

Falls Prevention

The Leeds Approach

Sharon Hughes

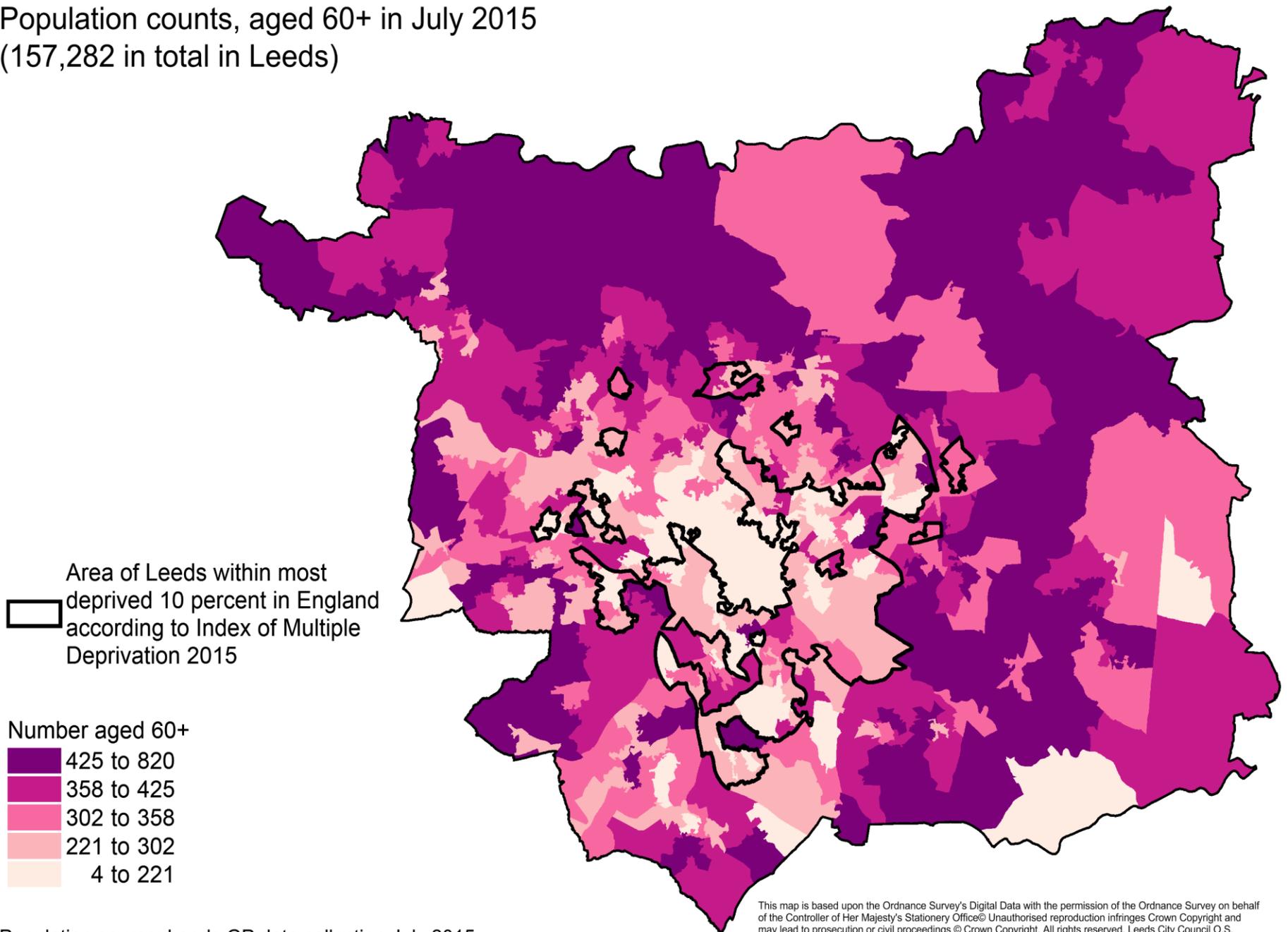
Falls Project Manager

Office of the Director of Public Health

Leeds City Council



Population counts, aged 60+ in July 2015 (157,282 in total in Leeds)



Population source: Leeds GP data collection July 2015

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Income Deprivation Affecting Older People (IDAOP, IMD2015)

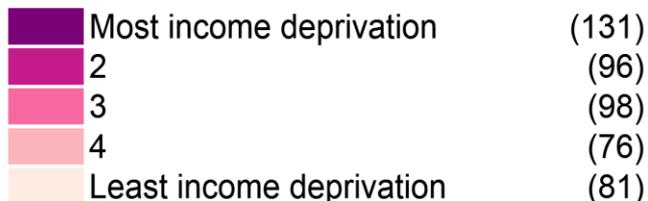
1 LSOA is ranked 84th in England (out of 32,844)

7 others are inside the top 500.

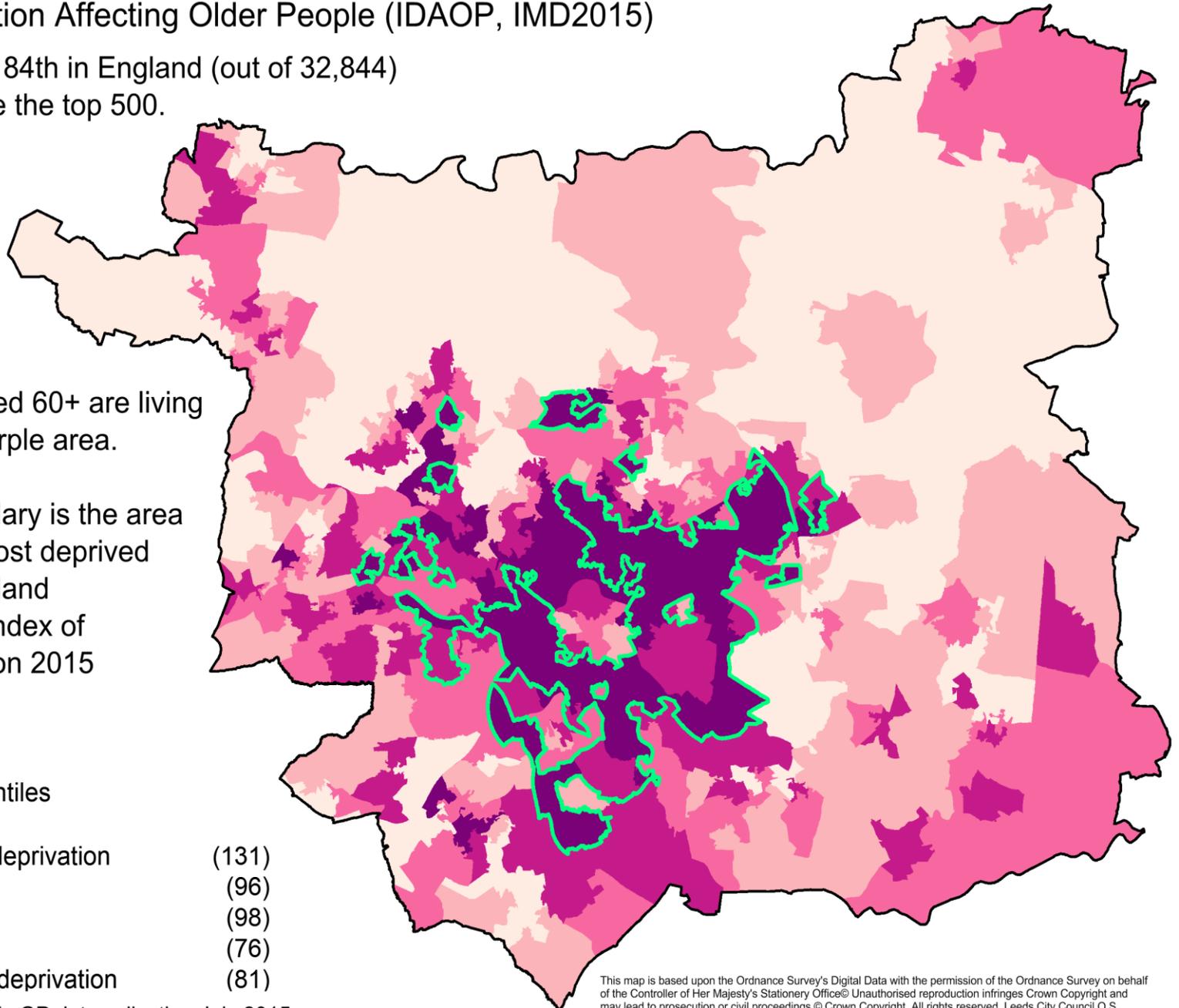
31,376 people aged 60+ are living inside the dark purple area.

Light green boundary is the area of Leeds within most deprived 10 percent in England according to the Index of Multiple Deprivation 2015

IDAOP English quintiles



Population source: Leeds GP data collection July 2015

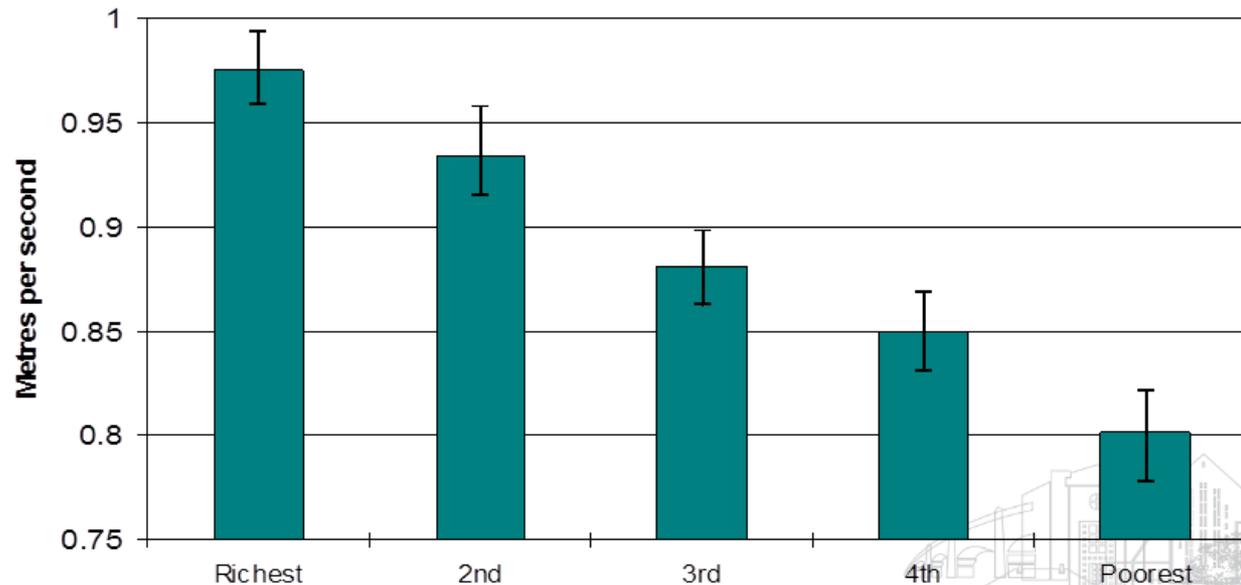


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Inequalities in Leeds

Life expectancy - 10.8 years lower for men and 8.5 years lower for women in the most deprived areas of Leeds than in the least deprived areas. (PHE 2015).

Mean walking speed and wealth, people aged 60+



The Falls Picture in Leeds

Age standardised rate of hospital admissions due to falls (aged over 65)

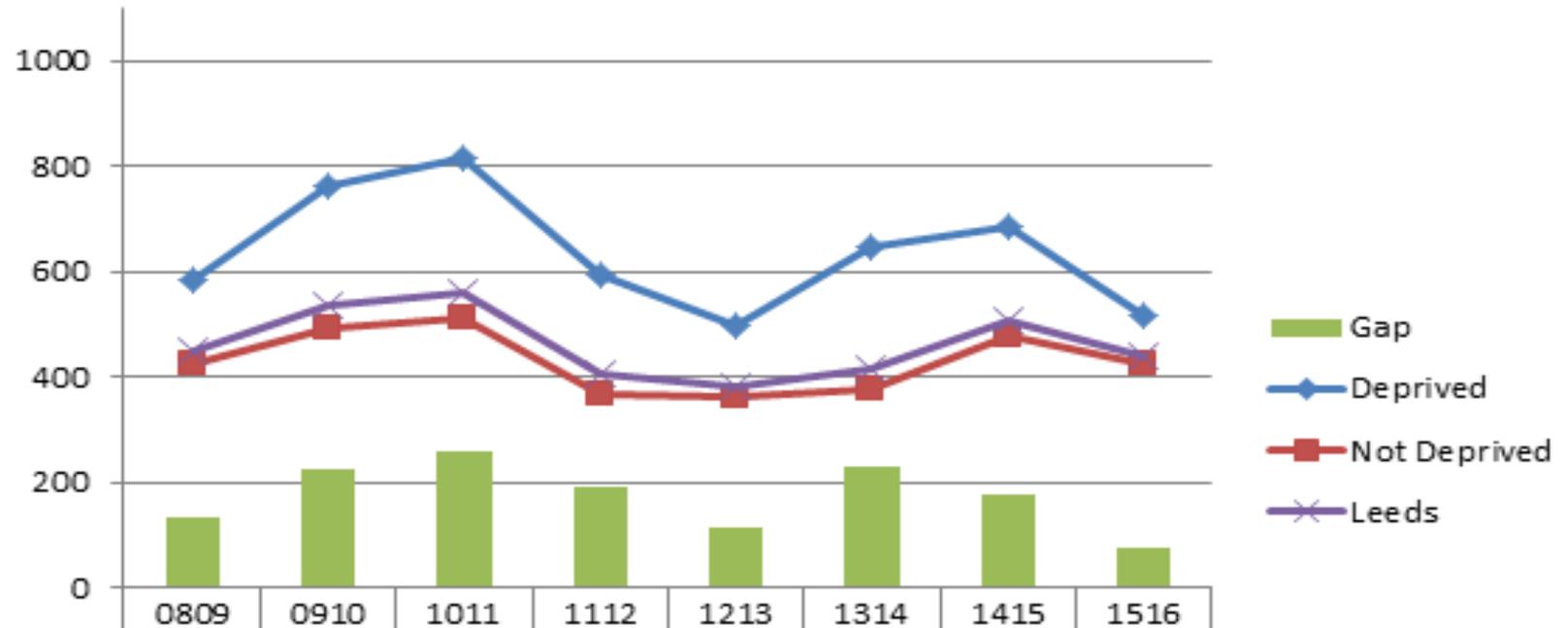
- England – 2125
- Yorkshire & Humber – 2041
- Leeds – 2382

Source: Public Health Outcomes Framework October 2015

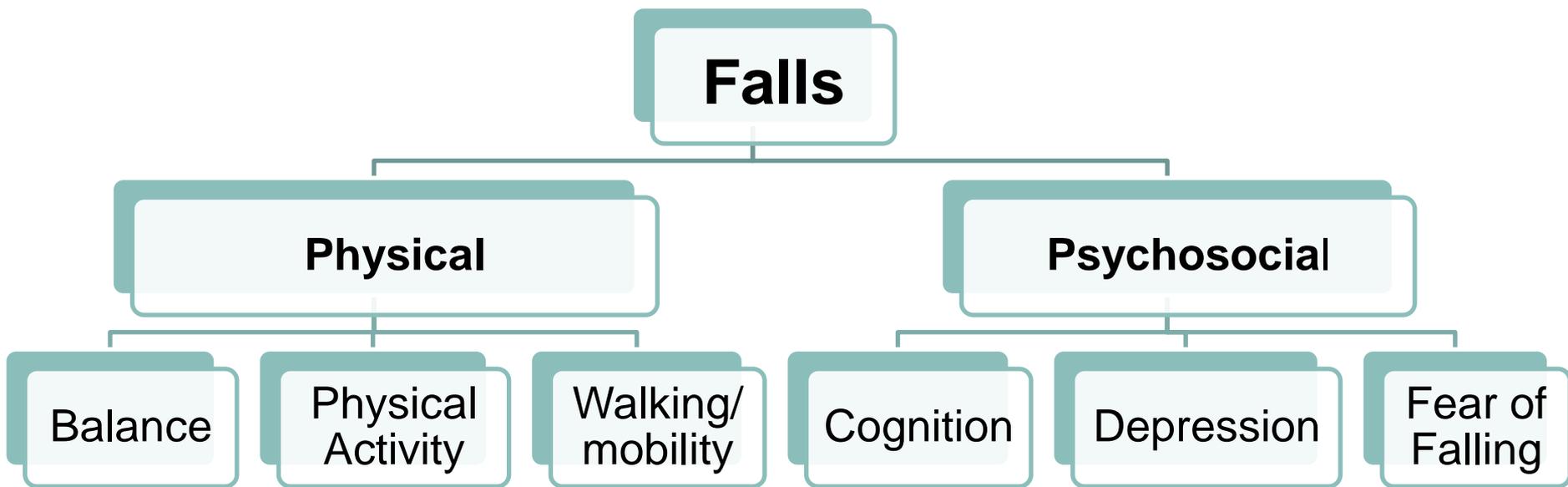


Hip Fracture Rates

Persons 65+ admitted for Fractured neck of femur : Per 100 000



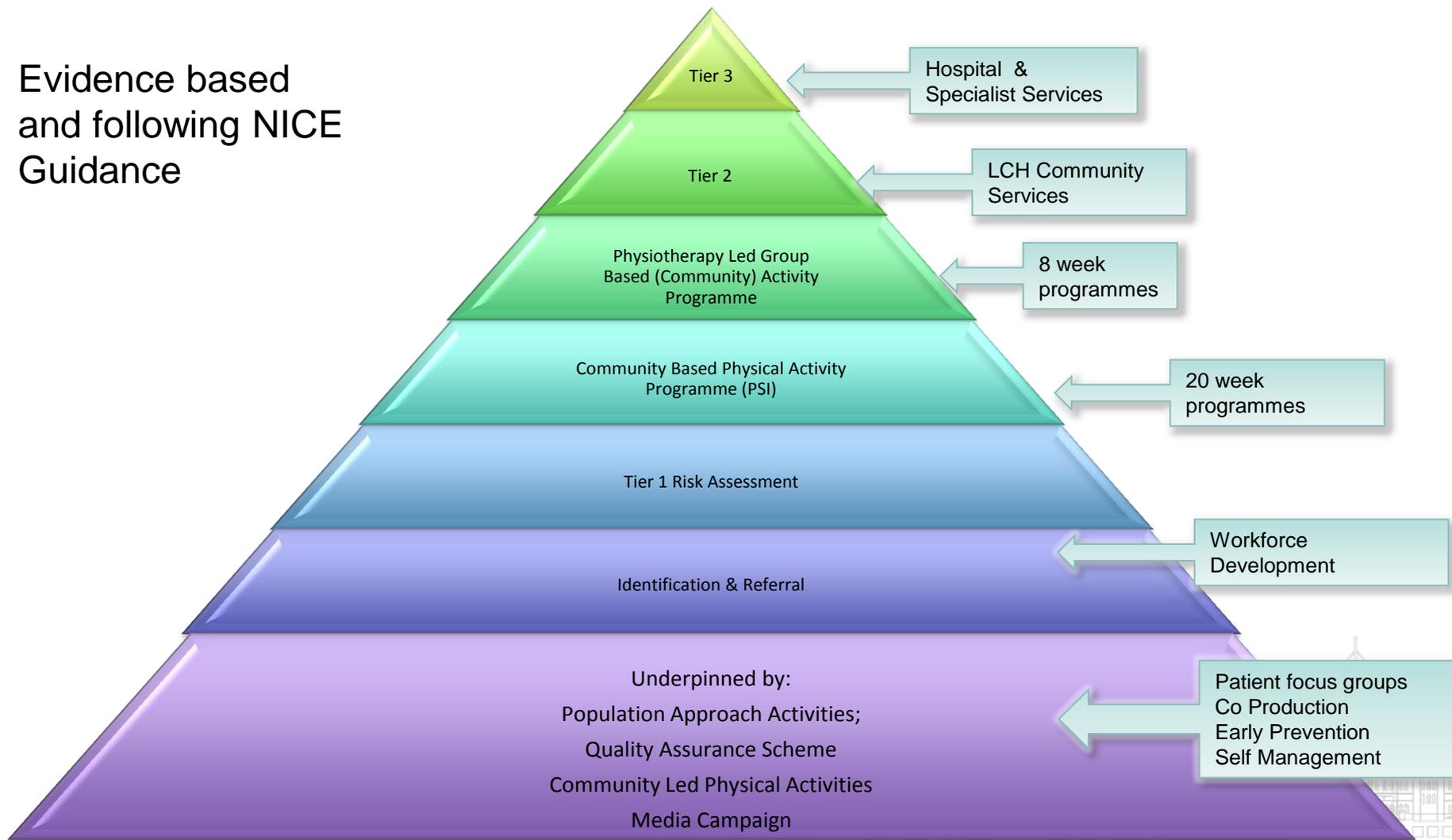
Gap	134	227	257	191	114	230	180	76
Deprived	586	763	816	595	498	647	687	516
Not Deprived	425	492	510	370	364	377	477	425
Leeds	452	536	558	404	384	417	508	440



Falls are multifactorial in nature, however modifiable risk factors that predispose an individual to fall have been identified which present opportunities to implement interventions designed to reduce falls and improve successful aging (Rubenstein and Josephson, 2002).

The Approach

Evidence based
and following NICE
Guidance



Campaign



www.leeds.gov.uk/fallproof



Leeds Health and Wellbeing Board

Quality Assurance Scheme

“Make It Fall Proof” Award

- Accreditation scheme to assess and maintain quality in community exercise programmes suitable for older people.
- Build capacity within communities for low level exercise provision suitable for people at risk of falls including - Tia Chi, Zumba Gold, chair based, Extend, Yoga
- Coordination of community exercise provision, information on one website.
- Benefits of accreditation
 - Mentoring by PS instructors
 - Apply for small grant funding
 - PS instructors to refer new clients
 - Accredited providers will be advertised on the website
 - Low cost training
 - Newsletter



Make It Fall Proof Award

Home > Community Sport > Community Sessions and Events

COMMUNITY SESSIONS AND EVENTS

FILTERS
[Reset Filters](#)

SEARCH BY KEYWORD
falls

LOCATION

Distance (All) ▾
Categories ▾
DATE ▾

List View **Map View**

Relevance **Date**

Results (8)

FALLS PREVENTION - TAI CHI
Tue. 15 Nov 13:30 & 5 MORE
📍 All Saints Parish Hall

FALLS PREVENTION - CHAIR BASED EXERCISE
Tue. 1 Nov 14:00 & 7 MORE
📍 The Hub

FALLS PREVENTION - CHAIR BASED EXERCISE
Thu. 8 Dec 14:00 & 8 MORE
📍 The Hub

FALLS PREVENTION -

FALLS PREVENTION -

FALLS PREVENTION -

ive.leeds.gov.uk/communitysport/Pages/default.aspx



Postural Stability Classes

- PSI classes deliver the FaME programme, a four point plan to :
 - Improve balance and co-ordination
 - Increase functional capacity
 - Increase bone and muscle mass,
 - Increase confidence 'reduce fear of falling'
- **Delivered by**
- **A Postural Stability Instructor (PSI) – Level 4 exercise qualification which included FaME and Atago.**
- **FaME = Falls Management Exercise**
- **Atago which is a falls exercise programme which originated in New Zealand.**



PSI Classes



Current Referral Network



Outcomes

- Improved TUG scores
- Improvements in FESi scores
- Clients Improved Confidence
- Ability to get back up from floor
- Reduction in walking aid use

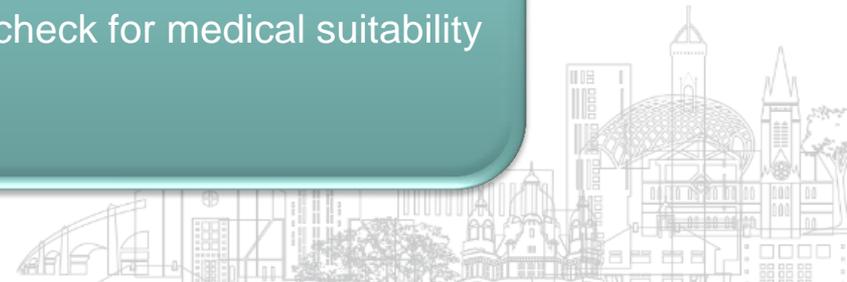
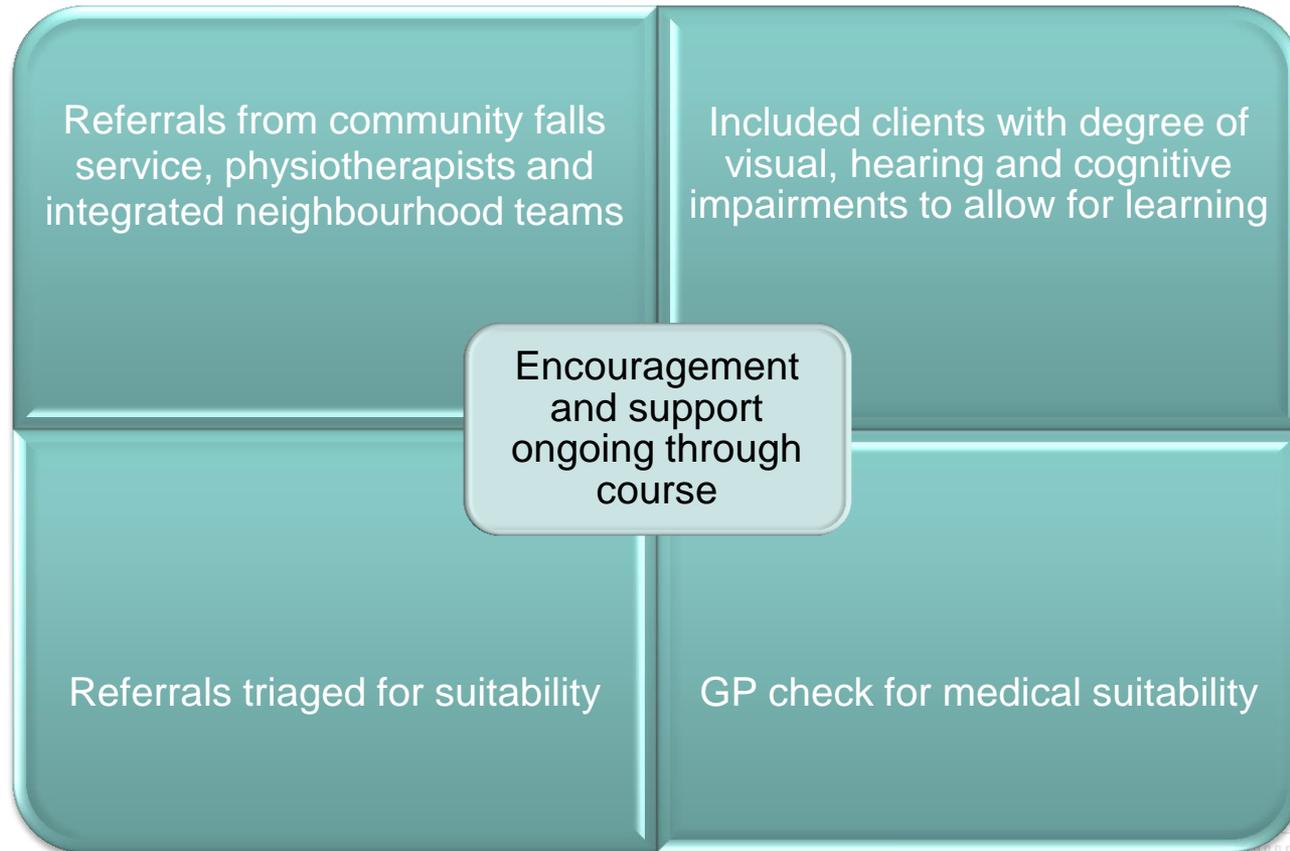


8 Week Physiotherapy Led Programmes

- Referrals through existing falls service
- De-escalate clients
- Creation of pathway for ongoing longer term support
- More patients, together at the same time in a group setting
- Falls prevention and management potentially more clinically efficient and productive
- Group programmes offer a progression from home-based exercise programmes
- Complement the falls prevention and management programmes provided by Falls Service.



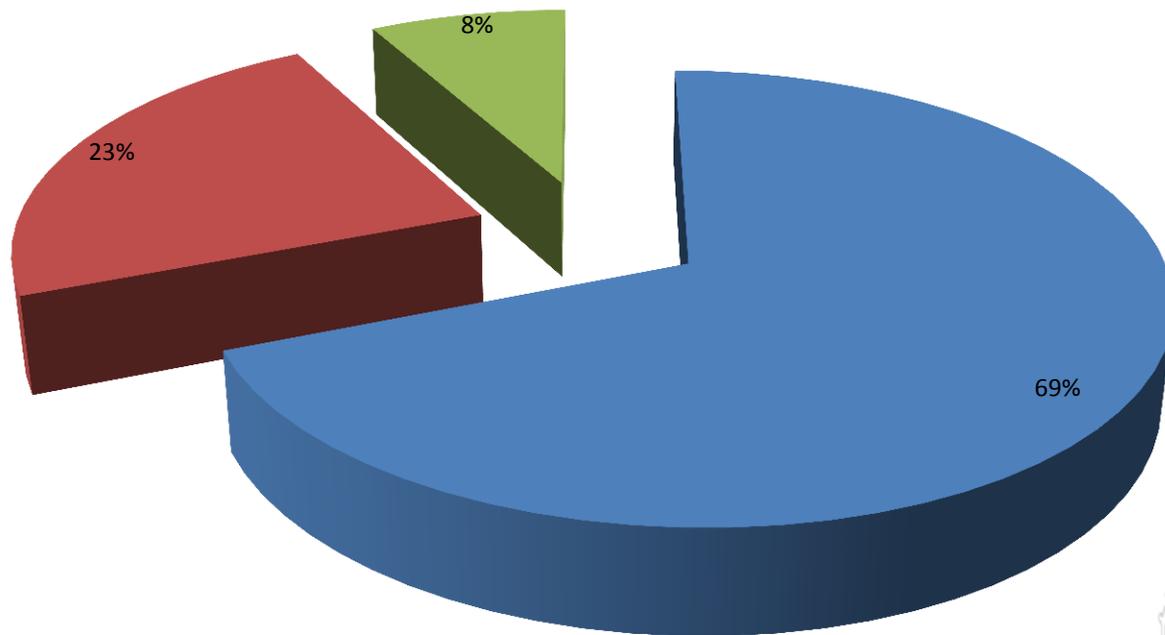
Structure and Content



Outcomes

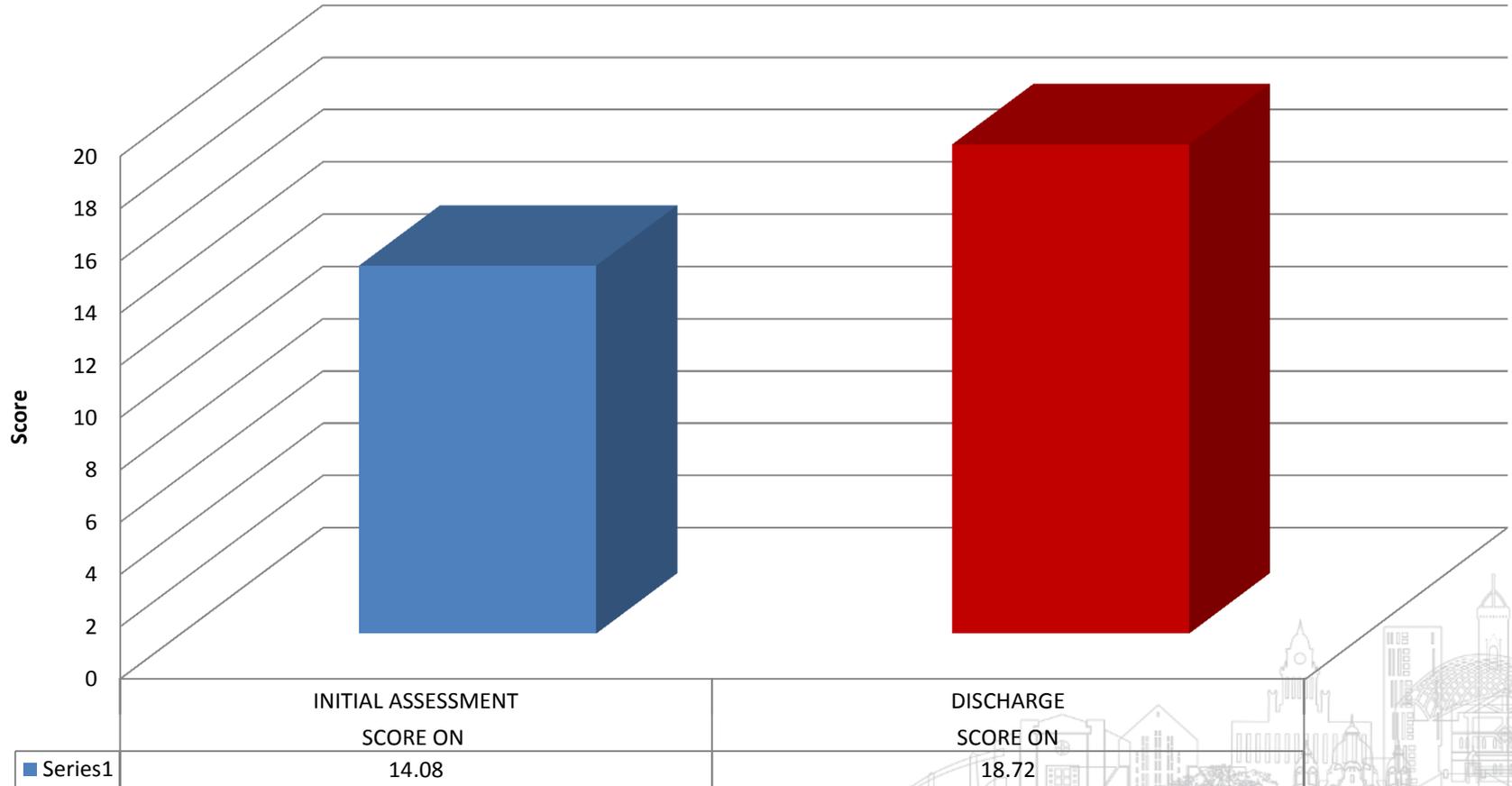
Short FESi Scores

■ Improved ■ Maintained ■ Declined



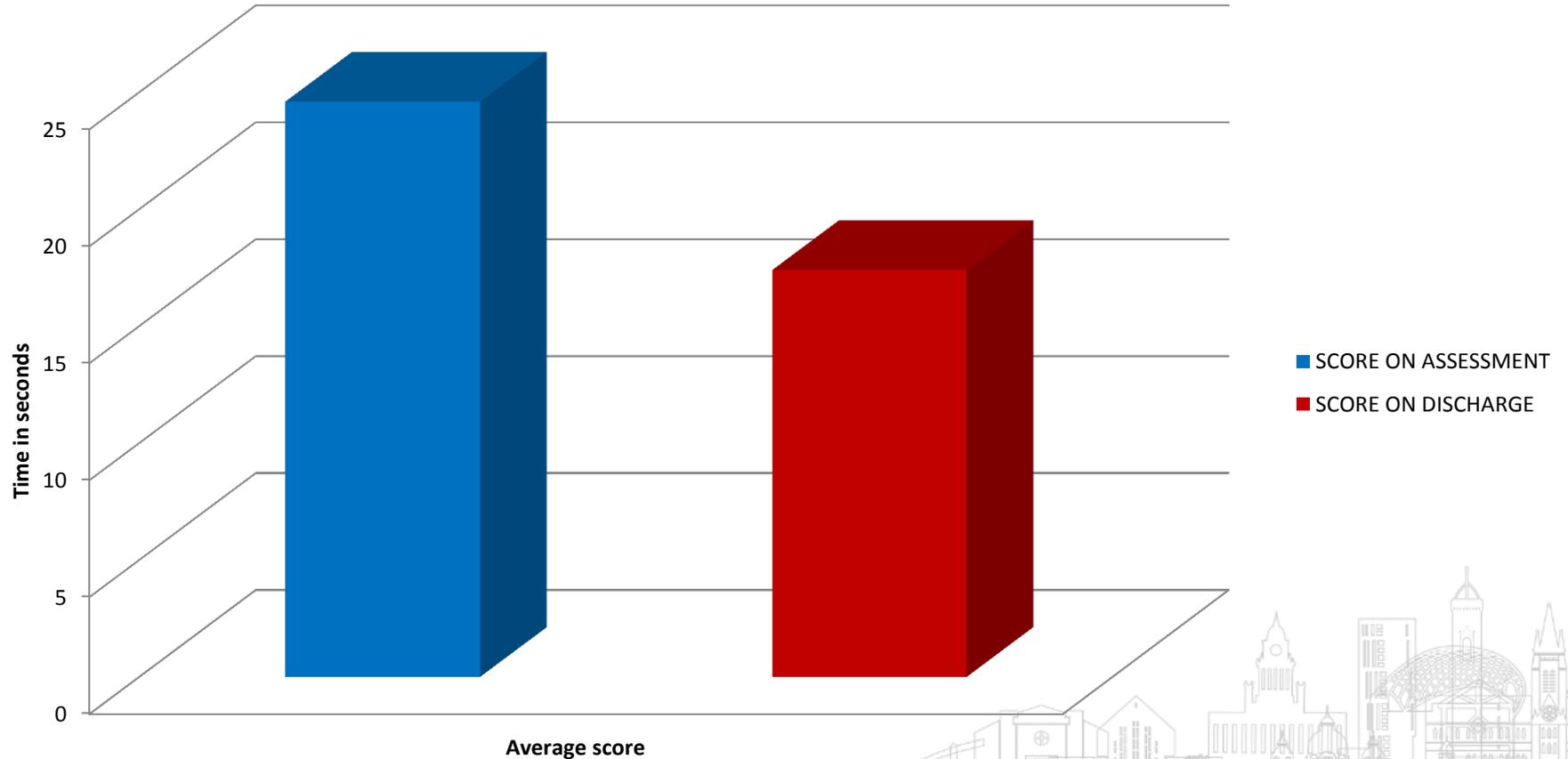
Outcomes

Tinetti Score



Outcomes

Timed Up And Go



Dancing in Time

Feasibility and acceptability of a contemporary dance programme to modify risk factors of falling in community dwelling older adults.



Low impact, open to all regardless of physical condition.
Improve or interpret music at a person centred level
Includes balance, flexibility, aerobic exercise and low level resistance

Dancing In Time

- The aim : examine the effect of an 8 week CD programme on both physical and psychosocial risk factor for falls (Lamb et al., 2005).
- Intervention acceptability and feasibility addressed by documenting:
 - Attrition and adherence rates,
 - Changes in physical and psychosocial risk factor for falls.
 - Focus groups to document participants' views of the intervention and affect.

Methodology

Invitation to 3 Dance 'Taster Sessions'

Recruitment- Informed Consent

T1- Baseline Data Collection

IPAQ & TUG

FES-I & GDS

8 weeks dance; 2 x 90 minutes a week

T2- Post Intervention Collection

Physical and Psychosocial Measures

Focus Group

(1) experiences of the dances programme (2) perceptions of how the dance had affected them (3) facilitators and barriers to participation in dance programme.

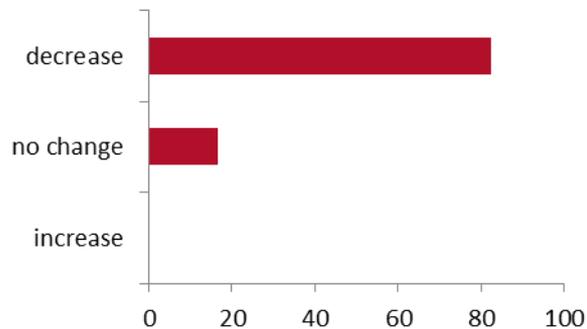
Behavioural Responses

TUG, GDS, FES-I

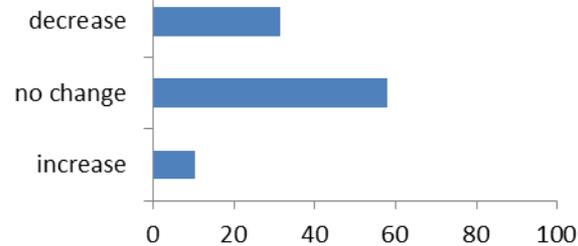
Behavioural Responses	T1	T2
Timed Up and Go (seconds)	10.1 (4.2)	7.7 (2.8)**
Geriatric Depression Scale (GDS)	3.2 (3.3)	2.1 (2.8)**
Falls Efficacy Scale (FES)	27.6 (9.9)	23.7 (8.6)**

** Indicates a significantly different mean score at T2 compared to T1.

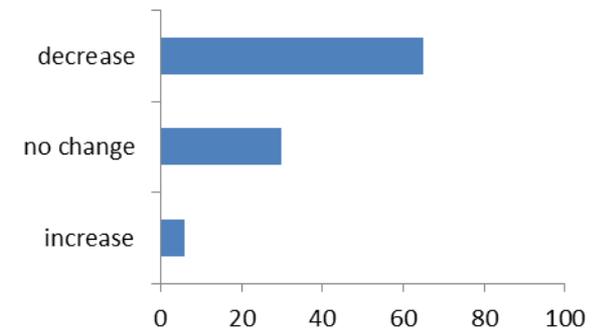
Timed Up and Go



Geriatric Depression Scale



Falls Efficacy Scale



The dance programme as a means of being active

- The need to be active
- A new way of exercising, different to current opportunities
- Exercising in a group supports attendance and enjoyment



Main Findings

- The attrition rate was 15%.
- There was an overall adherence rate of ~72% for all attendees.
- Increase in moderate and vigorous PA patterns.
- Decreases in the time taken to complete the TUG, fear of falling and depression.
- Dance Programme regarded the dance favourably, noting gains to overall health and well-being.

Positive effects on 'Physical' risk factors- Balance and Mobility

- The mean TUG score at T2, comparable to the lower end of the range for 60 to 69 year olds (Bohannon, 2006).
- 80% of participants showed an improvement (Noted in focus groups).
- TUG data suggest that CD could help improve balance, either direct or indirectly



Positive effects on 'Psychosocial' risk factors- Depression and Fear of Falling'

- Even with low baseline score, still significant improvement in mood, suggesting CD can also improve mental health. This was also noted in the focus groups.
- Fear of falling scores decreased by ~4 points, 65% of participants scored less T2 compared to T1.
- Additional physical activity or effects of dance on balance and muscle strength could have driven the significant decrease in fear of falling.
- Ways of reducing fear of falling is vital to not only prevent falls, but to also prevent frailty.

What Next?

- Testing using strength & balance in alternative activities
- Securing funding to extend provision
- Technological Developments
- Sustainability



Summary

- High % adherence
- Decreases in time spent sitting in the week
- Increase in moderate and vigorous physical activity patterns during the week
- Statistical significance in time taken to complete Time Up and Go
- Decreases in fear of falling
- Increases in confidence
- Increases in functional markers
- Reported improvements in mental wellbeing
- Increased levels of happiness
- Enjoyed the group nature

Thank You & Questions

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Office of the Director of Public Health
Leeds City Council



Leeds Health and Wellbeing Board