Commissioning gardening and food growing to promote health
Prof Jeremy Levy, clinical lead
Our vision

“
To ensure that workforce planning, training and education drive sustainable innovations to deliver a capable and flexible healthcare workforce now and in the future, to benefit patients.

“
An alternative guide to the new NHS in England
www.kingsfund.org.uk/health
This is North West London

Population: 1.9 million
~2,335 medical and dental trainees
~1,500 non-medical trainees
~422 GP practices
~46,300 NHS employees excl primary care
~£264 million budget
Key priorities

• Emergency care and urgent care
• The out of hospital/primary care and community workforce
• Developing community education provider networks
• Bands 1-4 staff (unqualified staff)
• End of life care and cancer care
• Mental health
Investing strategically and innovatively

• Community education provider networks: innovative learning networks, covering mandate priorities, with patient engagement:
  • Perinatal mental health
  • Connecting care for children
  • Education in nursing home for Bands 1-4 staff
  • End of life education for unqualified staff
  • Falls management
  • Pressure ulcers
  • Quality improvement training
• Investment in co-production eg with young people with chronic illness, and technology enhanced learning
Individuals are at different starting points: mental health and social inequality

- People with severe mental illness die on average 20 years younger than the general population
- 18% of the English population aged 16-64 have one or more common mental disorders, and only a minority received any intervention
- People living in the poorest neighbourhoods die seven years younger than those in the richest, but spend 17 years longer living with disability
Chronic diseases increasing:

**Arthritis** up 100% to 17m by 2030

**People with 3+ long-term conditions** up 100% to 2.9m by 2018

**Diabetics** up 29% by 2025 to reach 4 million

**People living with cancer** doubling by 2034 to 4m

**People living with dementia** will more than double over the next 30 years to 1.4m
Population lifestyles present significant risks to health

- 70% of the adult population are inactive
- 21% smoke
- 70% do not eat the recommended amounts of fruit & vegetables
- 26% are obese
- 27% of males, 18% of females drink more than recommended safe limits of alcohol
3. The first argument we make in this Forward View is that the future health of millions of children, the sustainability of the NHS, and the economic prosperity of Britain all now depend on a **radical upgrade in prevention and public health**. Twelve years ago Derek Wanless’ health review warned that unless the country took prevention seriously we would be faced with a sharply rising burden of avoidable illness. That warning has not been heeded - and the NHS is on the hook for the consequences.

4. The NHS will therefore now back hard-hitting national action on obesity, smoking, alcohol and other major health risks. We will help develop and support new workplace incentives to promote employee health and cut sickness-related unemployment. And we will advocate for stronger public health-related powers for local government and elected mayors.
Radical upgrade in prevention and public health

National action on obesity, smoking, alcohol and other ... Promote employee health ..

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Why social prescriptions are just what the doctor ordered

Social prescriptions, from fishing to knitting groups, are helping patients back on to the road to recovery

‘Young’ John, a member of Newcastle’s fishing group, with his latest catch. Photograph: Christopher Thomond for the Guardian Christopher Thomond/Guardian
• 121 individuals with allotments in Holland and a control group of 63 without, living next to the allotment gardeners.
• Allotment gardeners of 62 years and older scored better on all measures of health and well-being than age matched neighbours.
Allotment/communal gardening. 

*Vitamin G*

- Randomized studies among institutionalized elderly found significant improvements in cognitive functioning & emotional well-being after a brief stay in a nursing home’s garden.
- Allotment gardening had a significant positive effect on well-being and measures of life satisfaction and loneliness.
- Gardening promotes neuroendocrine restoration from stress (faster reduction in stress hormones after a stressful stimulus).
- Regular cycling and gardening reduce the likelihood of inadequate vitamin D status in Caucasian elderly.

*Peter Groenewegen, Utrecht, and others*
Gardening enhances health and well-being

• Structured gardening over a 12-months period had a positive impact on wellbeing, cognition and mood in people with young-onset dementia (Hewitt et al 2013)

• weight control benefits: Community gardeners from Salt Lake City Utah had significantly lower BMIs than their neighbours or siblings (Zick et al 2013)
A community garden where horticulture is used for therapy and rehabilitation, with opportunities for training for work and education, for artistic and creative expression.

Opened in 2006 by a small group of local residents including a local GP

Commissioned by Lewisham Clinical Commissioning Group (CCG) to provide garden sessions for adults experiencing mental ill health and for people with early onset dementia.

During 2011-12 received 173 referrals and held 79 introductions with potential co-workers. In 2012, 111 individuals attended at least one session, including 76 garden sessions.

www.nwl.hee.nhs.uk
Garden

Outcomes measured for 48 participants per 12 months:

1. Improved Mental Health
2. Improved Social Inclusion
3. Improved Independence

"I had become completely shut off from friends, I found it very hard to trust and have patience. You have provided me with a grounded, non-judgemental, safe place. You have allowed me to get to know people again and spend time with people. You have restored my faith in humanity."
Sow & Grow

Outcomes measured for 24 participants per 6 months:

1. Improved or maintained cognitive function
2. Improved ability to undergo physical activity
3. Improved Independence
4. Improvements in wellbeing

"The staff and volunteers in my group could understand me: They were giving me time to think, which was very important. I was in an environment where people could understand my dementia problems. When I first came I was not able to remember a lot of stuff but now I see that I can remember names of people that I don’t know for too long. I also believe that I can think clearly now."
For **Physical Health**, regular involvement in gardening or community food growing can:

- Increase overall levels of physical activity & fitness, burn more calories, contribute to healthy weight management and reduce the risk of obesity.
- Increase healthy fruit & vegetable consumption, for adults that grow food, and among children participating in food-growing activities at school, and improve young people’s attitudes to healthy eating.
- Reduce physical pain, and help with rehabilitation or recovery from surgery or other medical interventions.
- Help people cope with physically challenging circumstances, such as intensive cancer treatment or living with chronic conditions.

*The benefits of gardening & food growing for health & wellbeing*

*Garden Organic and Sustain: Ulrich Schmutz, et al 2014*
For **Mental Health**, regular involvement in gardening or community food growing can:

- Contribute to improved social interactions.
- Reduce the occurrence & severity of episodes of stress & depression.
- Reduce reliance on medication, self-harming behaviour and use of psychiatric services; improve alertness, cognitive ability & social skills.
- Alleviate symptoms of dementia such as agitation & aggression, and improve circumstances for carers.
- Provide productive activity and beneficial social interaction for people tackling drug & alcohol dependency.
- Help people manage the distress associated with mentally challenging circumstances, such as at the end of life.

The benefits of gardening & food growing for health & wellbeing
*Garden Organic and Sustain: Ulrich Schmutz, et al 2014*
The social and economic impact of the Rotherham Social Prescribing Pilot: *Main Evaluation Report*

September 2014
The social and economic impact of the Rotherham Social Prescribing Pilot: Main Evaluation Report

September 2014
Rotherham social prescribing model

• Core team: Project Manager and five Voluntary and Community Sector Advisors (VCSAs), and a grant programme, which funds additional capacity within the VCS

• VCSAs receive referrals from GP practices of eligible patients and make an assessment of their support needs before referring them on to appropriate VCS services.

• 23 VCOs have received grants with a total value of £603,000.

• The grants enable organisations to deliver 33 separate social prescribing services.

• Covers the whole of the borough of Rotherham (pop 250,000).
Rotherham social prescribing model

• Since 2012 has engaged with 28 GP Practices to receive referrals
• 1,607 patients and carers engaged with the service over 18 months
• 1,118 onward referrals to VCS services.
• 200 referrals to non-funded VCS services

The types of services most frequently accessed:
- community based activity
- information and advice
- physical activities
- befriending
- community transport
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<tr>
<th>Practice</th>
<th>No of Patients Referred to SPS</th>
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<td>Dinnington Group Practice</td>
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<td>Broom Valley Road Surgery</td>
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<td>Thrybergh Medical Centre</td>
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<td>Woodstock Bower Group Practice</td>
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Rotherham social prescribing model

• Analysis of hospital episodes focussed on 161 patients where data available for the six months prior to their referral.
• **Reductions** identified (compared to the 6 mnths prior):
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Rotherham social prescribing model

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- Patients becoming more independent and able to access social prescribing activities with less intensive support
- Patients becoming better at managing their long term condition
- Patients and carers feeling less socially isolated
  
  *(not possible to attribute these changes directly to Social Prescribing but they a positive sign of the potential of the service)*
Rotherham social prescribing model: economic benefits

• potential NHS cost reductions of £415,000 in the 1st year when service running at full capacity
• if benefits are fully sustained over a longer period
  – the costs of delivering the service for a year would be recouped after 18 - 24 months
  – the five year cost reductions for commissioners for each full year of service delivery could be £1.9 million: a return on investment of £3.38 for each £1 invested
All is not always rosy in the garden....
My Horse Whisperer husband accidentally poisoned my brother with deadly mushrooms and we ALL had to have new kidneys

- Author Nicholas Evans picked the mushrooms on his brother-in-law’s estate
- He cooked them for lunch and soon after, he, his wife Charlotte and her brother were in hospital
- Charlotte was physically sick for eight months as the poison remained
- As she began to face death, the mother of one of her son’s friends volunteered to donate a kidney
- Now both she and Nicholas have had kidney transplants but her brother is still to find a match

The Telegraph

Horse Whisperer author poisoned by mushrooms given daughter's kidney

Nicholas Evans, the bestselling writer, has received his daughter's kidney in a transplant three years after suffering a near-fatal reaction to poisonous mushrooms.
Role of Health Education England/NW London

- encourage and promote education around Growing Health ("vitamin G") among healthcare staff
- commission more education activities around brief interventions, making every contact count, motivational interviewing to support the public health agenda
- encourage clinical commissioners about the value of the activity
- support novel networks to enhance education to healthcare staff