Knowledge Management in Public Health: Views from a PHE Centre and Our Role in Knowledge Management

12th March 2015, Birmingham

Karen Saunders, Health and Wellbeing Programme Lead, PHE Centre West Midlands
PHE’s Priorities in 2014/15

• Tackling obesity particularly amongst children
• Reducing smoking and stopping children starting
• Reducing harmful drinking and alcohol related admissions
• Ensuring every child has the best start in life
• Preventing dementia and reducing its prevalence in 65-75 year olds
• Tackling the growth in Antimicrobial resistance
• Reducing the rates of TB infection

Underpinned by:
• Health inequalities (legal duty)
• Wider determinants of health
• Mental wellbeing
• Local priorities and needs
Role of the Centres

• Support and respond to local health priorities working with local government; the NHS; VCS and other partners

• Translate national priorities into local action and support local place based working

• Ensure that local perspectives and priorities are both understood and taken into account nationally

• Support national teams by co-designing PHE priority programmes

• Provide resources, tools and products to enable effective implementation, support and delivery of various programmes and programmes

• Ensure delivery of high quality local Health Protection, Screening and Immunisation, and other services working across the local public health system.

• Support interprofessional learning; sector led improvement and the development of the specialist and wider public health workforce

Delivery and priorities in each Centre is tailored to meet local public health needs and relationship requirements
## The Three Domains of Public Health

<table>
<thead>
<tr>
<th>Health Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Inequalities</td>
</tr>
<tr>
<td>- Education</td>
</tr>
<tr>
<td>- Housing</td>
</tr>
<tr>
<td>- Employment</td>
</tr>
<tr>
<td>- Family/community</td>
</tr>
<tr>
<td>- Lifestyles</td>
</tr>
<tr>
<td>- Surveillance and monitoring of specific diseases and risk factors</td>
</tr>
<tr>
<td>- Equity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Infectious diseases</td>
</tr>
<tr>
<td>- Chemicals and poisons</td>
</tr>
<tr>
<td>- Radiation</td>
</tr>
<tr>
<td>- Emergency response</td>
</tr>
<tr>
<td>- Environmental health hazards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Public Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Clinical effectiveness</td>
</tr>
<tr>
<td>- Efficiency</td>
</tr>
<tr>
<td>- Service planning</td>
</tr>
<tr>
<td>- Audit and evaluation</td>
</tr>
<tr>
<td>- Clinical governance</td>
</tr>
<tr>
<td>- Equity</td>
</tr>
</tbody>
</table>
Types of Content: Priorities; People and Places

Our resources must cover a wide range of public health areas, including:

**specific health conditions** e.g.
- cancer
- mental health
- cardiovascular disease

**lifestyle risk factors** e.g.
- smoking
- alcohol
- obesity

**wider determinants of health** e.g.
- poverty
- environment
- housing
- education
- economy
- planning
- transport
We Work With our Local KIT who:

- Enable and enhance access to national products and services - indicators, profiles, tools and reports
- Support local use of national products - active dissemination, local interpretation/application, expert support, feed-back loop, co production
- “Warm transfer of data” - helping people use our resources
- Education, training and professional/development support e.g. facilitating local/regional intelligence networks
- Access to public health intelligence expertise across national K&I service
- Access to evidence resources; data; library services
- Responsive ad hoc intelligence service e.g. bespoke analyses to answer local questions
Popular Tools and Resources

- Data and Knowledge Gateway
- Health Profiles
- Local Health
- Public Health Outcomes Framework (PHOF)
- Health Intelligence Network Tools
- Subject Specific Sites e.g. CHIMAT and NOO
- Wider Interprofessional Learning Opportunities
Resources

Resources that require a login or registration are marked with a padlock symbol (🔒). When you select a resource it will open in a new tab or window.

Select a category

- Cancer
- Child and maternal health
- Comparison, practice and performance
- Drugs, alcohol and tobacco
- End of life care
- General health profiles
  - Health impact assessment
  - Health inequalities
  - Injuries and violence
  - Learning disabilities
  - Long term conditions
- Mental health
- Obesity, diet and physical activity
- Screening
- Sexual health
- Social care, adults and older people

European health profile tool

European regional health profiles (12SARE)

Health profiles

Health protection profiles

Local health (neighbourhood) profiles

Small area indicators for joint strategic needs assessment
Health Profiles

• http://fingertips.phe.org.uk/profile/health-profiles

• Five indicator domains: Our communities, Children’s and young people’s health, Adults’ health and lifestyle, Disease and poor health, Life expectancy and causes of death
## Health Profiles

### Our communities
- Children's and young people's health
- Adults' health and lifestyle
- Disease and poor health
- Life expectancy and causes of death
- All spine chart indicators

### Overview

**Area type:** District & UA

**Areas grouped by:** Region

**Area:** Birmingham

**Region:** West Midlands

**Benchmark:** England

### Compared with benchmark:
- Better
- Similar
- Worse
- Lower
- Similar
- Higher
- Not compared

### Table:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Period</th>
<th>England</th>
<th>West Midlands</th>
<th>Birmingham</th>
<th>Bromsgrove</th>
<th>Cannock Chase</th>
<th>Coventry</th>
<th>Dudley</th>
<th>East Staffordshire</th>
<th>Herefordshire</th>
<th>Lickey</th>
<th>Malvern Hills</th>
<th>Newcastle-under-Lyme</th>
<th>North Warwickshire</th>
<th>Rugby</th>
<th>Sandwell</th>
<th>Solihull</th>
<th>South Staffordshire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deprivation</td>
<td>2010</td>
<td>20.4</td>
<td>28.8</td>
<td>56.2</td>
<td>0.0</td>
<td>11.6</td>
<td>32.2</td>
<td>24.5</td>
<td>20.2</td>
<td>8.0</td>
<td>3.7</td>
<td>2.1</td>
<td>14.7</td>
<td>5.1</td>
<td>19.2</td>
<td>24.8</td>
<td>3.6</td>
<td>59.4</td>
</tr>
<tr>
<td>Children in poverty (under 16s)</td>
<td>2011</td>
<td>20.6</td>
<td>23.2</td>
<td>32.2</td>
<td>9.7</td>
<td>18.9</td>
<td>25.9</td>
<td>22.8</td>
<td>18.3</td>
<td>14.4</td>
<td>13.3</td>
<td>14.1</td>
<td>17.7</td>
<td>14.3</td>
<td>20.1</td>
<td>18.9</td>
<td>13.7</td>
<td>29.9</td>
</tr>
<tr>
<td>Statutory homelessness</td>
<td>2012/13</td>
<td>2.4</td>
<td>3.6</td>
<td>9.4</td>
<td>2.0</td>
<td>0.7</td>
<td>4.1</td>
<td>1.3</td>
<td>1.0</td>
<td>3.2</td>
<td>2.1</td>
<td>1.2</td>
<td>0.2</td>
<td>1.3</td>
<td>3.4</td>
<td>2.1</td>
<td>1.2</td>
<td>4.2</td>
</tr>
<tr>
<td>GCSE achieved (5A*-C inc. Eng &amp; Maths)</td>
<td>2012/13</td>
<td>60.8</td>
<td>58.9</td>
<td>59.9</td>
<td>68.9</td>
<td>56.2</td>
<td>56.6</td>
<td>59.7</td>
<td>61.8</td>
<td>56.1</td>
<td>64.0</td>
<td>60.1</td>
<td>50.9</td>
<td>54.8</td>
<td>57.3</td>
<td>68.0</td>
<td>66.2</td>
<td>54.2</td>
</tr>
<tr>
<td>Violent crime (violence offences)</td>
<td>2012/13</td>
<td>10.6</td>
<td>10.4</td>
<td>12.4</td>
<td>7.0</td>
<td>11.5</td>
<td>12.5</td>
<td>6.9</td>
<td>11.0</td>
<td>9.8</td>
<td>6.2</td>
<td>6.4</td>
<td>11.1</td>
<td>6.5</td>
<td>10.1</td>
<td>13.9</td>
<td>7.7</td>
<td>9.4</td>
</tr>
<tr>
<td>Long-term unemployed</td>
<td>2010</td>
<td>3.9</td>
<td>12.2</td>
<td>22.6</td>
<td>4.9</td>
<td>2.8</td>
<td>11.0</td>
<td>47.0</td>
<td>46.5</td>
<td>5.3</td>
<td>3.7</td>
<td>4.1</td>
<td>6.2</td>
<td>4.5</td>
<td>2.8</td>
<td>7.7</td>
<td>4.2</td>
<td>3.9</td>
</tr>
</tbody>
</table>
Local Health


Aim:

• to improve the availability and accessibility of health and health-related information in England.

It gives you access to:

• interactive maps and reports

Geography:

• Ward,
• Local authority
• Middle Super Output Area
PHOF Tool

http://www.phoutcomes.info/
## Public Health Outcomes Framework

### Table: Data for Selected Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Period</th>
<th>England</th>
<th>West Midlands</th>
<th>Birmingham</th>
<th>Coventry</th>
<th>Dudley</th>
<th>Herefordshire</th>
<th>Sandwell</th>
<th>Shropshire</th>
<th>Solihull</th>
<th>Staffordshire</th>
<th>Stoke-on-Trent</th>
<th>Telford and Wrekin</th>
<th>Walsall</th>
<th>Warwickshire</th>
<th>Wolverhampton</th>
<th>Worcestershire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children in poverty (all dependent children under 20)</td>
<td>2011</td>
<td>20.1</td>
<td>22.7</td>
<td>32.4</td>
<td>25.4</td>
<td>22.1</td>
<td>13.9</td>
<td>29.6</td>
<td>13.0</td>
<td>15.8</td>
<td>14.8</td>
<td>26.9</td>
<td>24.1</td>
<td>28.5</td>
<td>13.5</td>
<td>30.6</td>
<td>15.0</td>
</tr>
<tr>
<td>Children in poverty (under 16s)</td>
<td>2011</td>
<td>20.6</td>
<td>23.2</td>
<td>32.2</td>
<td>25.9</td>
<td>22.8</td>
<td>14.4</td>
<td>29.9</td>
<td>13.8</td>
<td>15.4</td>
<td>15.4</td>
<td>22.6</td>
<td>21.5</td>
<td>29.2</td>
<td>14.1</td>
<td>31.5</td>
<td>15.7</td>
</tr>
<tr>
<td>School Readiness: The percentage of children achieving a good level of development at the end of reception</td>
<td>2012/13</td>
<td>51.7</td>
<td>50.0</td>
<td>49.6</td>
<td>55.4</td>
<td>51.1</td>
<td>55.0</td>
<td>45.6</td>
<td>52.4</td>
<td>58.0</td>
<td>53.6</td>
<td>52.0</td>
<td>45.1</td>
<td>48.3</td>
<td>44.9</td>
<td>44.2</td>
<td>49.4</td>
</tr>
<tr>
<td>School Readiness: The percentage of children with free school meal status achieving a good level of development at the end of reception</td>
<td>2012/13</td>
<td>36.2</td>
<td>36.1</td>
<td>39.5</td>
<td>42.3</td>
<td>33.9</td>
<td>34.4</td>
<td>35.1</td>
<td>35.7</td>
<td>32.1</td>
<td>36.1</td>
<td>41.1</td>
<td>30.6</td>
<td>32.6</td>
<td>28.2</td>
<td>34.8</td>
<td>26.6</td>
</tr>
<tr>
<td>The percentage of Year 1 pupils achieving the expected level in the phonics screening check</td>
<td>2012/13</td>
<td>69.1</td>
<td>70.0</td>
<td>69.1</td>
<td>66.9</td>
<td>68.0</td>
<td>67.7</td>
<td>69.9</td>
<td>73.2</td>
<td>79.0</td>
<td>72.7</td>
<td>64.5</td>
<td>67.0</td>
<td>72.0</td>
<td>71.7</td>
<td>65.8</td>
<td>70.6</td>
</tr>
<tr>
<td>The percentage of Year 1 pupils with free school meal status achieving the expected level in the phonics screening check</td>
<td>2012/13</td>
<td>55.8</td>
<td>58.0</td>
<td>61.4</td>
<td>54.9</td>
<td>52.4</td>
<td>46.9</td>
<td>61.3</td>
<td>56.8</td>
<td>70.7</td>
<td>58.7</td>
<td>53.3</td>
<td>54.7</td>
<td>58.0</td>
<td>54.1</td>
<td>57.4</td>
<td>49.7</td>
</tr>
</tbody>
</table>
Health Intelligence Networks

- Cancer Intelligence Network
- Cardiovascular Intelligence Network
- Mental Health Dementia and Neurology
- Child and Maternal Health Intelligence Network
- End of Life Care Intelligence Network
ChiMat Tools

http://www.chimat.org.uk/default.aspx?QN=CHMT0
# Child Health Profiles

## Health Protection

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MMR vaccination for one dose (2 years): 2012/13</td>
<td>Staffordshire</td>
<td>93.9</td>
<td>92.3</td>
<td>77.4</td>
<td>58.4</td>
<td>93.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Dtap / IPV / Hib vaccination (2 years): 2012/13</td>
<td>Staffordshire</td>
<td>96.3</td>
<td>96.3</td>
<td>81.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children in care immunisations: 2013</td>
<td>Staffordshire</td>
<td>28.8</td>
<td>36.7</td>
<td>0.0</td>
<td>14.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute sexually transmitted infections (including chlamydia): 2012/13</td>
<td>Staffordshire</td>
<td>28.8</td>
<td>34.7</td>
<td>28.8</td>
<td>14.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Wider Determinants of Ill Health

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children achieving a good level of development at the end of...</td>
<td>Staffordshire</td>
<td>51.7</td>
<td>27.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCSE achieved (A*-C inc. English and maths): 2012/13</td>
<td>Staffordshire</td>
<td>50.9</td>
<td>43.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GCSE achieved (A*-C inc. English and maths) for children in...</td>
<td>Staffordshire</td>
<td>18.5</td>
<td>15.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-19 year olds not in education, employment or training: 2012/13</td>
<td>Staffordshire</td>
<td>5.4</td>
<td>10.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First time entrants to the youth justice system: 2012</td>
<td>Staffordshire</td>
<td>15.4</td>
<td>45.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children in poverty (under 16 years): 2011</td>
<td>Staffordshire</td>
<td>33.7</td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family homelessness: 2012</td>
<td>Staffordshire</td>
<td>1.7</td>
<td>6.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children in care: 2013</td>
<td>Staffordshire</td>
<td>6.3</td>
<td>20.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Health Improvement

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low birthweight of all babies: 2012</td>
<td>Staffordshire</td>
<td>7.3</td>
<td>10.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese children (4-5 years): 2012/13</td>
<td>Staffordshire</td>
<td>9.7</td>
<td>14.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese children (10-11 years): 2012/13</td>
<td>Staffordshire</td>
<td>18.9</td>
<td>27.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with one or more decayed, missing or filled tooth: 2012/13</td>
<td>Staffordshire</td>
<td>21.6</td>
<td>53.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 18 conceptions: 2012</td>
<td>Staffordshire</td>
<td>28.8</td>
<td>52.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teenage mothers: 2012/13</td>
<td>Staffordshire</td>
<td>1.4</td>
<td>3.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital admissions due to alcohol specific conditions: 2012/13</td>
<td>Staffordshire</td>
<td>42.7</td>
<td>113.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital admissions due to substance misuse (age 15-24 yrs): 2012/13</td>
<td>Staffordshire</td>
<td>73.5</td>
<td>216.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
More To Do On:

- How we land products that are expressed in appropriate language and supported by an evidence base better aligned with stakeholder priorities
- Systematic review of barriers and facilitators of the use of evidence by policymakers
- Working across wide interprofessional boundaries
- Co production – identifying and responding to different needs
- NICE – “evidence”? Social return on investment and qualitative knowledge
- Cost benefit analysis
- Performance management vs. performance improvement
Libraries and the Public’s Health

• Well-placed to contribute to promoting health and well-being

• Able to reach individuals and communities, informing positive lifestyle choices of individuals and the self-management of medical conditions, and providing a better understanding of the problems and challenges facing local communities

• Provide essential information to key stakeholders necessary to promote public health: patients, carers, community leaders, healthcare workers, policymakers, and the public

• Community ethos and outreach role and the value of community space/settings both as a venue and as a positive environment

• Library-based activity can contribute to linked agendas such as worklessness, informal adult learning, literacy, language and skills development, social inclusion and the building of social capital

• Challenge - such initiatives can be patchy and lack co-ordination. Funding cuts
Contact

Karen Saunders
Health and Wellbeing Programme Lead
Karen.saunders@phe.gov.uk

Acknowledgements:
Nicola Dennis
Knowledge Transfer Facilitator
nicola.dennis@phe.gov.uk