RE-FRAMING HOW FRAILTY IS IDENTIFIED, DIAGNOSED AND MANAGED AMONG PEOPLE LIVING WITH HIV: EXPLORATORY PERSPECTIVES FROM **CLINICAL PRACTICE**

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number:

Background

Definitions and guidance traditionally position frailty as an 'age-related' or 'geriatric' construct associated heavily with functional or mobility impairment. People living with HIV can present with frailty at an earlier age and via less typical routes than the general public.^{1–3} Prevalence of disability in this population is also high.4

Despite more than 50% of people living with HIV in the UK estimated to be aged ≥50 by 2028,⁵ there is still no consensus on how UK healthcare practitioners should identify, diagnose and manage frailty in this population. Frailty tools exist but are either not sufficiently validated or labelled as 'inappropriate' in the context of HIV.^{2,6}

We explored the perspectives and experiences of senior practitioners to understand what works in practice and what else needs to happen to improve models of care across the field.

Materials and methods

Semi-structured interviews were conducted virtually with six healthcare professionals with expertise across different disciplines of HIV care.

Interviews were audio-recorded, transcribed and thematically analysed

1. explore current practice

- 2. identify key barriers
- 3. curate suggestions to make identification, assessment and management of frailty easier in practice.

Results

The interviews highlighted three core barriers to identifying, diagnosing and managing frailty in HIV:

- 1. lack of awareness and understanding within the field
- 2. lack of optimised tools and processes for frailty/pre-frailty in
- 3. lack of care coordination, integration and resource.

Approaches varied across centres but increasing and improving identification of those living with HIV and at risk of frailty was seen as the greatest priority by all. Suggested actions were compiled and a new 'FRAIL in HIV' acronym co-developed to support staff in looking beyond a 'FRAIL' scale to consider implications in the wider context of HIV.

Introducing the 'F.R.A.I.L. in H.I.V.' framework

The 'F.R.A.I.L. in H.I.V' framework has been created to provide a more holistic and memorable way of identifying those who may be at risk of frailty across HIV services. It is adapted from the EACS 2021 algorithm for frailty screening.

It encourages clinicians to look beyond physical signs of frailty, such as those outlined by the F.R.A.I.L. scale.

It also considers other risk factors in the context of HIV.

- Fatigue Tiredness or exhaustion most or all of the time?
- Resistance i.e., Strength Unable to climb stairs unaided? Slow sit-to-stand?
- Ambulation i.e., Mobility Unable to walk unaided? Slow walking speed? Falls?
- Illness More than five co-morbidities? Or multiple complex illnesses?
- Loss of weight Unexplained weight loss?
- Home Any issues happening at home? (Social, Financial, Support issues?)
- Impairment Any other physical or mental health challenge or limitation in daily functioning? Any new or change in impairment? Any pre-existing disability? (Body function/structure inc. Symptoms, Incontinence, Pain, Memory, Cognition, Other issues?)
- Vulnerability Anything else putting them at risk or making them less able to self-care or live well? (Polypharmacy/Side-effects, Disability, Mental health, Mood/Stress, Stigma, Alcohol/Drug misuse, Menopause, Uncontrolled HIV, Other worries?)

The 'F.R.A.I.L. in H.I.V.' framework can act as a simple educational tool to help all staff play a part and help reposition the concept of frailty risk. But it could also provide a useful framework for screening as outlined in our illustrative 'F.R.A.I.L in H.I.V.' framework. This example builds off the 'FRAIL scale'; however, the H.I.V. component could be used to frame and support any subjective and/or objective screen for frailty that your service chooses to use.

IDENTIFY FRAILTY RISK FACTOR OR VULNERABILITY IN PEOPLE LIVING WITH HIV

[At every contact]

nd F.R.A.I.L. text of H.I.V.

- Older age (e.g. over 50)
- Multiple/complex co-morbidities
- HIV diagnosed pre-1996
- Uncontrolled HIV/AIDS defining diagnosis
- Post-menopause
- Polypharmacy
- · Other risk factor or vulnerability (e.g. Falls; Mobility or selfcare issues; Disability, Mental health, Memory or cognitive concerns; Substance misuse; Social concerns or Isolation)

[At first contact and at least once a year]

With optional physical performance tests:

5xSTS [>14 secs=higher risk of falls]

SCREEN FOR FRAILTY (AND POSSIBLE VULNERABILITIES)

SIGNS OF FRAILTY PRESENT? [YES/NO]

- Fatigue Tiredness or exhaustion most or all of the time?
- Resistance (Strength) Unable to climb stairs unaided? Slow sit-to-stand? Ambulation (Mobility) Unable to walk unaided? Slow walking speed? Falls? Illness More than five co-morbidities? Or multiple complex illnesses?
- Loss of weight Unexplained weight loss?
- **HOW TO MEASURE...** With frailty scales:*
- FRAIL scale [1–2=pre-frail; 3+=frail]
 CFS [4=living with very mild
- frailty; 5+=frail]
- TUG [≥12 secs=higher risk of falls] Gait speed [≤0.8 metres/second=frail†]
- SPPB [<10/12=frail]
- ...AND/OR OTHER VULNERABILITIES

ADDITIONAL RISK FACTORS OR VULNERABILITIES PRESENT? [YES/NO]

- Home Any issues happening at home? (Social, financial, or support issues?)

 Impairment Any other physical or mental health challenge or limitation in daily functioning? Any new or change in impairment? Any pre-existing disability?
- (Body function/structure inc. Symptoms, Incontinence, Pain, Memory/Cognition, Other issues?)

 Vulnerability Anything else putting them at risk or making them less able to self-care or live well? (Polypharmacy/Side-effects, Disability, Mental health, Mood/Stress, Stigma, Alcohol/ Drug misuse, Menopause, Uncontrolled HIV, Other worries?)

HOW TO MEASURE... With questioning: Activities of daily living

- WHODAS [any problems]

SIGNS OF FRAILTY: N >1 VULNERABILITY: N

USUAL FOLLOW UP CARE

• Diet, exercise + healthy living recommendations

KEY
CFS = Clinical Frailty Scale; TUG = Timed-Up-and-Go; 5 x STS = 5 x
Sit-to-Stand; EQ-5D-5L = EuroQol 5-Dimension, 5-Level health-related
quality of life questionnaire; PHQ-9 = Patient Health Questionnaire;
BDI-II = Beck Depression Inventory-II; PTSD = Post-Traumatic Stress

sorder; PCL-5 = PTSD Checklist for DSM-5; 3-MAPSS-SF = 3-iten

Multi-factorial Assessment of Perceived Social Support; ADL = Activities of daily living; SF-36 = Short Form 36 Health Survey Questionnaire; HIS = HIV Symptom Index; BPI-SF = Brief Pain Inventory - Short Form;

- Offer support as needed

SIGNS OF FRAILTY: N >1 VULNERABILITY: Y

EXTRA CARE

- · Refer to relevant service for extra

Plus, usual follow up care

NO FRAILTY BUT HAS VULNERABILITIES

FRAILTY/PRE-FRAILTY CONFIRMED

CARE COORDINATION

• Establish management plan with

SIGNS OF FRAILTY: Y >1 VULNERABILITY: Y OR N

ASSESSMENT TO CONFIRM FRAILTY AND IDENTIFY DRIVING FACTORS...

Consider further test of frailty such as: • Fried Frailty Phenotype

...AND OTHER RELEVANT FACTORS

FOR ALL:

- OLYPHARMACY > Medication ("brown bag") review
- MOBILITY & FUNCTION > ADL or SF-36
- (if not sufficiently covered already)
- COGNITION > MoCA
- MOOD > (Depression) PHQ-9 or BDI-II; (PTSD) PCL-5 SOCIAL /FINANCIAL > 3-MAPSS-SF; Safe-guarding?
- SYMPTOM BURDEN > HSI; (Pain) BPI-SF • NUTRITION/WEIGHT > RNS-H
- Other concerns, e.g., incontinence, substance abuse etc

Not frail but still at risk?

Regardless of the outcome of the frailty screen, any issues or vulnerabilities identified by the 'H.I.V.' acronym or equivalent questioning should be noted and explored further, as soon as possible, by a relevant service. Providing additional care to limit or manage ongoing vulnerabilities will help optimise an individual's ability to age well and minimise the risk of frailty developing over time.

Summary and conclusions

Addressing frailty in people living with HIV requires a more holistic approach than traditional models of care, and taking small actions now was seen as better than waiting for a unified approach. Our collated guidance hopes to reframe frailty in the context of HIV and address existing barriers to screening, diagnosis and management in clinical practice.

GILEAD HIV STANDARDS SUPPORT TEAM

References

- 1. Jones HT et al. Curr Opin Infect Dis 2022;35(1):21-30.
- 2. Levett T, Wright J. Sex Transm Infect 2017; 93:476-477. 3. Levett T et al. J Am Geriatr Soc 2016;64(5):1006-14. 4. Brown DA, et al. PLoSOne 2022;17(5): e0267271.
- 5. Yin Z et al. In: British HIV Association, vol. 18. HIV Medicine; 2017.
- 6. Brothers TD, Rockwood K. Eur Geriatr Med 2019;10(2):219–226.
 - 7. EACS Guidelines Version 11, 2021 (p110) Available at: https://www.eacsociety.org/media/final2021eacsguidelinesv11.0_oct2021.pdf

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