty has been operationalised during the pandemic? Though the development of a frailty-based 'triage tool' was stood down in March 2020, when initial concerns about NHS capacity were allayed (NHS, 2020), accusations persist that frailty was used as a blunt tool for rationing. Based on investigative journalism, Arbuthnott et al (2020) claim than in anticipation of a high volume of hospital admissions during the first wave of the pandemic, elderly and frail people were excluded from hospital and intensive care. They claim that GPs were required to identify frail patients who should not be admitted to hospital if they contracted COVID-19, ambulance and admissions teams were instructed to exclude older people, and care homes were unable to have unwell residents admitted to hospital. These accusations have been strongly rebutted by the NHS, which has stated that even at the height of the first wave, there was no shortage of intensive care beds and that staff were instructed that 'no patient who could benefit from treatment should be denied it' (NHS, 2020). This statement aligns with the sentiment of the NICE rapid guidance (2020) which advises that the CFS should be used as part of 'a holistic assessment' and does not preclude the admission of frailer people to critical care (See figure 2). However, concerns have been substantiated that, at the beginning of the pandemic, as part

of advanced care planning, 'do not attempt cardio-pulmonary resuscitation' (DNACPR) decisions were made without consulting people, families or carers, or were applied in a blanket fashion to residents of care homes or frail older patients on GP lists (Care Quality Commission, 2021).

This seems a long way from the nuanced balancing of risks for an individual patient presented in our ethnographic data. Yet, in the absence of detailed ethnographic work, we do not know whether and how frailty assessments played into care decisions made for older patients with COVID-19, the degree to which these involved the informal, tacit and localised assessments of experienced clinicians or formal codified frailty scores, or how decisive such scores proved to be in treatment decisions.

In our view, the problematic aspects of frailty do not only arise from lay conceptions or lack of understanding by some clinicians. Problems arise with the clinical conception of frailty when used at a policy level to structure care pathways. Grenier (2007) argues that in a culture of fiscal restraint, the medical construction of frailty, focusing on functional notions of health, 'is used to ration treatment to those at greatest risk, which places older people in competition for scarce resources'. Yet, she argues, this 'obscures the way that frailty is structured by cumulative disadvantage'. Tomkow (2020: 706) similarly identifies that 'frailty proffers to identify people most at risk of utilising costly emergency health services'. These concerns appear prescient given that in the COVID-19 pandemic, frailty was used to assess older people's risk of adverse outcomes and, arguably, to ration access to critical care (NICE, 2020). This has prompted further concerns about the potential for this move to reinforce socio-economic inequalities in health (Lewis *et al.*, 2021).

In summary, healthcare professionals understand frailty in a way which is relevant to their speciality, the clinical context, and particular patient needs. As in Quintin's case, it may be appropriate to acknowledge frailty when deciding on an individual's treatment and care. But we should be wary of the implication that only 'lay' understandings of frailty are problematic. Clinical understandings are multiple and can be equally problematic as they shift focus away from structural inequalities, and, when used at a policy level, have the potential for large-scale discrimination. Many questions remain about the use of frailty assessments during the pandemic, including the use of frailty scales, and ultimately whether the concept of frailty has served or hindered patients in receiving appropriate treatment and care.

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Clinical Frailty Scale*



I Very Fit — People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



2 Well — People who have **no active disease** symptoms but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.



3 Managing Well — People whose medical problems are well controlled, but are not regularly active beyond routine walking.



4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.



5 Mildly Frail — These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.



- 7 Severely Frail Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within \sim 6 months).
- 8 Very Severely Frail Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



9. Terminally III - Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.</p>

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.

- * 1. Canadian Study on Health & Aging, Revised 2008, 2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.
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Figure 2

