Healthy Ageing Research

Local context national impact

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The Healthy Ageing Research Family

University of Manchester Healthy Ageing Research Group

Manchester Institute for Collaborative Research on Ageing (MICRA)

National Institute for Health Research - Applied Research Collaboration (Healthy Ageing theme)

National Institute for Health Research - Older People and Frailty Policy Research Unit

https://arc-gm.nihr.ac.uk/

https://www.opfpru.nihr.ac.uk/

Aims and Scope

- NIHR Applied Research Collaborations (ARCs) support applied health & care research that responds to and meets needs of local populations & health & care systems.

- Further funding from
  - NIHR Healthy Ageing, Dementia & Frailty National Priority Area
  - Centre for Ageing Better
  - NHS:E
  - NIHR HS&DR and PHR Programmes
  - NIHR/Alzheimer's Society Dementia Capacity Building
  - Dunhill Medical Trust/NIHR/University of Manchester Healthy Ageing PhD Programme
  - Greater Sport
  - NHMRC

Aims and Scope

- **Healthy ageing**
  - enable people to live longer, healthier, fulfilling & socially connected lives in safe environments

Focus

- Develop evidence of what works
  - reduce risk of poor health & wellbeing
  - reduce morbidity & frailty in Greater Manchester,
  - align with Centre for Ageing Better & GM Population Health Plan
- Advance GM research capacity in Healthy Ageing
  - act as knowledge hub for stakeholders including older adults

DHSC Research Priorities

(Jan 2023)

- ## Early action to prevent poor health outcomes
  - Prevention, early diagnosis & appropriate intervention for people at increased risk of poor health to prevent excess deaths, improve population health, reduce disparities & decrease reliance on health and social care

- ## Reduction of pressure on NHS & social care
  - Improved patient outcomes & reduced pressure across health and care system through preventing avoidable admissions, utilising innovations to make routine care more efficient & resilient, enabling smart discharge, & through effective pandemic preparedness & new treatments to tackle a range of infectious diseases

- ## Shaping & supporting the health and social care workforce of the future
  - A public health, NHS, social care & wider health workforce that is effectively structured, trained, deployed & supported to deliver future effective & efficient models of healthcare which meet the needs of the UK's changing population.

https://www.gov.uk/government/publications/department-of-health-areas-of-research-interest/department-of-health-areas-of-research-interest

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DHSC Research Priorities

Cross cutting themes: research which

- reduces health disparities & improves health & economic outcomes for the most deprived 20% of the population

- promotes economic growth by delivering a healthier workforce, a more efficient NHS, a higher skilled health & social care workforce, & through investment in life sciences sector

- accelerates adoption & scale of innovation in health and care system

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DHSC Research Priorities

Cross cutting methods

- Systems thinking

- Data science

- Health economics

- Behavioural science

- Implementation science

- Evidence synthesis

Project areas

- **How do we identify health risks in ageing and help people to maintain independence and resilience?**

- **Activity promotion**
  - Behaviour Change Interventions in Later Life
  - Signpost to Health
  - Active, Connected, Engaged (ACE) Trial
  - Promoting Physical Activity in the Workplace
  - Menopause & Physical Activity
  - CMO Physical Activity Guidelines
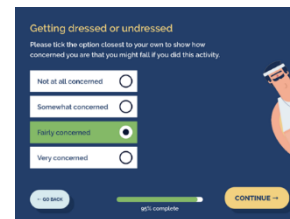 - High Intensity Strength Training for Older People

Projects areas

- **Fall Prevention, Exercise/Activity & Technology**

- Standing Taller

- Falls Services following COVID-19

- Falls Management Programme
  Implementation study (FLEXI)

- Keep-on-Keep-Up
  - Evaluation
  - Urdu translation
  - Dementia
  - Implementation & effectiveness study

- Digital Aged 75+ project

- Germ Defence for Care Homes

Projects areas

- **Dementia**
  - Everyday aesthetics
  - End of life care
  - Keep On Keep Up app
  - Activity and dementia prevention

- **Delirium**
  - Delirium toolkit evaluation
  - Delirium & falls review

Focus on the future

- ## Prevention

    - Activity promotion and behaviour change to prevent poor outcomes

    - Reduce disparities, between rich and poor, reach those most in need

    - Reduce pressures on health and social care

    - Technologies to support (not replace) health and social care workers (accelerate and upscale innovationn)

    - Early identification and intervention at risk rather than waiting for disease/condition to develop

The Bell-Curve Shift in Populations

Shifting the whole population into a lower risk category benefits more individuals than shifting high risk individuals into a lower risk category

Population approach: encourage everyone to change, shifting the entire distribution

Risk reduction approach: Move high risk individuals into normal range

% of Population

"Low"   "Normal"   "High"

Level of risk
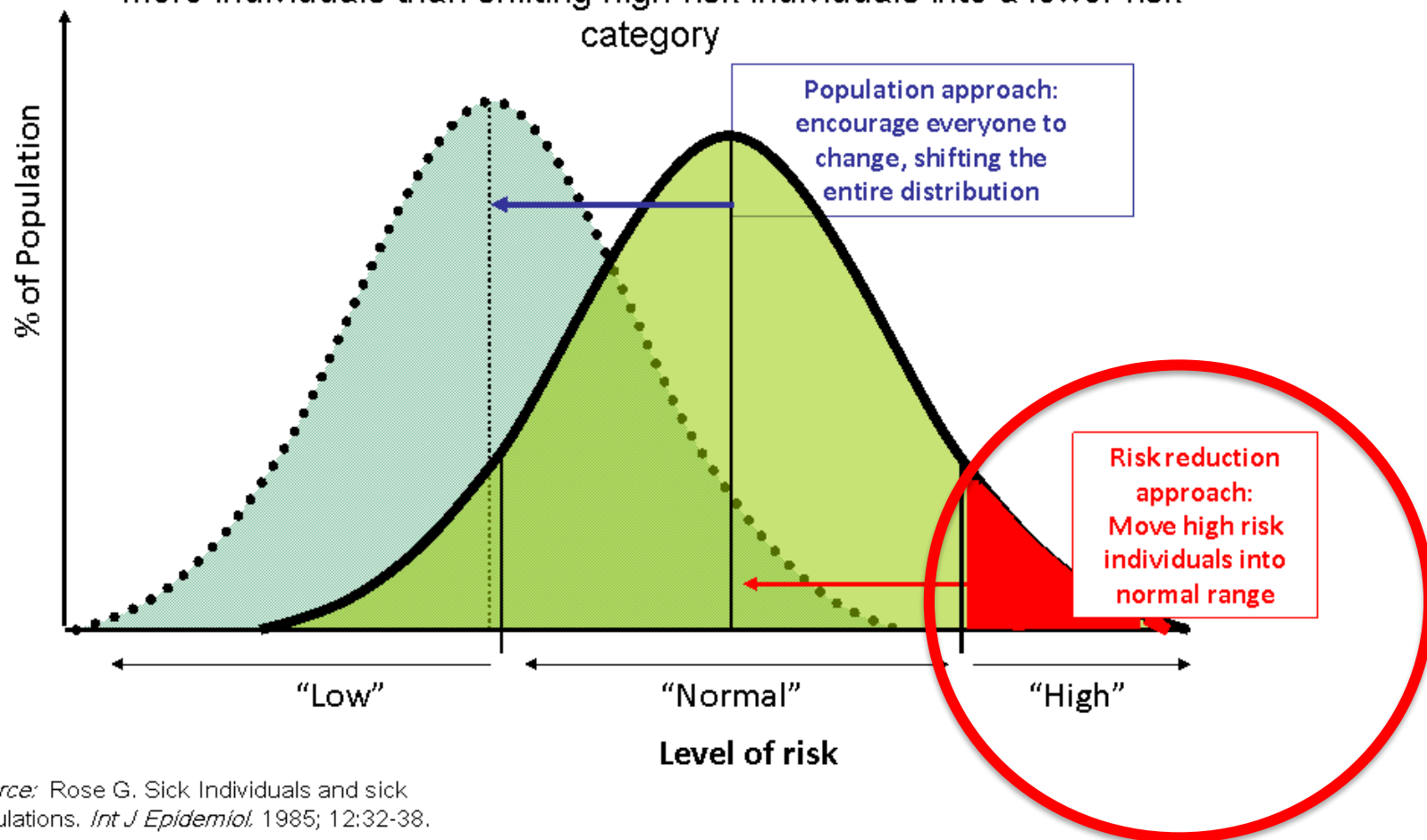
Source: Rose G. Sick Individuals and sick populations. *Int J Epidemiol.* 1985; 12:32-38.

RISK FACTOR MODEL FOR FALLS IN OLDER AGE

- Poor **building** design
- **Cracked** or uneven sidewalks
- **Slippery** floors and stairs
- **Insufficient** lighting
- Loose **rugs**

ENVIRONMENTAL RISK FACTORS

- Multiple **medication** use
- **Inappropiate** footwear
- Excess **alcohol** intake
- Lack of **exercise**

BEHAVIOURAL RISK FACTORS

FALLS AND FALL-RELATED INJURIES

SOCIOECONOMIC RISK FACTORS

- Inadequate housing
- Lack of **social interactions**
- Lack of **community resources**
- Low **income** and **education** levels
- Limited access to health and social services

BIOLOGICAL RISK FACTORS

- Age, gender and race
- **Chronic** illnesses (e.g. Parkinson's disease, Arthritis, Osteopororis)
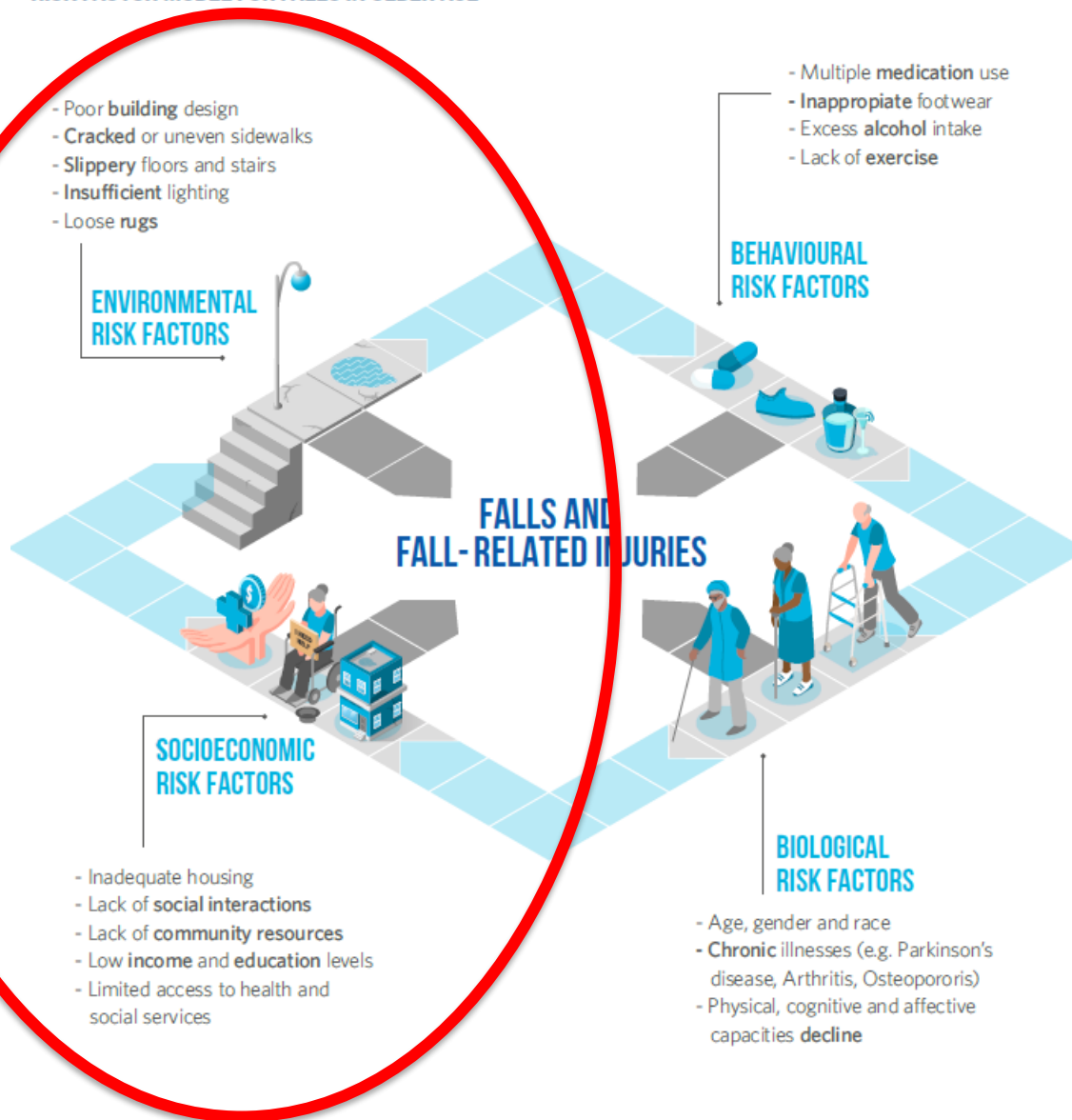- Physical, cognitive and affective capacities **decline**

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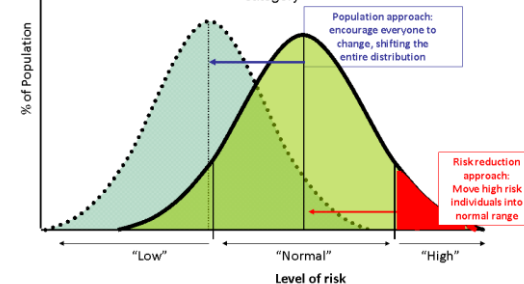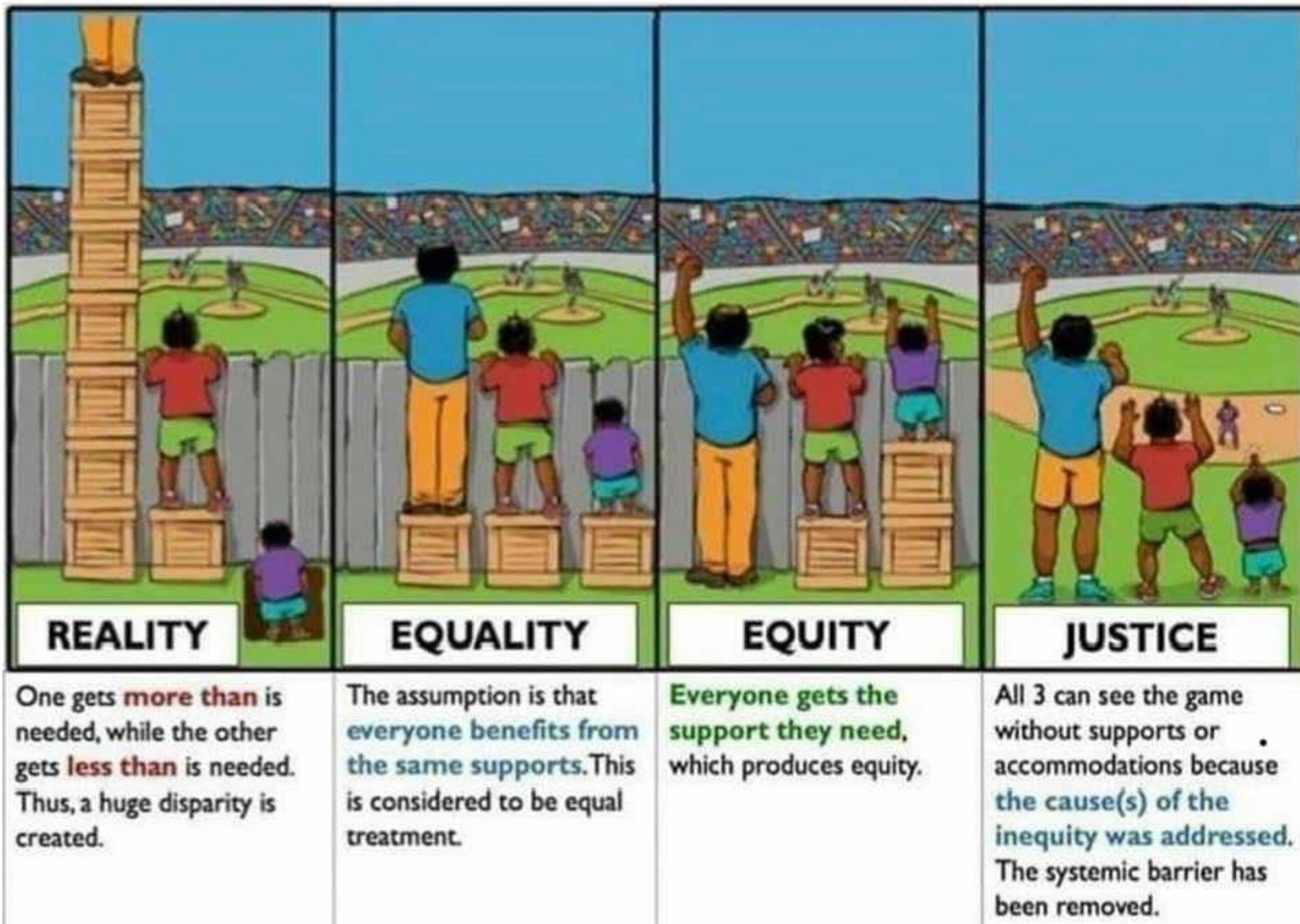
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Greater Manchester **Integrated Care Partnership**