What is Public Health and why bother with prevention?

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This session will

• What public health is and the context in which it sits in the current environment
• What do we mean by prevention
• And why we should bother
• Some practical solutions to today’s problems
What is Public Health?

The Faculty of Public Health defines public health as:

“The science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organised efforts of society.”

Three Domains and Two Cross Cutting Themes

**Health Improvement**
people’s lifestyles as well as inequalities in health and the wider social influences of health, science of behavioural change

**Health Protection**
infectious diseases, environmental hazards and emergency preparedness

**Health Care Public Health**
service planning, efficiency, audit and evaluation

**Surveillance and information**
trends, epidemiological studies and inequalities

**Workforce**
Specialist, wider and linking workforces together, making public health a tool for all
What is the Context in which we work?

• **Local Authorities:** take the lead for improving health and coordinating local efforts to protect the public’s health and wellbeing, and ensuring health services effectively promote population health.

• **Public Health England (PHE):** provides national leadership and expert services to support public health, and also works with local government and the NHS to respond to emergencies.

• **Health and wellbeing boards:** act as a forum for local commissioners across the NHS, social care, public health and other services. The boards allow wider input into strategic decisions about health and wellbeing services.
What is the Context in which we work?

- **NHSE**: commissions specific Public Health programmes including those for Immunisation and Screening
- **GPs & Pharmacists**: provide specific Public Health services
- **Provider Trusts**: Provide Health promoting Environments and deliver Making Every Contact Count (MECC)
- **CCGs**: commission programmes to improve health and wellbeing and to reduce inequalities.
- **HEE**: ensures the future workforce is fit for purpose
Current challenges and Opportunities

• Five year forward view – Shift to prevention
• STPs – wider footprints, addressing 3 gaps
• Devolution – devolved powers for local government
• Healthy Towns
• Budget changes – Growth in health care expenditure has dropped Ave 1997-2009 = 8%, Ave 2010-2012 = 1.5%
  – PHE required to deliver savings
  – The Public Health grant to LAs has been cut
  – HEE budget cuts and changes to student bursaries
Changes to Public Health Funding

- Year-on-year real terms growth
- Real terms allocation

Total allocation (£bn)

2015/16: £3.47bn
2016/17: -3.8%
2017/18: -4.2%
2018/19: -4.4%
2019/20: -4.6%
2020/21: ?
What is prevention?

• **Primary:** aims to prevent disease or injury before it ever occurs.
  – legislation and enforcement e.g. use of seatbelts
  – education about healthy and safe habits
  – immunization against infectious diseases

• **Secondary:** aims to reduce the impact of a disease or injury that has already occurred.
  – Screening for breast or bowel cancer
  – Drugs to prevent further heart attacks or strokes
  – suitably modified work so injured or ill workers can return safely to their jobs.

• **Tertiary:** aims to soften the impact of an ongoing illness or injury that has lasting effects.
  – chronic disease management programs e.g. for diabetes or arthritis
  – support groups that allow members to share strategies for living well
Why Bother?

International studies suggest healthcare contributes only about 10% to preventing premature deaths, whilst changes in behavioural patterns is estimated to contribute 40%.

It is estimated that if the public were fully involved in managing their health and engaged in prevention activities, £30 billion could be saved.

- UK women, on average, smoke 3% more than the EU average.
- In the UK in 2008, 61.1% of males were estimated to be physically inactive and 71.6% of females.
- The average consumption of alcohol by adults in the UK is 10% higher than the EU average.

Only 4% of the total healthcare budget is spent on prevention.
## Preventable Deaths

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart &amp; circulatory disorders</td>
<td>158,500</td>
</tr>
<tr>
<td>Cancer</td>
<td>110,400</td>
</tr>
<tr>
<td>Respiratory disorders</td>
<td>64,600</td>
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<tr>
<td>Nervous system disorders</td>
<td>25,900</td>
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<tr>
<td>Digestive disorders</td>
<td>21,600</td>
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<tr>
<td>Kidney disorders</td>
<td>11,200</td>
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<tr>
<td>Infections</td>
<td>7,680</td>
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<tr>
<td>Non-transport accidents</td>
<td>7,590</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5,070</td>
</tr>
<tr>
<td>Musculoskeletal disorders</td>
<td>4,070</td>
</tr>
<tr>
<td>Suicide</td>
<td>3,070</td>
</tr>
<tr>
<td>Transport accidents</td>
<td>2,680</td>
</tr>
<tr>
<td>Mental health disorders</td>
<td>1,480</td>
</tr>
<tr>
<td>Undetermined events</td>
<td>1,100</td>
</tr>
<tr>
<td>Murder</td>
<td>970</td>
</tr>
<tr>
<td>Medical complications</td>
<td>380</td>
</tr>
<tr>
<td>Pregnancy &amp; birth</td>
<td>350</td>
</tr>
<tr>
<td>War</td>
<td>72</td>
</tr>
<tr>
<td>Rank 1990</td>
<td>1990 Leading Causes</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>1.0 (1-1)</td>
<td>1 Ischemic heart disease</td>
</tr>
<tr>
<td>2.1 (2-3)</td>
<td>2 Low back &amp; neck pain</td>
</tr>
<tr>
<td>2.9 (2-3)</td>
<td>3 Cerebrovascular disease</td>
</tr>
<tr>
<td>4.0 (4-4)</td>
<td>4 Lung cancer</td>
</tr>
<tr>
<td>5.1 (5-6)</td>
<td>5 COPD</td>
</tr>
<tr>
<td>6.6 (6-8)</td>
<td>6 Falls</td>
</tr>
<tr>
<td>8.7 (6-11)</td>
<td>7 Lower respiratory infections</td>
</tr>
<tr>
<td>8.9 (6-14)</td>
<td>8 Sense organ diseases</td>
</tr>
<tr>
<td>9.5 (7-12)</td>
<td>9 Alzheimer disease</td>
</tr>
<tr>
<td>9.7 (5-17)</td>
<td>10 Depressive disorders</td>
</tr>
<tr>
<td>9.9 (6-16)</td>
<td>11 Skin diseases</td>
</tr>
</tbody>
</table>
Rise in Long Term Conditions

Figure 4.7: Expected rise in long-term conditions, 2010 to 2040

- Arthritis: 8.5M (8.5 million)
- Multiple LTCs: 1.9M (1.9 million)
- Stroke: 1.1M (1.1 million)
- Diabetes: 2.9M (2.9 million)
- Cancer: 2.0M (2.0 million)
- Dementia: 0.7M (0.7 million)

Source: Department of Health, 2012; Department of Health, 2009; Parkinson’s UK, 2009; Diabetes UK, 2012; Association of Public Health Observatories; Osteoarthritis Nation, 2012
Figure 8a. DALYS attributed to Level 2 risk factors in 2013 for England for both sexes combined.
The annual cost of obesity

- Cost to wider economy: £27bn
- Obesity medication: £13.3m
- Cost to NHS: £5.1bn
- Obesity attributed days sickness: 16m
- Social care: £352m
So what can we do about it?

- **Behavioural insights:** provide opportunities for new approaches in health; recognising role of both automatic and reflective systems in decision-making.

- **MECC:** uses day-to-day interactions to support people to make positive changes to their physical and mental health and wellbeing.

- **Patient activation:** a measure of a person’s knowledge, skills and confidence to manage their own health and care.
  - Could help 10% of those with long term conditions in England (1.5m people)
  - Up to 40% of the population have low activation levels
  - Low activation: >30% more likely to have unmet medical needs
  - Activated people are more likely to attend screenings and check-ups and have greater engagement in healthy behaviours e.g. regular exercise
What does that mean?

1. You
2. You with Support
3. Environmental
4. Legislative
Getting people to take responsibility for their own health – Apps – Campaigns – MECC – Brief Interventions

85% of people can change if we can get them motivated to change, and they don't need a service
If most people can change without support, we should focus on those who do need support. Hard to reach groups, inequalities, vulnerable populations. Services focus will be different.

What changes do our services need to accommodate this?
Environmental
Legislation

- Time it takes to implement
- Policing
- Creates an underworld

Impact
- Unintended consequences
  - Sugar tax
  - Tobacco
Conclusion

• Considerable financial pressures on government spending
• Population of England is ageing
• Prevalence of many chronic diseases is increasing
• Greater focus in prevention and healthy living needed
• Empower people to help themselves
  – Healthy Planning
  – Healthy Workplace
  – Brief interventions by frontline staff
  – Use of technology
  – One You

The challenge of the unknown future is so much more exciting than the stories of the accomplished past.

—— Simon Sinek ——

AZ Quotes
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