Creating a sustainable and accessible health service: how is this possible?

While use of health services is increasing, the resources available in the NHS remain limited. The health service will only remain sustainable by aiming to prevent ill health. This must be done for those already suffering from chronic diseases and by preventing the occurrence of disease from the outset.

Decreasing risk through health promotion

Old age is associated with more ill health and as the population ages this will place a greater burden on the NHS. However many diseases associated with old age like chronic obstructive pulmonary disease (COPD), diabetes and cardiovascular disease have modifiable risk factors in common.

The World Health Organisation identified these as smoking, unhealthy diet and physical inactivity[1]. Projects have been undertaken to discourage these behaviours and encourage a healthy lifestyle. The Active Schools programme[2] aims to encourage children to participate in more exercise, while the Change4Life advertising campaign shows the 'hidden nasties' in everyday foods[3]. The ban on smoking in enclosed public places has reduced the number of smokers and the health impacts of this are already apparent. For example Sims et al.[4] found a reduction in the incidence of myocardial infarctions since the restrictions were put in place.

Another risk factor for many diseases is alcohol; it is involved in 1 in every 8 bed days in hospital[5]. A pragmatic approach is being used in London to help to ease this burden: 'Booze buses' help those intoxicated by alcohol without the need for them to be admitted to hospital[6]. A more preventative approach is being used in Fife. A mobile alcohol intervention unit[7] gives advice to youths on reducing alcohol intake. 41% said that they had reduced their alcohol intake after this intervention[6]. On a national scale, minimum unit pricing is being considered. A Canadian study found that a 10% rise in alcohol cost reduced consumption relative to other drinks by 16.1%[8].

Early diagnosis

Where disease is present, early detection can reduce morbidity and mortality. This is done through screening programmes, for example cervical and bowel cancer screening.

However, health inequities limit the uptake of these programmes. Goddard and Smith[9] found that people from poorer economic backgrounds use breast cancer screening less due to factors like cost of travel and time taken to attend the appointment.

To qualify this Levesque et al[10] identified five dimensions of healthcare accessibility: approachability, acceptability, availability and accommodation, affordability and appropriateness.

There are projects focusing on each of these dimensions. The Borders Health in Hand website[11] provides health information for those with long term conditions, increasing accessibility by removing cost of travel and providing the information in the 6 languages

most common to the area. This website is part of a larger project collaborating with local workplaces and libraries to increase the accessibility of health resources[12]. As part of this, training sessions are available at local libraries that signpost people to helpful websites.

Improving chronic disease management

For chronic conditions sufferers the aim is to prevent unplanned hospital admissions (UHAs) where possible by good management. UHAs put a strain on resources by increasing waiting times and disrupting elective procedures, costing the NHS £11 billion per year[13].

Additionally, hospitalisation increases the incidence of hospital acquired infections, pressure sores and leads loss of independence. Covinsky et al[14] found that 35% of over 70s admitted to hospital decreased their ability to perform activities of daily living.

Purdy et al.[15] conducted a systematic review of interventions to prevent UHAs. They found that in some circumstances education and self management, exercise and rehabilitation and telemedicine (for example blood pressure monitors[16]) can reduce UDAs. Case management, care pathways and hospital at home were found to either have no effect or increase them. However, these have been found to improve patient experiences and provide cost effective care overall[17].

Croydon[18] piloted the first virtual ward which aimed to reduce UDAs by managing patients in the community. Mr KP, was referred to one of the virtual wards after an exacerbation of COPD[19]. Once admitted, a multidisciplinary team cared for him and provided the default communication point for all services in order to integrate his care. His case manager identified when he became ill quickly, administered antibiotics and prevented a hospital admission.

This project uses risk prediction tools[20] to identify those at risk of future hospital admissions. Other projects have targeted people who have already had multiple hospital admissions are unsuccessful due to regression to the mean: the improvement would have happened without intervention[21,22,23].

S**elf management**

Self management reduces hospital admissions[24] and allows an individual to actively manage their own illness using problem solving and setting goals. Various projects have been started to support patients through this. The patient passport[25] was developed by people suffering from arthritis for people with the condition. The passport records a patient's medications, changes to their condition and changes in their ability to carry out daily living. This allows patients to take ownership of their condition and so maintaining their independence and dignity. It also facilitates information sharing between health care professionals to improve illness management and integrate services.

The voluntary sector is vital to create a sustainable health service and this includes their support for people who are self-managing. The Co-creating health project[26], developed by The Health Foundation, has been encouraging self-management in people with COPD since 2007. An evaluation of the first phase of this project[27] explored co-delivery of training courses by someone with COPD and a healthcare professional. The courses were for professionals and patients and both groups found that it changed their

perception of their role in healthcare. The combination of initial training and long term support, for example buddying systems, was vital to make self-management sustainable. Overall, this self-management programme improved quality of life[27].

Throughout the NHS, the shift from compliance to concordance based practice[28] facilitates the uptake of self-management. It encourages patients to be involved in decisions regarding their own healthcare, empowering them to take an active interest in their health whilst respecting autonomy.

Creating a healthy workforce

Creating a sustainable health service relies on a resilient workforce. The Boreman report[28] explores health worker absenteeism and presenteeism (those at work but unwell, who cannot perform to their full potential). Absenteeism varies from 2 to 6% between locations[29]. The majority of long term absences are due to acute medical conditions, musculoskeletal problems and mental health problems[30].

Services that actively improve the health of workers increases resilience[30]. The 'Addenbrooke's Life' initiative[28] provides free pilates classes for workers and quarterly health testing days where BMI and BP are checked. On these days advice is given on diet and exercise, amongst other things.

The Boorman report[28] also shows the link between staff wellbeing and patient safety, dignity and care.

Looking to the future

In order to move forward and create a sustainable, accessible health service for the future, current projects must be evaluated. An evidence based approach for this is necessary, not only taking into account financial costs but also quality of life and the patient experience which incorporates compassion, dignity and respect[31].

Rolling out successful projects must be done cautiously: when targeted at a different population the same framework may fail. It is equally important that the greatest number of people benefit each the project. This involves signposting patients to services relevant to them in the NHS and the voluntary sector.

The voluntary sector and also social care are essential in creating a sustainable model. This will, for example, prevent hospital beds being used by people waiting for a social care package. In Scotland a bill incorporating the results of a consultation into integration of health and social care is due later this year[32]. This bill will also see the integration of their budgets.

The aging population is important to consider when designing healthcare for the future. This may burden the health service in two ways: age related illnesses will create more patients and more worker absences. However, a report[33] found that by facilitating 'morbidity compression' through healthy aging, an aging population can make economies more competitive whilst placing less strain than may be expected on healthcare services.

Risk factors for illness include lifestyle factors and health inequity. Health promotion projects aimed at all ages and groups of the population can reduce the impact of these as discussed previously. Additionally, there is a correlation between income inequality

and health and social problems[34,35,36]. Decreasing income inequality would help to create a healthier population.

Research and medical advances also remain important in improving health[33]. The morbidity and mortality of conditions like atherosclerosis have been improved by drug advances and others like dementia could benefit from similar advances.

Therefore there is a great challenge ahead: improving the health of the nation is a complex task involving healthcare workers, current patients and future patients. There are many innovative projects taking place that aim to improve health by illness prevention and health promotion. Only by carefully sharing these projects and encouraging new ones, will the health service be accessible and sustainable for the future.

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