Mabwysiadu Dulliau Ataliol

Adopting Preventative Approaches

Harry Thomas
April 2014
Demand Management

Why?

What?

How?
The "funding gap" between projected funding and cost pressures

Source: Future pressures on Welsh public services - summary report
State of the Nation 2013: social mobility and child poverty in Great Britain

Old-age dependency ratio (2010 = 100)
Index of Comparative Costs of Social Problems

Source: Northern Ireland Assembly, Research and Library Service
### A National Strategy of Prevention

<table>
<thead>
<tr>
<th>Measure</th>
<th>SWEDEN</th>
<th>UK</th>
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<tbody>
<tr>
<td>% Live Births to teen mothers</td>
<td>1.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Infant Mortality (per 1,000 live)</td>
<td>2.5</td>
<td>5.1</td>
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<tr>
<td>Smoking (% per day aged 15+)</td>
<td>16</td>
<td>25</td>
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<tr>
<td>Alcohol (litres per person p.a.)</td>
<td>7</td>
<td>11</td>
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<tr>
<td>Adult Obesity (% of population)</td>
<td>11</td>
<td>23</td>
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<tr>
<td>Smoking Related Deaths (per 100,000 popn)</td>
<td>196</td>
<td>245</td>
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<td>Chronic Liver Disease Deaths, &lt; 65 yrs (per 100,000)</td>
<td>4</td>
<td>9</td>
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<tr>
<td>Cancer Deaths, &lt; 65 yrs (per 100,000)</td>
<td>56</td>
<td>67</td>
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<td>Circulatory Disease Deaths, Under 65</td>
<td>32</td>
<td>43</td>
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</table>
Understanding the Infant Brain

Source: Early Intervention, The Next Steps, HM Government
Sensitive periods in early brain development
Average affirmations and prohibitions per hour by socio-economic status in the US

Outcomes 13: More parents are regularly engaging positively with their children.

Source: ‘Child poverty and improving outcomes for Children’, UCL
Inequalities - a simplified outline

**Causes**
- Intergenerational effects
- Chaotic early years

**Mechanisms**
- Abnormal stress response
- Adverse neurological development

**Outcomes**
- Poor health
- Worklessness
- Educational failure
- Criminal behaviour

**Consequences**
- Poverty
- "Failure"

Pathways to crime often set by age 3

Dunedin study of all children born in 1972, to age 21

Number with 2+ criminal convictions

<table>
<thead>
<tr>
<th>At risk</th>
<th>Normal</th>
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<tbody>
<tr>
<td>2.5x</td>
<td>1x</td>
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Violent offences

<table>
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<tr>
<th>At risk</th>
<th>Normal</th>
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<tr>
<td>55%</td>
<td>18%</td>
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Abused partners

<table>
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<tr>
<th>At risk</th>
<th>Normal</th>
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<tbody>
<tr>
<td>47%</td>
<td>9.5%</td>
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</table>
Implication of Optimum Investment

Primary Prevention cheaper than cure, better outcomes for children

Continue on current path?

• Out of 12 million children under 16 in UK:
  • Severely maltreated - 1 to 1.6 million
  • Physical neglect – over 1 million
  • Alcoholic in household – 1 million
  • Witnessing domestic violence – ¾ million

Source: Wave Trust, C4EO, Big Lottery Fund
Targeted interventions: costs and estimated savings (£ billions)

Source: Backing the Future: why investing in children is good for us all, Action for Children
Net cash flows from investing in Functional Family Therapy, over time (non-discounted)

Source: 'Child poverty and improving outcomes for Children', UCL
Discrepancy between health determinants and spending

Source: Reducing Health Care Costs through Prevention, Prevention Institute
Why falls and fractures are the unsolved epidemic of ageing and should be “the new stroke”

<table>
<thead>
<tr>
<th>The issues</th>
<th>Strokes and TIA's</th>
<th>Heart attacks</th>
<th>Fragility Fractures</th>
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<tbody>
<tr>
<td>Incidence/year (England)</td>
<td>110,000 (1)</td>
<td>146,000 (UK, 2)</td>
<td>210,000 (3)</td>
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<tr>
<td>Current trend</td>
<td>Falling</td>
<td>Falling</td>
<td>Rising</td>
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<tr>
<td>NHS bed days</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>NHS annual costs</td>
<td>£ 2.7 Billion</td>
<td></td>
<td>£ 2.3 billion (hip fracture)</td>
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</table>

Source: Falls Prevention Seminar and Workshops.
Costs related to falls

Source: Exploring the system-wide costs of falls in older people in Torbay, The King's Fund
Shift of publicly-funded service take-up to extra care housing, independent supported living and short stay re-ablement intermediate care

Increase in 'need' for residential care based on demographic projections & prevalence of social care need

Shift of provision to extra care housing, independent supported living, short stay re-ablement intermediate care, AT and carer support (requires Wigan action)

Reduction of residential care places, based on recent trends in provision

'Core' residential provision for most vulnerable groups at 10 per 1000 (requires Wigan action)

Source: Chapter 2: Overview of Wigan’s Older People’s Social Care Needs, Service Costs and Requirements
<table>
<thead>
<tr>
<th></th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
<th>2017/18</th>
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<tbody>
<tr>
<td><strong>Cost</strong></td>
<td>£000</td>
<td>£000</td>
<td>£000</td>
<td>£000</td>
<td>£000</td>
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<tr>
<td></td>
<td>9,118</td>
<td>9,534</td>
<td>10,596</td>
<td>9,874</td>
<td>10,159</td>
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<tr>
<td><strong>Benefits</strong></td>
<td>11,473</td>
<td>14,771</td>
<td>23,790</td>
<td>27,418</td>
<td>28,933</td>
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<tr>
<td><strong>Net Benefits</strong></td>
<td>2,355</td>
<td>5,238</td>
<td>13,195</td>
<td>17,544</td>
<td>18,774</td>
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</tbody>
</table>
Conditions For Maximising Public Value

For a given sum of investment:

1. Clarity of Purpose

2. Do the right things (effectiveness)

3. Do them well (economy & efficiency)

Source: Backing the Future: why investing in children is good for us all, Action for Children
The Opportunity

£ Cost of Services (Demand)

£ Demand Reduction

£ Efficiencies

£ Institutional Resources

£ Preventative Spend

Community Assets

Years

0 1 2 3 4 5 6 7 8
Managing Demand

**Excess Demand**
- Are there opportunities to get a better fit with what is actually needed by citizens?

**Avoidable Demand**
- Is service demand arising from certain behaviours or broken relationships?

**Failure Demand**
- Is demand rising as a result of public service failure?

**Preventable Demand**
- Is demand rising as a result of not intervening early enough?

**Co-dependent Demand**
- To what extent is demand unintentionally reinforced by service dependence?

**Customer Insight**
- How can we better understand the ‘grain’ of communities and the needs, assets, and resources of citizens?
- Can different research tools, methodologies and ways of collaborating across agencies build better insight?

**Early Intervention**
- How can early intervention become a central policy consideration in the future? What kind of leadership and governance are needed?
- How can we work more collaboratively and preventatively to reduce long term demand and build capacity in UK communities?

**Behaviour Change**
- How can we use behavioural insights to design better, more citizen-centric policy that moves?
- How can we encourage behaviour change through new forms of leadership and a different kind of conversation with citizens?

**Building Resilience**
- What strategies can be put into place to help build the resilience and social and economic productivity of communities?
- How can we move from a mindset of ‘delivering services that meet need’ to ‘building on people’s assets and supporting future livelihoods’?

Source: Download Beyond Nudge to Managing Demand, RSA

Parch • Gwasanaethu • Positif • Gweithio fel tîm • Gwerth am arian
Respect • Serving • Positive • Working as a team • Value for money
Better Together – A New Approach

PEOPLE TAKING OWNERSHIP AND RESPONSIBILITY

HELPING PEOPLE TO HELP THEMSELVES

RE-DESIGN SERVICES:
- RIGHT SERVICE
- RIGHT PEOPLE
- RIGHT TIME

PEOPLE/COMMUNITIES  INSTITUTIONS

Parch • Gwasanaethu • Positif • Gweithio fel tîm • Gwerth am arian
Respect • Serving • Positive • Working as a team • Value for money
Whole System, Whole Place – understanding how demand manifests across a ‘whole system’ and a ‘whole place’

Emerging Science – different types of demand and the tools and techniques which are being used to manage demand, such as ‘nudge’

Citizens and State – cultural shift: away from public services as delivery agents to passive population, to localities in which everyone ‘does their bit’
Emergency admissions continue to rise unsustainably, driven by self referrals to A&E

England - All emergencies by source of admission
(HES Jan 07 - Dec 09)
1. Connect the patient to the doctor

Source: Why is A&E demand rising, and how could access to GPs affect it? East Midlands NHS Innovation Expo
Average days waited by patient to see GP face to face

From 16/4/12 average days wait falls to 1. 90% are same day

Source: System change in a Liverpool GP practice transforms access, Patient Access
Transforming Patient Access

Outline system design

Admin question

Reception takes call

Come and see GP

Come and see nurse

GP phones patient

Problem solved

10%

30%

60%

70%

20%

10%
Transforming Patient Access

Effects sustained and improved over a year...

- 90% of patients choose to see GP same day
- Patient contacts rise 50%, since fallen over 10%
- “Did Not Attends” fall over 80%
- GP returns call in median time of 15 mins
- Morning peak is reduced, steadier flow
- GP time is saved, only 45% called in
- Half GP saved, reducing costs by £37k pa

Wider outcomes follow: A&E usage near bottom of Liverpool practices...

Source: System change in a Liverpool GP practice transforms access, Patient Access
Elms 40% below average A&E attends per 1000 list

Around the UK, some 80 practices have invented, adopted and adapted the method

Source: System change in a Liverpool GP practice transforms access
Attendance & admission, by practice, for age group 75+

A&E variation by East Midlands practice 0910, pts 75+
A patient ringing this practice will predictably speak to a doctor within a median time of 26 minutes.

Source: Why is A&E demand rising, and how could access to GPs affect it? East Midlands NHS Innovation Expo
Multi – Agency Teams
A&E Alcohol Link Worker

- 73% decrease in no. of visits to A&E (previously presented 1-4 times)
- 65% decrease in no. of visits to A&E (previously presented 5-19 times)
- 7% increase in no. of visits to A&E (previously presented 20+)
- 54% reduction in in patient spells
- 64% reduction in no. of days patients spent in hospital
- Total savings in presentations to A&E is £16,800
- No. of visits by ambulance dropped from 174 to 114
- Currently looking at impact on criminal activity
- A&E Link Youth Worker now funded
Health trainers and wellbeing coaches

- 73% of clients who set goals around healthy eating/losing weight made behaviour changes.
- BMI fell by 4.22% on average after sessions with a health trainer.
- Fried/high fat snack food consumption down by 60%.
- Alcohol consumption down by 64%.
- 78% of those who decided to ‘get moving’ were successful in improving their level of physical activity.
- 80% of a sample of clients who have been followed up for 3-6 months have maintained the weight loss they made.

Source: More than Medicine: New services for People Powered Health, Nesta
Food Dudes – Research Evaluation

PROVISION       CONSUMPTION
Vegetables

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
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<tbody>
<tr>
<td>% of Children</td>
<td>11</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>51%</td>
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PROVISION       CONSUMPTION
Fruit

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
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</thead>
<tbody>
<tr>
<td>% of Children</td>
<td>58%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td>51%</td>
<td>76%</td>
</tr>
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</table>

Source: Ireland National Rollout – UCD Evaluation, Food Dudes
Getting the care pathway for prevention right can lead, in a 3 year period, to:

- 33% reduction in admissions to residential care
- 10% reduction in people who need intensive home care
- 50% reduction in people who need low level home care

Source: Prevention, Partnerships and Resources, JRFB Ltd
Potential savings per client in Shared Lives per annum (£)

- Learning disabilities: Highest savings
- Mental health needs: Lowest savings

Social Finance: Investing in Shared Lives
Expenditure on Children’s Social Services per head of population under 18, 2004/5 to 2013/14

- Expenditure per head - Gwynedd
- Expenditure per head - median of family of comparable councils

Difference corresponds to £3.5m
Social Services Statutory Responsibility

Children’s Services Budget = £11.3m
corresponding to a savings scope of £2.6m

Managing Placements
(Proposal 5)

Number: 212
Cost: £3.4m
Cost per client: £16,000

Additional cost of £0.3m

Care Threshold Team
(Proposal 4)

Children in Care or on Protection Register

Preventative Programme
Access to Services (Proposal 1)

Number: 22,000
Number: 1,100+?
Number: 573
Cost: £2.1m

1. Children
2. Vulnerable Children
3. Children in Need
4. Other
    - In-house Fostering
    - Agency Fostering
    - In-house Residential
    - Residential Schools
    - Out-country Residential

Assuming the £5.5m “central” costs and the £2.1m Children in Need remain constant.
The Role of Implementation

Assessing Need Comes First

For whom are we not doing well? ...how do we know?

What is the present and future cost in human suffering and money for not doing well?

What are the benefits of doing better?

Are there children and families that Agencies and Ministries have in common (e.g. child welfare, juvenile justice, education, mental health)?

Would “joining up” make sense for helping these children and youth?

Source: NIRM, UNC
Prioritising Issues: Demand Management

OUTCOMES

For People

For Institutions

ACTIVITIES AND INTERVENTIONS

RESOURCES: FINANCIAL AND NON-FINANCIAL

INPUTS

OUTPUTS

OUTCOMES

OR

£ OR
Prioritising Users

LONG TERM POTENTIAL USERS

Certainty

£

Users in System

Users at Edge of Need

Expenditure

Numbers

30 Years

0
Hip Fracture Admission ratios

Figure 3.10: Slope index chart for indirectly age- and sex-standardised hip fracture admission ratios by deprivation decile, 2001–2004 and 2008–2011

Source: Focus on hip fracture Nuffield Trust
Corrected odds of learning disability by neighbourhood deprivation

Prevention and Social Care for Adults with Learning Disabilities, NIHR School for Social Care Research Scoping Review
Better outcomes through integrated health & social care

Data matching between health and social care based on risk of hospital admission: By focusing on the top 3 risk strata we address 75% of total costs, 94% of hospital cost and 87% social care costs

Source: Iga
The Role of Implementation – Consider “WHAT”

Once the Needs of the Population have been identified...

There has been “due diligence” in examining the “WHAT”:

- The potential EBPs or innovations
- The rigor of the research
- The impact (effect size)
- The match with population’s needs
- How well operationalized is the Intervention?
- Is it ‘service ready’? Who will help?

Source: NIRM, UNC
The Role of Implementation
Choosing Wisely Is Not Enough

Implementation has not been achieved by doing more or better research on interventions.

The ability to make use of an EBP has nothing to do with how effective the research says it is.

—“Evidence” on effectiveness helps you select what to implement for whom
—“Evidence” on outcomes does not help you implement the program

Source: NIRM, UNC
Evidence of Increased reach

Total number of families for Bradford, Knowsley and Reading

Source: Transforming early years, better outcomes for families at lower cost, NESTA, Innovation Unit
New vs old: cost per family

Source: Transforming early years, better outcomes for families at lower cost, NESTA, Innovation Unit
The Role of Implementation - System Alignment

Source: NIRM, UNC
Running the CBA Model

Running the CBA Model

- Assumptions tested/updated via evaluation

Source: Presentation to Our Place Champions Network, New Economy
“The moral test of government is how it treats those in the dawn of life, the children, those who are in the twilight of life, the aged; and those in the shadows of life, the sick, the needy, and the disabled”

Hubert Humphrey. The 38th Vice President of the United States
November 4th, 1977
Do one brave thing today... then run like hell!