Years Ahead and the Healthy Life Simulation

Report of findings

Newcastle
July 2015

Supported by Newcastle University
### Years Ahead

- A network of public, voluntary/community and private sector bodies operating at a local and regional level linked through a Partnership Board.
- At least half of the voting representatives are older people appointed by their respective local forums and organisations.
- Have a direct link to Government Ministers through the UK Advisory Forum on Ageing (UKAFA) which ensures that the voice of older people is heard on the issues that matter in the region.

### Rationale for Simulation

The Board of Years Ahead objectives in engaging with the Healthy Life Simulation were as follows:

- To gain a greater understanding of how communities can contribute to public health
- To report that learning to government ministers and the other English regional forums at the UK Advisory Forum on Ageing

### This Report

- Presents the findings from the simulation event.
- Is written up by the simulation team.
- Outlines the rationale for the Healthy Life Simulation.
- Describes the simulation process and activities Years Ahead team undertook.
- Provides the evidence base for the recommendations Years Ahead are making.
Years Ahead Simulation Players

On 14 July 2015, members of the Years Ahead Board came together to play the healthy life simulation in order to gain a better understanding of how communities can improve their public health.

The simulation was run and facilitated by the original team of simulation designers. We are grateful to Newcastle University for ongoing support.

<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
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<tbody>
<tr>
<td>Graham Armitage</td>
<td>Newcastle University - Years Ahead accountable body</td>
<td>Mark Greenfield</td>
<td>50+ Action Group - Sunderland</td>
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<tr>
<td>Frances Child</td>
<td>Alzheimer's Society</td>
<td>Frank Harrison</td>
<td>50+ Forum - Hartlepool</td>
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<tr>
<td>Madeleine Elliott</td>
<td>Age UK Northumberland</td>
<td>Norman Jemison</td>
<td>Northern TUC - Pensions Advisory Group</td>
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<tr>
<td>Sean Fahey</td>
<td>North East Pensioners Association</td>
<td>Val Johnston</td>
<td>Age UK (representing the whole of the north east)</td>
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<tr>
<td>Bill Ions</td>
<td>Years Ahead Chair</td>
<td>Alex Mitchell</td>
<td>Newcastle University - Years Ahead accountable body</td>
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<tr>
<td>Violet Rook</td>
<td>Newcastle Elders Council</td>
<td>Helen Sandford</td>
<td>Newcastle University - Years Ahead accountable body</td>
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<tr>
<td>Roz Tinlin</td>
<td>Royal Voluntary Service</td>
<td>Debbie Smith</td>
<td>North East Dementia Alliance</td>
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<td>Jim Clarke</td>
<td>National Pensioners Convention</td>
<td>Russell Taylor</td>
<td>Department of Work and Pensions</td>
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Health inequalities and ageing

Health inequality

The North East of England, like many other areas, has significant variation in how well people age depending on where they live. Newcastle University research showed that the number of healthy years 55 year olds can expect to live will vary by 11 years if they live just a few stops apart on the Metro line.

Unsolved problem

Considerable effort has been made in understanding the problem of health inequality and ageing but developing solutions has proven challenging. Health inequalities are influenced by a wide range of factors including access to education, employment and good housing as well as individuals’ circumstances and behaviours.

Financial challenge

The consequences of not addressing this gap in healthy life expectancy (HLE) are unacceptable levels of human suffering and premature loss of life in disadvantaged groups. In addition, increasing HLE in people from disadvantaged groups would reduce direct costs to the NHS as well as bringing economic gains to both individuals and society.
The Healthy Life Simulation

The Healthy Life Simulation, commissioned by Newcastle University, was developed as a novel and interactive toolkit to address the problems of health inequalities and ageing. It enables players to develop the skills and knowledge to debate this complex issue and identify potential solutions based local knowledge and experience.

How the simulation works

- **Scenario** - the gap in healthy life expectancy between the least and most deprived areas of a fictional city was exposed in a vividly filmed news report.

- **Mission** - players were challenged by the leader of the Council to form a Task Force to analyse the cause of the health divide and devise an action plan of interventions to close the gap for 55 year olds by 50% in 10 years within a strict budget.

- **Teamwork** – member of Years Ahead Committee formed 2 teams (North & South Team) who spent the day analysing, prioritising, discussing and preparing a plan to close the gap.

- **Priority diseases** - players had to analyse the rich and poor areas, prioritise diseases from data that showed the share each disease contributed to the gap in HLE.

- **Risk factors** - teams also had to prioritise risk factors associated with the diseases that could be modified by intervention.

Intervention strategy

- **Intervention** - Teams then had to select two interventions directed at distinct levels of the major determinants of healthy life:
  - Individual behaviours
  - Community & social networks
  - Health services
  - Population & general environment

- **Modelling** - The interventions were assessed in an evidenced-based MCDA model that estimated cost & effectiveness over 10 years.

- **Presentation** - At the end of the session, teams presented their findings to the group.
Conclusions

There was agreement that:

It is harder for people from disadvantaged areas to make healthy life style choices (this awareness was increased by playing the simulation)

Good choices stem from education and opportunity

Obesity and its consequences are a major concern in low income groups

The risks and disease burden of Type 2 Diabetes and Mental Illness need to be reduced to address the gap.

Social isolation is an increasing risk as people age

There is a need to demonstrate return on investment to persuade policy makers to adopt policies promoting health equality
Recommendations

We recommend that

- Disadvantaged areas provide and promote appropriate opportunities for people to make healthy choices e.g. by ensuring fresh food is available for people to buy, there are controls on number of premises offering fast food and cheap alcohol
- Resources are targeted to promoting physical activity and healthy diets in deprived areas by providing appropriate local community sites, education, referral and support
- We use local and central responsibility deals to improve the quality of processed food
- We maximise community involvement and resources in developing solutions
- We address the underlying causes of unhealthy behaviours – for instance by creating sustainable jobs, increasing income, improving housing and transport infrastructure
- We promote opportunities for social networking through environmental improvement and local schemes
- Work with health services to promote social prescribing and collect evidence of its value
Evidence base for our recommendations

- We used a systematic approach to understanding the complex issues of health inequalities and ageing.
- We started by understanding the nature of the HLE gap and comparing a high income community with one with high levels of deprivation (Pillar 1).
- We considered seven key diseases that contribute to the gap and can be modified by intervention (Pillar 2).
- We reviewed the modifiable risk factors that are associated with the diseases of the gap (Pillar 3).
- We considered changes individuals can make to reduce risk and disease profile (Pillar 4).
- We debated ways to enhance and improve communities with high levels of deprivation (Pillar 5).
- We discussed how best to influence how health services are delivered to socially deprived groups (Pillar 6).
- We thought about changes in the overall environment that would improve health & wellbeing (Pillar 7).
Evidence from the Healthy Life Simulation
Pillar 1: The gap in HLE at 55 years of age

“Wealth brings health” was the overwhelming message when comparing health profiles from an affluent ward with that of a ward with significant social disadvantage.

- There were major differences in community indicators such as levels of deprivation, people’s educational attainment levels, unemployment rates and standards of housing between the two wards.
- There were fewer opportunities for people to make healthy lifestyle choices in a disadvantaged Ward.
- There was little access to fresh foods and many more fast food outlets in the disadvantaged ward.
- Although there were community facilities in ward with high levels of deprivation, there were fewer green space and no park.
- It was however notable that there were health issues in affluent communities as well.
  - For instance there were increasing levels of high risk drinking in the affluent, educated over 50s.
Pillar 2: Prioritising the diseases that contribute to the gap

Seven diseases contributing to the HLE gap between income groups were reviewed:

Type 2 Diabetes, Heart disease, Stroke, COPD, Lung Cancer, Liver Disease, Mental Illness

Both teams chose to focus on:

Diabetes type 2
- A major challenge we need to respond to
- Especially important to address in order to reduce health inequality as there is a social divide in consumption of sugary, fatty food
- Food labelling debate going on for 50 years and still not resolved
- Can be “cured” by lifestyle changes
- Lifestyle changes that reduce diabetes risk have add on benefits to other diseases like cardiovascular disease

Mental illness
- Other conditions drive/are driven by mental health issues
- Loneliness & isolation are triggers in older people
- Is hard to resolve as the fundamentals (lack of jobs, income, purpose) need to be resolved
- Policy makers need to be persuaded to treat mental and physical illness with parity

Top 2 picks in the simulation

<table>
<thead>
<tr>
<th>North Team</th>
<th>South Team</th>
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<tbody>
<tr>
<td>Mental illness</td>
<td>Mental illness</td>
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<tr>
<td>Type 2 diabetes</td>
<td>Type 2 diabetes</td>
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Pillar 3: Modifiable risk factors associated with diseases that mark the gap in HLE

Debate and priority setting

Risk factors associated with the key diseases that make up the gap and that can be modified by intervention were debated and prioritised for action.

- Obesity has to be tackled to reduce HLE gap
- We have to address physical inactivity as society overall is becoming more and sedentary
- Social isolation as people age can and must be addressed (schemes become self sustaining over time)
- Promoting health literacy prevents disease by tackling the problem before illness manifests
- To stop people smoking/drinking we have to address underlying deprivation as it may be smoking /drinking is their only pleasure
- We have to consider if prolonging life in a state of deprivation desirable
- We need to demonstrate a return on investment to convince policy makers to intervene

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<td>Obesity</td>
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</tr>
<tr>
<td>Social isolation</td>
<td>Other equally important – smoking, inactivity, diet, isolation, health literacy</td>
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</table>
Pillar 4: Interventions directed at the level of an individual

“Choice is important and we need to help people realise the benefits of their choice”

Key discussion points

- We need to target resources at disadvantaged groups to impact the gap in HLE
- We need to develop referral systems from statutory and voluntary organisations to schemes promoting weight management, dietary advice and community exercise schemes
- We need appropriate and affordable facilities located close to where people live
- We need to develop social networks and partnerships within VCS to promote people choosing healthy behaviour and being socially active
- We need to highlight the consequences of not controlling weight
- Education on home economics is essential
- Fresh food needs to be available in disadvantaged areas

Top 2 inventions targeted at individuals

<table>
<thead>
<tr>
<th>North Team</th>
<th>South Team</th>
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<tbody>
<tr>
<td>Weight management</td>
<td>Social networks</td>
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<tr>
<td>Mediterranean diet</td>
<td>Exercise promotion</td>
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Pillar 5: Community level interventions

Top 2 interventions targeted at the level of the community

<table>
<thead>
<tr>
<th>North Team</th>
<th>South Team</th>
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<tr>
<td>Active transport</td>
<td>Controls on alcohol / fast food outlets</td>
</tr>
<tr>
<td>Housing</td>
<td>Housing</td>
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- **Active transport**
  - Good availability of cheap and accessible transport supports people to remain active and promotes social interaction
  - This intervention should be focussed on disadvantaged areas where there is greatest need

- **Housing**
  - Poor housing is a major factor in deprivation
  - Renovation & maintenance are essential
  - Gardens promote activity & interaction
  - Insulation prevents disease states
  - Security addresses safety concerns
  - Shortages to be addressed
  - Save local authority social housing

- **Control of alcohol / fast food outlets**
  - Too many fast food outlets and premises selling low cost alcohol in deprived areas
  - There should be a cap set on numbers
  - This would restrict new applications
  - Communities should develop a dialogue with national supermarkets and local business to set controls of quality and quantity of food and drink available

Local evidence
- Good evidence from Newcastle that subsidised public transport works when bus passes were provided. 40% increase in bus use. This leads to more people being active outside the home and less isolation
- 25 years ago Sunderland had a vibrant shopping centre - today 70% of businesses are fast food takeaways resulting in litter, stench, noise and pollution

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Pillar 6: Interventions delivered through health services

Top 2 interventions using health services

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<thead>
<tr>
<th>North Team</th>
<th>South Team</th>
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<tr>
<td>Brief interventions on alcohol</td>
<td>Community health trainers</td>
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<tr>
<td>Social prescribing</td>
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- **Community health trainers**
  - Concern was expressed about whether these reach those who need them
  - Need to be based in community sites
  - People should be referred by GPs and after hospital admissions
  - Trainers need to be recruited from local communities

- **Social prescribing**
  - Gets people actively involved in their community in different ways like walking, cycling and other social activity groups
  - Need to work with GPs to use social prescribing rather than medication
  - Need to show the cost saving benefit of local initiatives in the long term

- **Brief interventions on alcohol**
  - More self help groups needed in the community
  - Support and training for volunteers
  - Health related education very important

**Note**

- Integrating health & social care is vitally important in joining services up for individuals but was taken out of the simulation choices in the simulation as an integration programme is now underway
Pillar 7: Population level interventions

Job creation schemes

Improve processed food

Top 2 interventions at population level

North Team

South Team

Job creation schemes

Job creation schemes

Improve processed food

Improve processed food

Jobs

- Many health and wellbeing problems have been created by a failure of the economy to create fairly paid and secure jobs in our region
- Work with local Job Centre Plus (have budgets)
- Promote sustainable jobs
- Develop community programmes eg Health Trainers
- Provide skills workshops and job clubs eg Bridge
- Promote local jobs for local community
- Advertise local skills
- Recognise this is very difficult but we must try

Better processed food

- Seen as key to improved health
- Promote local responsibility deal
- Encourage local business to improve content
- Get local communities to lobby food manufacturers to improve content, reduce packaging, improve labelling
- Encourage locally sourced foods to reduce preservatives
- May need legislation
Healthy Life Simulation Results

North Team
Narrowed gap by 4 years
With 39% improvement
Under budget

South Team
Narrowed gap by 4 years
With 36% improvement
Under budget

Demonstrating that: local residents can understand complex health information, spend budget responsibly and know what interventions work well in their communities
Opinion Survey

Players were asked to complete a survey that canvassed opinions about the gap in HLE at the start of the simulation and then to repeat it at the end. This provided a measure of opinions and attitudes and any shifts in response to engaging with the simulation.

Results

- At the start all participants were aware of the gap in HLE at 55 years of age
- All players wanted to close the gap both before and after engaging with the simulation
- Awareness of lung cancer, heart disease, type 2 diabetes was high at start
- Awareness of the importance of mental illness and diabetes increased as a result of playing
- Reducing human suffering and making society more fair remained the most important reason for closing the gap
- Overall 94% thought it was harder or much harder to make healthy lifestyle choices in disadvantaged areas after playing (67% at start)
- Education on healthy lifestyle choices and targeting more resources to deprived areas was most favoured before and after play
- Introducing more laws and taxes to control how people behave was not favoured. Nor was paying rewards to people who adopt healthy behaviours
- Around 50% of players said family was most important influence on their health behaviours. Media was next – GPs and health services were only selected by 1 or 2

Information

Further information about the simulation can be obtained from Michael Whitaker, Strategic Research Advisor, Newcastle University at michael.whitaker@ncl.ac.uk.