As populations age it is essential that physical, mental and social health in later life is maintained for as long as possible – this is beneficial for the individual and for societies faced with the costs of providing care. Health and wellbeing of older people are a consequence of the biological mechanisms that account for ageing, and the underlying environmental and social factors that have accumulated throughout an entire lifetime.

In biological terms ageing is thought to result from an accumulation of cell damage, overriding the bodies defence and repair mechanisms that eventually leads to cellular and organ dysfunction and atrophy. This inherent decline makes older people more susceptible to chronic diseases such as cardiovascular disease, hypertension and type II diabetes.

Environmental and social factors including the unequal social, economic and environmental circumstances starting from before birth mean that, at every stage of life right up to old age there is a health divide between the richest and the poorest in the population. In older age disadvantage is further compounded by the social perceptions of older people as being frail, ill or dependent (ageism) and the gradual loss of participation and isolation that contribute to many mental health problems in this age group.

**Healthy ageing**

Counter to the negative connotations of older age is the concept of healthy ageing which centres on holistic notions of wellbeing. Healthy ageing is not just about disease prevention and extending life; it is about creating the environments and opportunities that enable people to be and do what they value throughout their life into later years. Recognising that many will have one or more adverse health conditions or disabilities, healthy ageing introduces the notion of resilience - “the ability of individuals to ‘bounce back’ or maintain a high level of functioning despite these challenges”.

**Scope of the workshop**

Whilst recognising the importance of environmental and social determinants of healthy ageing, the third My Healthy Future workshop focuses on opportunities and issues created by the more personalised approaches that might be enabled through technological advances.

What’s important to consider when thinking about healthy ageing?

- Ageing as a process - slowing or halting the biological mechanisms of ageing
- Maintenance of independence
- Coping well with disease and disability
- Loneliness and mental health issues - older adults can easily become or feel isolated due to their lack of mobility or ill health
- Onset of chronic disease and multimorbidities
Dementia cases are projected to increase from 85,000 to 2 million by 2051.

Falls:
- 30% >65 year olds
- 50% >80 year olds will fall ≥ 1 a year

Sight loss:
- 14% >65 year olds
- 35% >75 year olds
- 50% >90 year olds

Mental health:
- 25% people > 65 live with a common mental health condition rising to 40% of people who live in care homes

Overweight:
- 65% women aged 65-74
- 77% of men aged 65-74
  (associated conditions - diabetes, hypertension)

Falls are the commonest cause of injury related deaths in people aged ≥75.

>25% of all deaths of people aged ≥65 are caused by cardiovascular disease.

25-65% increased risk of almost all chronic diseases for older persons in lower socioeconomic groups than those in more privileged groups.

85% of older people with depression receive no help from the NHS.

71% of people aged 45-54 used smartphones in 2017 (65-74 year olds in 20 years time)

30% of those aged 65+ now

96% of people aged 45-54 were online in 2017 (65-74 in 20 years time)

17.8 years
Number of extra 'good' health years females born in Richmond upon Thames can expect compared to females in Manchester.
In anticipation of an ageing society, a number of strategies and plans have been devised to address the major health issues affecting older adults, aiming to improve quality of life and minimise disease progression.

Future of an ageing population - Government Office for Science (2016)
A foresight report using trends and projections based on current evidence identified that the main areas affected by an ageing society included working lives, lifelong learning, housing and neighbourhoods, health and care systems, and technology use.

This publication encouraged businesses to retain, retrain and recruit older workers and presented the benefits of a fuller working life.

Hidden in plain sight: the unmet mental health needs of older people - Age UK (2016)
Based on a review of current approaches to treatment of older people with mental health conditions, this report highlighted important areas where service provision fell short of aspirations. It recommended urgent consideration of the under-treatment of mental health conditions and the wide inequalities in access to this care.

Evidence suggests that malnutrition causes significant and long-lasting health conditions and increases the risk of frailty in older people. This report urged the importance of identifying and treating malnutrition as an important prevention programme which will, in the long term, reduce the need for both health and social care.

Dementia: applying all our health - Public Health England (2015)
Evidence and guidance to help healthcare professionals maximise their contribution to supporting the health, wellbeing and independence of people with dementia.

A practical guide to healthy ageing - Age UK and NHSE (2015)
A guide to help people improve their health and general fitness, particularly those aged 70 or over with ‘mild frailty’. Topics include medicines reviews, exercise, preventing falls, general home safety, and keeping warm and staying well in winter, with tips to help older people stay both physically and mentally fit and independent.

3.8 million over 65s have never used the internet
Developments in biomedical, genomic and digital technologies are enabling more personalised prevention. During this workshop we want to capture your thoughts on the opportunities created by new technologies, how this will impact the healthcare landscape in the future and what wider issues may arise. Here are some questions that we will be considering throughout the day.

**Opportunities**

In 20 years time, what technologies do you think will be available to:

- **Understand (and potentially slow) ageing processes**
- **Detect disease early and enable early treatment**
- **Assess risk of disease and provide personalised interventions**
- **Support individuals to take up healthy lifestyles**
- **Support older people to cope well with disease and disabilities**

**Issues**

All of these new technologies bring with them a range of issues for the individuals who might use them, the health systems that provide support and care and for wider society. During the workshop we will identify those that arise in the context of personalised prevention in older people and support for healthy ageing. Areas that have arisen in previous workshops have included:

- **Risk information and communication**
- **The role of the commercial sector**
- **Medicalisation**
- **Potential impact on health systems**
- **Providing person centred healthcare in a highly technological environment**
- **Impact on health inequalities**

We are sure there are many more, with particular relevance for older people – and hope to explore these in the workshop.

Today’s healthy ageing workshop is one of four initial life stage workshops (on pregnancy and neonatal health, the health of young people, healthy ageing and the healthy adult) that will inform My Healthy Future, a PHG Foundation initiative culminating in a set of policy recommendations for how the health system and wider society will need to adapt to make optimal use of emerging technologies.

#myhealthyfuture