Improving the health of everyone in Wales – the public health challenge of prudent healthcare

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Summary

Public health practice is a rigorous, evidence-based approach, which involves a critical understanding of the patterns of disease and health, their distributions and their causes. It also means constantly assessing and reviewing what works to change these.

Public health practice supports prudent healthcare through:

- Ensuring resources match need
- Providing evidence about the effectiveness of interventions
- Measuring meaningful outcomes
- Influencing and effecting change
- Working with and for individuals, communities and populations

Effective prudent public health in Wales needs to be at scale across whole populations. Urgent action is needed across multiple systems, sectors and organisations in Wales so in order that we can meet the health challenges in Wales in a united and integrated way.

Introduction

Public health in Wales has always worked to support the health of the people of Wales through reducing inequalities in health (equity), promoting prevention, ensuring what we do works (effectiveness), and working with and for communities in partnership. This means that many of the approaches and principles of prudent healthcare are not passing buzz-words, but are at the core of what good public health practice in Wales tries to achieve. Unlike those working in clinical practice or social care, public health applies these principles to whole populations or communities and not just individuals. By working with the people of Wales in partnership, prudent public health will co-create the environments to allow people in Wales to live healthier lives for longer.

Public health practice

Public health practice is ‘the science and art of promoting and protecting health and well-being, preventing ill health and prolonging life through the organised efforts of society’.

(Faculty of Public Health, 2010)\textsuperscript{[1]}

The science of public health practice means taking a rigorous, evidence-based approach to population health. This approach involves a critical understanding of the patterns of disease and health, their distributions and causes. It also means constantly assessing and reviewing what works to change these patterns.
The art of public health means harnessing our many social, political, economic and cultural assets throughout society and using them to work towards a common cause. It means influencing, often without authority, to:

- empower individuals to make healthy choices for themselves and their families
- enable communities to develop and mobilise skills and assets for health
- help our health services focus on disease prevention
- create the environments and public policy supportive for good health.

As well as sustainable health improvement, public health focuses on protecting the public from threats such as communicable disease and environmental hazards, including climate change. It also supports development of healthcare that is effective, equitable, minimises harm and puts people at its centre.

**Public health practice supports prudent healthcare**

The remit of public health practice is intrinsic to prudent health care by:

- promoting equity by working to ensure resources flow to areas of highest need
- providing evidence to win continued support for effective interventions while eliminating those interventions that do not work
- helping make sure meaningful health outcomes are measured, not just activity
- influencing and effecting change, directly and indirectly, with and often without the authority to do so
- working with and for individuals, communities and populations.

**Public health in partnership**

As well as building on prudent healthcare principles, public health also works in partnership with others at all levels, from the political (influencing policy) to the personal (changing individual health behaviour). This long standing experience in working together at all levels of influence, directly and in partnership is an important way in which public health practice can support prudent healthcare. Effective partnerships make healthcare spending go further and create greater value. Sir Derek Wanless concluded that NHS spending was most cost effective where levels of public engagement in their health were high.\(^{(2,3)}\)

In his review of the NHS in Wales Wanless drew many conclusions about the future of the health service in Wales, and in terms of prudent public health, that:

- a public fully engaged in health issues will positively impact on the health service, through increased health promotion, disease prevention, better self care and increased health seeking behaviour
- achieving effective public engagement will require an active partnership between those who provide care and those who receive it
• when there is effective public engagement, the desirable health outcomes are only likely to come about when there is a step change in the way public health is viewed, resourced and delivered nationally.\(^{[2]}\)

Effective prudent public health, with effective partnerships, community involvement and a strong evidence base, in Wales needs to be delivered at scale across whole populations. The challenge of delivering prudent public health will not be a challenge for one person, agency or system. Urgent action will need to be taken across multiple systems, sectors and organisations to meet our health challenges in a united and integrated way. This requires a significant shift in the current and traditional models of health care from predominantly treating people who are acutely unwell to preventing ill health (primary prevention), preventing the exacerbations of existing ill-health (secondary prevention) and thereby keeping people healthier for longer.

**What are the public health challenges facing Wales?**

Although Wales has some markers of good health, we also have poorer health compared with many other western nations. Inequalities in levels of health between communities are strongly associated with socio economic deprivation. Life expectancy in Wales overall has increased by a year since 2005. However, when we compare the most and least deprived populations, we find a difference of over 18 years in life expectancy and worryingly this is not showing signs of improving (see Figure 1 below).

The causes of ill health and their relationship to deprivation are complex. They relate to income, housing, opportunities for work and education. They are strongly associated with lifestyle factors such as smoking, alcohol misuse, obesity, diet and exercise. These in turn have a major impact on the chances of an individual developing cancer, circulatory and respiratory diseases which are significant underlying causes of differences in life expectancy.\(^{[4]}\) Effective strategies to combat these factors are essential if we are to address health inequalities.

In the face of public sector austerity, the NHS across the UK is dealing with increased demand while budgets remain static. In Wales there is a relative lack of investment in NHS services a lower proportion of our NHS budget is spent on prevention and public health, compared with other UK countries. Public health spending is hard to quantify making actual public health spending difficult to assess.
This means that achieving true value from public health, and realising the potential of prudent public health must be a real priority for the NHS in Wales.

Prudent public health in practice

We already have evidence and experience from a vast amount of prudent public health work in Wales. To support this work we put out a call for case studies of prudent public health in practice and this led to many good and innovative examples. From these, we have selected those that highlight prudent healthcare principles and show how they are being applied in Wales.

1. Equity based public health action

Equity based public health action addresses the fact that approaches to improve equity or fairness usually cost more for the same gain in health. It involves a constant resolve to focus and work universally, but with greater effort aimed at working in partnership with those most marginalised, disadvantaged, vulnerable or in need. It calls on professionals to develop greater awareness of the values and culture of disadvantaged communities and work in partnership with them to co-create services that meet their needs and are effective in improving health outcomes.

Screening for Life – Increasing Uptake

Author: Ian Scale, Locum Consultant, Hywel Dda Public Health Team

Objective: To increase uptake of national screening programmes particularly among groups with lower uptake

Setting or groups: A range of groups including Communities First, traveller communities and individuals with learning disabilities and relevant agencies/professionals.

Learning: The national adult screening programmes look for breast, bowel or cervical changes as well as for Abdominal Aortic Aneurysm. Individuals are sent invitations to either attend a screening appointment or, in the case of bowel screening, complete and return their own home test kit. Fewer individuals in certain communities take up their screening offer – yet most cancers have higher rates in these groups. Improved uptake leads to more conditions detected earlier which may lead to more successful treatment.

Action:

- Increase equity by making it easier for all individuals to take up their screening offers
- Make the offer relevant to different communities

Work with relevant professionals and Third Sector partners to reach out to individuals less likely to take up screening offers.

Improving Hepatitis B vaccination uptake in prisons in Wales

Authors: Stephanie Perrett, Jane Salmon, Marion Lyons

Objective: To improve liver health among prisoners in Wales by including hepatitis B vaccination as part of a larger campaign.
Setting: A prison liver health campaign was developed and launched in Wales in April 2012. The campaign included:

- A delivery plan for the provision of seamless liver health care in Welsh prisons
- Literature and posters on liver health for prisoners
- An e-learning module for prison staff.

Action: As part of the liver health campaign, hepatitis B vaccination was promoted.

Learning: Data from January 2012 to December 2013 indicated that the average hepatitis B vaccination coverage, based on the completed course including a booster dose, rose from three per cent in the first half of 2012 to 33 per cent in the second half of 2013.

The involvement of many different groups of individuals, both prison staff and prisoners in developing this campaign was fundamental to achieving this improvement.

2. Minimise harm from action or from lack of effective action

For population level interventions, harm may come from action or inaction. This balance can be difficult.[1] An understanding of the evidence and opportunity costs involved in choices to be made is essential.

Reducing Healthcare Associated Infections (HCAI): a prudent healthcare initiative

Author: Dr Mike Simmons, Public Health Wales, and Ms Sharon Evans, Hywel Dda UHB – Senior Nurse Infection Prevention & Control

Objective:

To use a complexity science approach to reduce HCAIs in both the community and acute sectors of the health board area.

Use two rules in judging potential HCAI actions:

First do no harm

Second, take the positive action or direction.

Groups:

Whole health board initiative, emphasising the health board and Welsh Government assertion that HCAI prevention and reduction is the responsibility of all healthcare staff.

Learning:

1. The health service is a complex system that can respond to simple rules.
2. Self-organisation will occur through defining simple positive rules.
3. Detailed top-down direction can create perverse negative rules and should be avoided.

First ‘do no harm’ should take precedence, unless another positive action supersedes it.
Community pharmacist pilot project – optimising medicines treatment in heart failure

Authors: Gareth Holyfield, Public Health Wales; with Don Wilkes and Jenny Pugh-Jones, Hywel Dda Health Board

Objective: To improve access to medicines review for patients with heart failure.

Setting: Community pharmacist clinic within GP surgery in Hywel Dda.

Groups involved: Community pharmacist, patients with heart failure, GP surgery, and hospital cardiac team.

Learning:

1. Optimising drug treatment improves patient care in heart failure and this pilot showed the added value of including a community pharmacist specialist as part of the cardiac team.
2. Forty-two per cent of all the patients referred to the pharmacist required changes to their drug treatment, which is a measure of the importance and value within the community team.
3. The clinic has encouraged people in rural communities to engage locally and access different specialist services from their community pharmacist.

3. Consistently apply evidence based practice

Public health practice has a vital role in making sure that everyone, from decision makers and to the people of Wales has the best information available for them to assess the impact of actions to improve health.

High quality evidence for interventions that work on public health issues are rare, due to the complex and interrelated nature of the factors that affect health and the long time scales involved. Developing good evidence is time consuming and can conflict with urgency for action.

Prudent public health involves robust evaluation of initiatives, preparedness to challenge accepted culture and practice and willingness to bring in new ways of working where these are likely to have a greater impact. When put into practice, this approach is challenging.

Transforming Health Improvement Review, using programme budgeting and marginal analysis (PBMA)

Authors: Dr Julie Bishop, Public Health Wales

Objectives: To undertake an evidence-based review of the impact of the national health improvement programmes in Wales.

Using PBMA, to explore evidence-based potential alternatives and areas for investment and disinvestment.

Groups: Multi-stakeholder group led by Professor Rhiannon Tudor Edwards to undertake a PBMA. The panel considered multi-source evidence (including public and service user perspectives) to make recommendations about future investment and disinvestment.
Learning: PBMA was found to be a transparent evidence-based tool to reach decisions about ensuring resources are most cost-effectively and equitably deployed. This exercise recommended disinvestment of £8.8 million where evidence of effectiveness was lacking. Marginal analyses prioritised child health, mental health and wellbeing, and tobacco control as key areas for investment.

The exercise demonstrated

1. The value of multi-source evidence considered together.
2. The importance of understanding what is required to deliver population impact in advance and checking that is happening.
3. The need to regularly reflect and review, with input from partners and service users, to ensure the original goals and assumptions are still valid.
4. The need to shift from secondary to primary prevention – individual to population focus.

**Community Pharmacy Tuberculosis (TB) Medicines Compliance Scheme**

Author: Sian Evans, Pharmaceutical Public Health

Objective: To address an ongoing outbreak of tuberculosis, in a South Wales village, where traditional methods of management were ineffective.

Action: A new treatment service model was developed to improve access to the health service, support patient’s TB medicine management and minimise disruption and support capacity pressures to the hospital service. The service was delivered via a community pharmacy supported by the hospital based TB specialist team.

Setting or groups: One community pharmacy, patients with latent TB, hospital respiratory team, Cwm Taf Health Board and Public Health Wales.

Learning: Developing a service model more acceptable to the local community led to more effective treatment:

- There was improved adherence to medication regimes for patients accessing the new community pharmacy’s tuberculosis medicine compliance service.
- The community pharmacy service was found to be more effective and cost effective than the hospital service.
- A flexible, tailor-made approach to TB treatment provision assisted patients to understand their health risks and regularly discuss medication issues with a health professional which encouraged adherence.

**4. Co-create health with people, patients and partners**

Co-creating health demands the resources and assets needed to improve health are shared between individuals, their families and communities, as well as across government, academia, public, private and voluntary sector services. It is essential that we all work together and utilise our resources and assets to co-create a healthier Wales. Co-production is a new way of working and presents many challenges. The examples given here signal a direction of travel for public health in adopting true co-production principles.

**Screening services working with the transgender community in Wales**

Authors: Sikha de Souza, Screening Division, Public Health Wales
Objectives: Improved awareness of screening for individuals in the transgender community, enabling informed decision making.

Raised awareness and improved training for health professionals working with this group

Improved experience of screening services for this group of service users.

Groups: Working in partnership with representatives from the trans community and organisations including Transgender in Wales, Female to Male Wales, Unique Transgender Network and the NHS Centre for Equality and Human Rights.

Learning: A co-production approach was used, starting by identifying priorities together.

Quality standards were developed, setting out the care which transgender men and women should expect to receive.

Resources were also developed in partnership including an information leaflet, frequently asked questions, and YouTube videos.

Staff training was identified as important, raising awareness of issues that transgender service users face.

**Newtown Community Research Project**

Authors: Nicola Gordon, Principal Public Health Practitioner; Sophia Bird, Principal Health Promotion Specialist.

Objective: To identify whether social network interventions can impact upon health-related behaviours.

Groups:

- Powys Public Health Team
- Powys County Council
- Powys (t) Health Board
- Voluntary sector
- Community members.

Action: Community research was undertaken to map the social connections in Newtown, recognising community members with strong social connections.

The programme will approach these people and invite them to become Community Connectors, who pass on key health messages and refer to appropriate services.

Learning: The use of social networks to communicate health messages.

**Conclusion**

There is an urgent need to practice prudent public health across Wales. There can be no stronger argument for a better balance between prevention and treatment in health policy, practice and funding if we are to avoid a crisis in the NHS in Wales.

In 2014, health inequalities in Wales remain stubborn and persistent. We will continue to suffer inequalities in health across Wales, unless we do things differently and prudently. Reducing existing health inequalities offer substantial economic benefits. Not only will pressure on healthcare in Wales be reduced with resulting savings, but we will also enjoy benefits from increased economic productivity, increased tax revenues and reduced welfare payments.
Prudent public health begins with prevention, using public health evidence. Prudent public health needs to be based on what we know works to improve population health. Where it is not clear we need to innovate with others and robustly evaluate our impact, being prepared to change in order to secure improved health and wellbeing.

To deliver prudent public health, we will need to harness the resources and assets we already have as well as adopting new and innovative approaches to be effective. We can do this by creating opportunities for individuals and communities to set the agenda for change, to define local problems and to seek local solutions.

References

1. Faculty of Public Health. What is Public Health?. [Internet] 2010 [cited 2014 August 22]; Available at: http://www.fph.org.uk/what_is_public_health