Setting the Context for the Faculty of Public Health (FPH) Strategy: a Brief Profile of the Health of the Public in the UK 2018

Purpose of this report

The aim of this profile is to provide an overall context for the development of the FPH Strategy 2019-2025. It is not intended to be a comprehensive health profile of the UK, many more detailed reports and tools are available and some of these have been used as sources to provide the data here.

Key messages

- Although life expectancy has improved, it is lower in the UK than in similar countries. The rate of increase has slowed dramatically – the UK is the second slowest out of 20 developed countries.
- Child mortality rates have fallen, but the UK has higher perinatal and neonatal mortality rates than many developed countries. The UK ranks fairly low in measures of child health and wellbeing compared to other similar countries
- While overall health has improved over recent years, health inequalities remain significant and in most cases are not reducing. Inequalities in healthy life expectancy are greater than inequalities in life expectancy (up to nearly 2 decades between the most and least deprived).
- Without additional action, the UK is not on target to achieve many of the health-related indicators for the Sustainable Development Goals
- In terms of ill health:
  - Ischaemic heart disease, lung cancer and cerebrovascular disease are the top 3 causes of premature mortality.
  - Low back and neck pain, ischaemic heart disease and skin diseases cause the greatest number of Disability Adjusted Life Years (DALYs).
  - Some causes of premature mortality and DALYs are significantly higher in the UK compared to other similar countries.
  - Whilst many causes are similar there are also some important differences between the 4 nations.
  - The UK performs relatively worse than comparator countries for outcomes for the major cancers and cardiovascular diseases, in particular for cancers in females
- Tobacco remains the biggest lifestyle risk contributor to DALYs in all 4 nations, followed by dietary risks. Alcohol and drug use, and occupational risk have shown an increased contribution since 2005.
- While patient experience of the NHS is generally favourable compared to other countries, the outcomes are often worse. The social care system is facing increasing

demands with reducing funds. The priorities in the NHS 10 year plan will include mental health, cancer, cardiovascular disease, children's services and health inequalities.

- The major determinants of health are beyond health services. Significant inequalities exist in education, housing, income, employment and our environment.
- Health and outcomes for some of the most vulnerable groups in our society are much worse than the population as a whole, for example those who are dependent on alcohol and drugs, destitute, have learning disabilities or are undocumented migrants.
- The health of the public is likely to worsen by 2025 due to both worsening trends (eg obesity) and an ageing population (eg dementia)

1. Life expectancy

Key message: Although life expectancy has improved, it is lower in the UK than in similar countries. The rate of increase has slowed dramatically – the UK is the second slowest out of 20 developed countries.

Compared to similar countries, the UK has a relatively low life expectancy and healthy life expectancy, ranking 16 out of 19 high income industrialised countries (Source: How good is the NHS, Dayan et al, (1) using Organisation for Economic Co-operation and Development (OECD) data). The highest life expectancy at birth for women is in Japan (87.1 years) and for men in Switzerland (81.7 years) Source: OECD (2)

Life expectancy has increased over time but differences remain between the 4 nations with Scotland having the lowest life expectancy for both males and females (table 1)

Table 1: Life expectancy at birth

	Males		Females	
	1990	2016	1990	2016
UK	72.9	78.9	78.5	82.9
England	73.1	79.2	78.7	83.1
Scotland	70.9	76.9	76.8	81.2
Wales	72.6	77.9	78.4	82.2
N. Ireland	71.9	77.9	77.9	82.4

Source: Global Burden of Disease Country profiles (3)

Although life expectancy in the UK has been increasing for many decades, from 2011-2016 the improvements in life expectancy slowed. Compared with 19 other developed countries the UK had the second greatest slowing in life expectancy at birth (behind the US). Improvements dropped by nearly 76% from 17.3 weeks/yr (2006-11) to 4.2 weeks/yr (2011-16). This is partly due to a relatively large increase in male life expectancy in the UK from 2011-11. The slowdown in life expectancy was greater for females than males with the UK experiencing the greatest slowdown of all the 20 countries studied. Source: Office for National Statistics (ONS) (4)

In another study on trends in mortality rates published by ONS, a slowdown in the decline in mortality rates for circulatory diseases since 2011 is a major contributor to the slowdown in

mortality improvements for people aged 55 and over. England and Wales have seen a greater slowdown in overall mortality improvements for males compared with Northern Ireland and Scotland. For females, mortality rates in Wales have worsened from 2011-2016, Northern Ireland had no improvement and England and Scotland mortality rates have improved but at a slower rate than previously. Source: ONS (5)

2. Child mortality, health and wellbeing

Key message: Child mortality rates have fallen, but the UK has higher perinatal and neonatal mortality rates than many developed countries. The UK ranks fairly low in measures of child health and wellbeing compared to other similar countries.

Child and infant mortality rates have fallen over recent years (table 2) but the UK compares poorly with other developed countries for rates of perinatal and neonatal mortality (Source: How good is the NHS, Dayan et al (1))

Table 2 Child mortality rates

	Under 5s		Under 1s	
	1990	2016	1990	2016
UK	9.5	4.6	8.0	3.9
England	9.5	4.6	8.0	3.9
Scotland	9.5	4.1	8.0	3.4
Wales	8.8	4.4	7.3	3.7
N. Ireland	9.5	4.8	8.1	4.1

Deaths per 1000 live births. Source: Global Burden of Disease Country profiles (3)

The Nuffield Trust and Royal College of Paediatrics and Child Health (RCPCH) recently published a report on health and wellbeing in early childhood in the UK in comparison to 14 other countries (6). Table 3 shows where the UK ranked, and the top 3 countries, for key highlighted areas from this report.

Table 3: International comparisons of child health and wellbeing

Indicator	UK ranking	Top 3 ranked countries
% of live births <2500g in 2014	9th out of 15	Sweden, Ireland, New Zealand
% exclusive breastfeeding (various years)	14th out of 14	Portugal, Spain, Canada
Childhood obesity (% overweight and obese) 2013	11th out of 15	Netherlands, France, Belgium
Measles vaccine uptake 2016	8th out of 13	Portugal, Spain, Sweden

Source: Cheung (2018) (6)

3. Health inequalities

Key message: While overall health has improved over recent years, health inequalities remain significant and in most cases are not reducing. Inequalities in healthy life expectancy are greater than inequalities in life expectancy. (up to nearly 2 decades between the most and least deprived).

Headline figures for England and Wales:

Table 3 shows the stark differences in life expectancy and healthy life expectancy based on deprivation.

Table 3 Life expectancy and healthy life expectancy at birth 2014-16 by deprivation decile for England and Wales

		Males	Females
ENGLAND			
Life expectancy at birth	10% most deprived	73.9	78.8
	10% least deprived	83.3	86.2
Healthy life expectancy at birth	10% most deprived	51.9	51.8
	10% least deprived	70.4	70.7
WALES			
Life expectancy at birth	10% most deprived	73.6	78.4
	10% least deprived	82.5	85.7
Healthy life expectancy at birth	10% most deprived	51.4	51.5
	10% least deprived	69.0	69.5

Source: ONS (7)

- In England, the least deprived males at birth (2014-2016) could expect to live 9.3 years longer than the most deprived, while for females the gap was 7.4 years.
- In Wales, the least deprived males and females at birth (2014-2016) could expect to live 8.9 years and 7.3 years more than the most deprived, respectively.
- Inequalities in healthy life expectancy at birth were wider than life expectancy for males and females. The gap in healthy life expectancy at birth exceeded 18 years for both males and females in England whereas in Wales, it was more than 17 years for both males and females.
- There were increases in the socioeconomic inequality in male and female life expectancy at birth and at age 65 years between 2011 to 2013 and 2014 to 2016 in both England and Wales; however, the increases were only statistically significant in England.
- The inequality in healthy life expectancy at birth grew for males, but fell slightly for females in England between 2011-2013 and 2014-2016. In contrast, in Wales the inequality narrowed slightly for both males and females which is more consistent with an improving picture in levels of socioeconomic inequality in Wales.

Headline figures for Scotland:

- In 2015, the premature mortality rate in the 10% most deprived areas was 828.6 per 100,000, 3.7 times higher than the rate in the least deprived areas (226.6 per 100,000).
- The gap in premature mortality rates between the most and least deprived areas has reduced since 2002 although increased again in 2014 and 2015. Relative inequalities, however, have widened over the long term.
- Between 1997 and 2015, premature mortality rates declined by 41% in the least deprived areas, but by only 20% in the most deprived areas in Scotland.
- In 2014/15, adults in the lowest income decile were 2.6 times more likely to report a limiting long term condition than those in the highest income decile (52.7% versus 20.2%).

Source: Scottish Government (8)

Headline figures for Northern Ireland:

- The gap in life expectancy at birth for males living in the 20% most deprived compared with the 20% least deprived (2012-2014) is 7 years, this is 0.5 years lower than 2010-2012
- For females, this gap is just over 4 years and is unchanged since 2010-2012
- The gap in healthy life expectancy between the most deprived and least deprived quintiles for males in 2012-2014 was 12.2 years, this was similar to 2010-2012
- However, the gap in healthy life expectancy for females had increased from 12.8 years in 2010-2012 to 14.6 years in 2012-2014.

Source: Irish Government (9)

All of the data presented here are based on deprivation. However, inequalities should also be considered in terms of groups who are often subjected to disadvantage and discrimination. Examples of inequalities in access to health services for Populations with Protected Characteristics (as defined under the Equality Act 2010) were highlighted in a recent report (10). For example, disabled people, particularly those with learning disabilities often face significant barriers in access and have lower uptake of preventative services. Black and minority ethnic groups, including gypsies and travelers often have significantly lower access to services due to discrimination and lack of cultural awareness. Lesbian, gay, bisexual and transgender communities (LGBT) experience a lack of understanding and discrimination. All of these experiences have negative impact on physical and mental health for these populations.

4. Sustainable development goals: Health-related targets and indicators

Key message: Without additional action, the UK is not on target to achieve many of the health-related indicators for the Sustainable Development Goals

The UK is signed up to achieving the Sustainable Development Goals (SDGs) by 2030. Data from the Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016) were used to measure 37 of the 50 health-related SDG indicators over the period 1990–2016. On the basis of past trends, predictions were made to 2030. 24 of the indicators have targets set, the UK is not projected to attain 14 of these targets by 2030 (table 4):

Table 4: SDGs with set targets that the UK is not predicted to achieve by 2030

	SDG Goal no.
Eliminate stunting in children younger than 5 years	2
Eliminate wasting in children younger than 5 years	2
Eliminate overweight/obesity in children aged 2-4 years	2
Eliminate new HIV infections	3
Eliminate new TB infections	3
Reduce by 1/3 premature mortality from non-communicable diseases	3
Reduce by 1/3 mortality from suicide	3
Halve road injury mortality by 2020	3
Ensure universal access to family planning services with modern methods	3
Achieve universal health coverage (universal health coverage index)	3
Ensure coverage of all target populations with vaccines	3
Eliminate intimate partner violence	5
Universal access to handwashing hygiene	6
Eliminate childhood sexual abuse	16

Source: The Lancet (11)

It should be noted that not all of the health-related indicators have defined targets so this should not be seen as an exhaustive list. It also does not include the SDGs which are wider determinants of health.

5. Ill-health

Key messages:

- Ischaemic heart disease, lung cancer and cerebrovascular disease are the top 3 causes of premature mortality.
- Low back and neck pain, ischaemic heart disease and skin diseases cause the greatest number of Disability Adjusted Life Years (DALYs).

- Some causes of premature mortality and DALYs are significantly higher in the UK compared to other similar countries.
- Whilst many causes are similar there are also some important differences between the 4 nations.
- The UK performs relatively worse than comparator countries for outcomes for the major cancers and cardiovascular disease, in particular cancers in females

The Global Burden of Disease Country Profiles provide data on premature mortality and Disability Adjusted Life Years (DALYs) in comparison to other countries. DALYs are a measure of overall disease burden, combining years of life lost to premature mortality and years lost to disability. Tables 5 and 6 show the top 10 causes of premature mortality and DALYs for the 4 nations. All 4 nations have higher rates of premature mortality from Chronic Obstructive Pulmonary Disease (COPD), Lower Respiratory Tract Infections (LRTI) and breast cancer compared with other high sociodemographic group countries. There are other additional exceptions, eg high rates of drug use disorders featuring in the top 10 in Scotland.

Table 5: Top 10 causes of premature mortality (YLL) (2016)

	UK	England	Scotland	Wales	N. Ireland
IHD	1	1	1	1	1
Lung cancer	2	2	2	2	2
Cerebrovascular disease	3	3	3	3	3
COPD	4	4	4	4	5
Alzheimer disease	5	5	6	6	7
Self harm	6	7	5	5	4
LRTI	7	6	9	8	6
Colorectal cancer	8	8	8	7	9
Breast cancer	9	9	10	9	
Neonatal preterm birth	10	10			
Drug use disorders			7		
Congenital defects				10	8
Road injuries					10

Source: GBD Country profiles (3), age standardized rates per 100,000 compared with “High Sociodemographic Index” group. green – significantly lower, teal – significantly higher

A similar pattern is seen for the top 10 causes of death and disability combined, for example the rates of low back and neck pain are significantly higher in all 4 nations than in comparator countries. There are also conditions which cause significantly higher DALYs in

individual nations for example cerebrovascular disease in Scotland and anxiety disorders in Northern Ireland.

Table 6: Top 10 causes of death and disability combined (DALYs, 2016)

	UK	England	Scotland	Wales	N. Ireland
Low back and neck pain	1	1	1	1	1
Ischaemic Heart Disease	2	2	2	2	2
Skin diseases	3	3	3	3	3
Migraine	4	4	6	4	4
Depressive disorders	5	6	8	6	6
Lung cancer	6	7	4	5	5
Sense organ diseases	7	5	10	8	8
Cerebrovascular disease	8	8	5	7	7
COPD	9	9	9	9	10
Drug use disorders	10		7	10	
Falls		10			
Anxiety disorders					9

Source: GBD Country profiles (3), age standardized rates per 100,000 compared with "High Sociodemographic Index" group. Green – significantly lower, teal – significantly higher

When looking at the leading causes of death all ages (rather than premature mortality) in England, Wales and Scotland, the leading cause of death for males in 2016 was heart disease, and for females it was dementia and Alzheimer's disease. (Source: ONS (12) and National Records of Scotland (13)). In Northern Ireland the headline figure for both sexes in 2016 was cancer, but these figures are aggregated (rather than separated by site in the other nations). The second most common cause was circulatory, with Alzheimer's and other dementias showing an increase. (Source: NISRA (14))

In addition to the conditions highlighted here the protection of the health of the public against issues such as antimicrobial resistance, emerging and re-emerging infections also need to be considered.

International comparisons of rates of ill health: Premature Mortality

Comparison of rates of ill health in the UK with the best performing other countries can help to identify potential areas for improvement. The Public Health England (PHE) Health Profile 2018 included a comparison of Years of Life Lost, as a measure of premature mortality, in the UK compared with the other 27 countries across the European Union (EU) (15).

For men the UK ranked 10th lowest for all causes and was significantly lower than the EU average, however Luxembourg, Sweden and Spain all had the lowest overall rates of premature mortality. For cardiovascular diseases France had the lowest rates, and for cancers rates were lowest in Finland.

For premature mortality in females, the UK ranked 18th, and was significantly higher than the EU average, with Spain, Italy and Finland having the lowest overall rates. Whilst premature mortality from cardiovascular diseases was relatively low in females in the UK (ranking 9th lowest, with France being the lowest), rates of premature mortality from cancers were high with the UK ranking 23rd overall (Spain was the lowest).

6. Risk factors driving death and disability

Key message: Tobacco remains the biggest lifestyle risk contributor to DALYs in all 4 nations, followed by dietary risks. Alcohol and drug use, and occupational risk have shown an increased contribution since 2005.

The GBD also provides information on the top 10 risks contributing to DALYs and the change from 2005 to 2016. Table 7 shows the ranks of these risks for the 4 nations with tobacco and dietary risks contributing the most to DALYs. Alcohol and drug use have shown an increased contribution to DALYs since 2005 in all 4 nations, as have occupational risks. In addition, individual risks have shown an increase, for example high BMI in Wales and Northern Ireland.

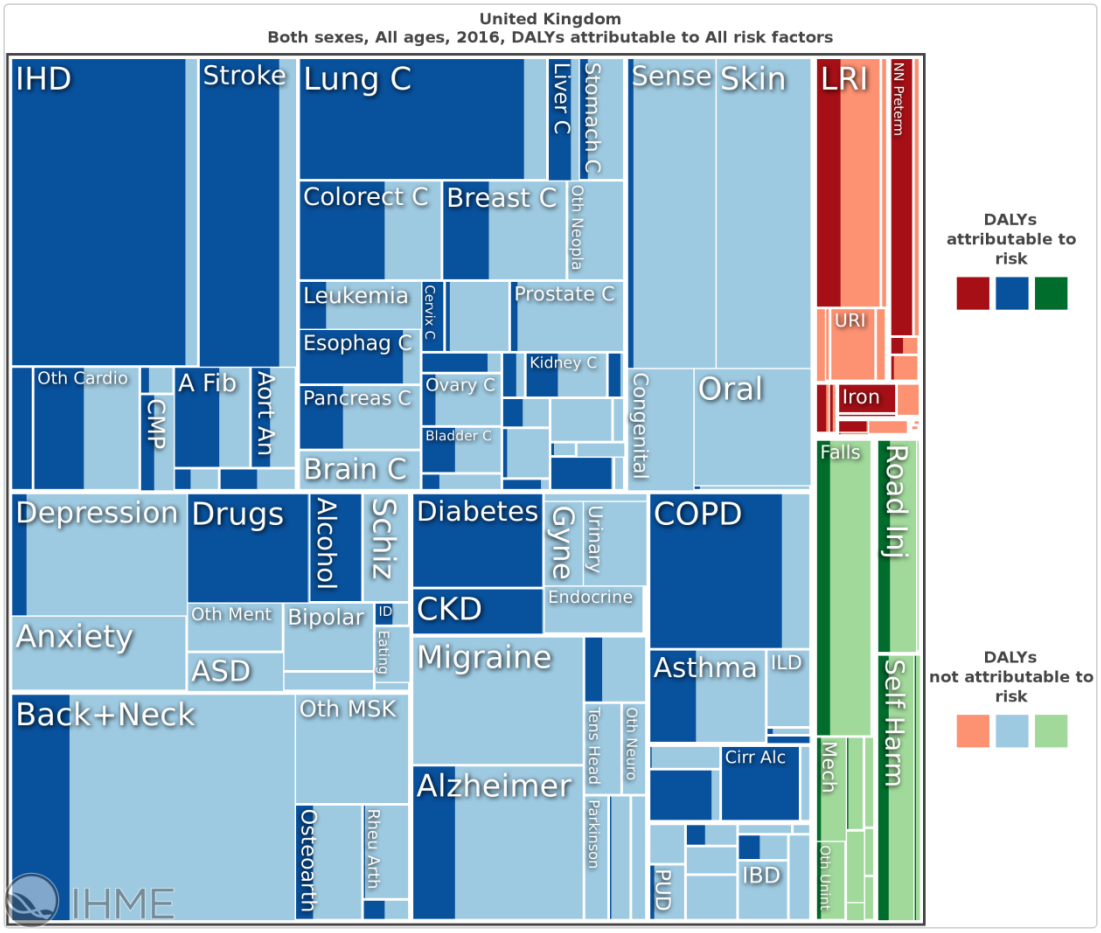
Table 7: Top 10 risk factors contributing to DALYs (2016)

	UK	England	Scotland	Wales	N. Ireland
Tobacco	1	1	1	1	1
Dietary risks	2	2	2	2	2
High blood pressure	3	3	4	3	3
High Body Mass Index (BMI)	4	4	5	4	4
Alcohol and drug use	5	5	3	5	5
High total cholesterol	6	6	6	6	6
High fasting plasma glucose	7	8	7	7	7
Occupational risks	8	7	8	8	8
Air pollution	9	9	9	9	9
Impaired kidney function	10	10	10		10
Low physical activity				10	

Source: GBD Country profiles (3), all ages, number. Green – increased % change 2005-2016

The DALYs attributable to all risk factors in the UK can be seen by the darker shading in fig 1. Many conditions (eg Ischaemic Heart Disease, stroke, lung cancer, diabetes, COPD, alcoholic liver cirrhosis) can be mostly attributed to preventable risk factors.

Figure 1: Treemap of DALYs attributable to all risk factors 2016



Source: GBD Compare (16)

7. Services

Key message: While patient experience of the NHS is generally favourable compared to other countries, the outcomes are often worse. The social care system is facing increasing demands with reducing funds.
The priorities in the NHS 10 year plan will include mental health, cancer, cardiovascular disease, children's services and health inequalities.

As part of the NHS's 70th birthday, researchers from the Health Foundation, the Institute for Fiscal Studies, The King's Fund and the Nuffield Trust were asked by the BBC to look at the state of health and social care in the UK. This section draws on the key findings from two of these reports, plus some data from the Commonwealth Fund.

NHS

The report into the state of the NHS in the UK (1) concluded that in comparison to health systems in other countries the NHS has both significant strengths and significant weaknesses. This section highlights some of the key findings from this report.

The main (and very significant) weakness is health care outcomes. When looking at the outcomes for the 12 conditions which cause the most deaths in high income countries (according to the World Health Organisation), the UK performs relatively poorly for cancers of the breast, colon, lung and pancreas although has improved over the last decade. It also performs poorly for COPD, LRTI, stroke and heart attack.

In terms of "amenable" mortality, where medical intervention should be able to save lives, the UK performs poorly compared with other developed countries.

As previously highlighted in section 2, the UK has higher rates of both neonatal and perinatal mortality than the average of our comparator countries.

On the more positive side:

- Patient experience of health services in the UK is relatively more favourable than in comparator countries
- The NHS protects people from heavy financial costs when they are ill
- The UK's performance is good for diabetes, kidney disease and suicide when compared to other high income countries. However, we do need to consider what is being done to prevent these conditions in the first place
- Although the data are limited, the NHS appears to be relatively efficient.

The Commonwealth Fund Multinational Comparisons of Health Systems Data 2017 (17) showed that spending on healthcare per capita in the UK ranked 10th out of the 11 comparator countries (2016) with the lowest annual growth rate of real healthcare spending per capita 2015-16. The number of doctors and nurses per 1,000 population was low in the UK, particularly for nurses where the UK ranked the lowest.

The NHS 10 year plan for England will be unveiled in the autumn. The priorities that have been identified are: mental health, cancer, cardiovascular disease, children's services and health inequalities. This is a key opportunity for Public Health professionals to influence the NHS's approach to improving the health of the public.

In Wales "A Healthier Wales: our plan for health and social care" sets out how the health and social care system will be changed to improved outcomes with a focus on making the health and social care systems work together, and brining more care out of hospitals into the community. (18)

Scotland's Health and Social Care Delivery Plan includes key areas of work on pieces of work on reforming GP services, primary care and social care services, including integration of health and social care and intensifying efforts to improve public health and mental health services. (19)

Quality 2020 is a ten year strategy designed to protect and improve quality in health and social care in Northern Ireland. (20)

Social care

The report into the state of social care in the UK paints a gloomier picture (21).

- Spending on adult social care has fallen by 9.9% in real terms between 2009/10 and 2016/2017. There are significant differences between the 4 nations (table 8) with England having the biggest % reduction and the lowest spending per head.

Table 8: Spend on Adult Social Care by the 4 nations

	Timeframe	Annual % change (real terms) in spend on adult social care	Actual spend per head on adult social care 16/17
England	08/09-15/16	1.6% decrease/yr	£292
Scotland	08/09-15/16	0.3% increase/yr	£419
Wales	08/09-15/16	0.8% decrease/yr	£391
Northern Ireland	11/12-15/16	1.5% increase/yr	£440

Source: Thorlby 2018 (21) and Public Expenditure Statistical Analysis 2018

- This is against a backdrop of rising demand due to an ageing population and younger adults with disabilities living longer. Based on current spending, a UK funding gap of £18 billion will open up by 2030/31.
- The means-tested system of funding social care is considered to be unfair, 56% of the public think that individuals having to use their housing assets to pay for care is at least somewhat unacceptable. Increasing financial thresholds mean that fewer people are now eligible for publicly funded social care. The notable difference is Scotland which introduced free personal care in 2002 for all adults over the age of 65.
- The care system itself is unstable, with a significant number of care homes at risk of failure and a high vacancy rate in the adult social care sector. The majority of caring responsibilities are borne by informal carers, the majority of which do not receive sufficient support.
- Deficiencies the care system results in added pressure for the NHS with increased admissions and delayed discharges.

8. Wider determinants

Key messages: The major determinants of health are beyond health services. Significant inequalities exist in education, housing, income, employment and our environment

Where we live, our environment, work and education are all known to have a big impact on health. This section aims to highlight a few key issues to support a more holistic approach to improving health and reducing inequalities, more detail can be found in the reports and websites listed at the end of this profile.

In addition, the majority (if not all) of the Sustainable Development Goals (SDGs) impact on health, for example goal 4 – Quality Education, goal 7 – Clean and Affordable Energy. Bertelsmann Stiftung and the Sustainable Development Solutions Network (SDSN) produce an annual report on progress towards the SDGs for all UN member states (22). Calculation of the SDG Index score, which signifies a country's position between the worst (0) and the best or target (100) outcomes, resulted in a score for the UK of 78.7 and a rank of 14 out of the 36 OECD countries highest was Sweden with a score of 85). The report shows that the UK faces major challenges in meeting 4 of the SDGs related to the environment:

- 12 Responsible consumption and production
- 13 climate action
- 14 life below water
- 15 life on land

In addition, the UK also scored low in progress towards:

- 2 zero hunger
- 5 gender equality
- 7 affordable and clean energy
- 10 reducing inequalties and 17 partnerships for the goals.

Worryingly, the UK is getting worse for the SDG 10 - reducing inequalities.

Education and early years

Programme for International Student Assessment (PISA) is an international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. It was last performed in 2015. The UK as a whole performed slightly better than the OECD countries group but was significantly lower than the top scoring country Singapore. There are marked differences within the UK, with Wales performing worse across all 3 indicators (table 9)

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Table 9: Mean PISA assessment scores for 15year olds 2015

	Science	Maths	Reading
UK	509	492	498
England	512	493	500
Wales	485	478	477
Scotland	497	491	493
N.Ireland	500	493	497
OECD	493	490	493
Singapore	556	564	535

Source: OECD (23)

There are significant differences in attainment within each of the 4 nations based on deprivation at all stages of education. For example, at age 16:

- In England in 2015-16 51.8% of children in the most deprived decile achieved 5 GCSEs at A*-C including English and maths compared with 68.7% in the least deprived decile. (Source: PHE health profile for England (15))
- In Wales in 2016 38% of pupils in the most deprived quintile achieved level 2 Level 2 qualifications (5 A*-C GCSEs or equivalents including English or Welsh First Language and Mathematics) compared with 75% in the least deprived quintile (Source: Health and Determinants in Wales report (24))
- In Scotland the measure for school leaver's attainment in the least deprived quintile is double that of the most deprived quintile (Source: Scottish Government (25))
- In Northern Ireland in 2016/17, 49.5% of year 12 pupils entitled to free school meals achieved 5 or more GCSEs at grades A*-C including GCSE English and GCSE maths, compared with 78.1% for pupils not entitled to free school meals. (Source: Irish Government (26))

Housing and Homelessness

There are many issues with housing that negatively impact on health. For example:

- In Wales over a quarter of households with children living in socially rented accommodation are overcrowded (Source: Health and Determinants in Wales report (24))
- In Scotland during 2017/18 there were 34,972 applications to Scottish councils under statutory homelessness legislation (Source: ScotPho (27)).
- Across England, the proportion of households in temporary accommodation due to statutory homelessness rose from 2.2 per 1,000 households in financial year 2010 to 2011 to 3.3 in 2016 to 2017 (Source: PHE health profile for England (15)).
- Between 2012 and 2017 homelessness in Northern Ireland increased by 32% and cost about £300m. In 2016/17 nearly 12,000 households were accepted as homeless (Source: NI Audit Office (28))
- Rough sleeping has been identified as an issue across all 4 nations. For example, in England on one evening in Autumn 2017 4751 people slept rough, up 15% from the previous year. In Aug 2018 the Government released the Rough Sleeping Strategy which aims to halve rough sleeping by 2022 and ending it by 2027. (Source: Rough Sleeping Strategy (29)) There is also work in Scotland to eradicate rough sleeping (Source: Ending Rough Sleeping in Scotland (30)) and Wales (Source: Inquiry into Rough Sleeping in Wales (31)), and reducing homelessness in Northern Ireland (Source: Homelessness strategy (32)).

Income and Employment

The Minimum Income Standard (MIS) is defined as not having enough income to afford a 'minimum acceptable standard of living', based on what members of the public think is enough money to live on. The proportion of individuals in the UK not reaching the MIS rose from 25.8% in financial year 2008/09 to 31.4% in 2013/14, then fell slightly to 29.7% in 2015/16. (Source: Health Profile for England (15))

The latest employment statistics for the UK show that employment rates are at a record high of 75.5% (July 2018) although rates in Northern Ireland are lower than this (69.3%)

(Source: ONS (33)). However, these figures do not demonstrate the inequalities in the labour market, where people who are disabled, have long term conditions or mental health issues, or are from certain ethnic groups have lower rates of employment. (Source: Health Profile for England (15))

Local environment (eg green spaces)

Access to green spaces has a beneficial effect on physical and mental wellbeing through both physical access and use. However, poorer communities generally having less access to green space, thus increasing inequalities (Health Profile for England (15))

Climate and pollution

Climate change has been described as the greatest threat to Public Health in the 21st century. Linked with this, in the UK, air pollution contributes to an estimated 28,000 to 36,000 deaths every year (Source: COMEAP report (34)). The most vulnerable in society suffer the most harm, due to living in deprived areas, which often have higher levels of air pollution or having pre-existing medical conditions which make them more susceptible (Source: RCP report (35)). There is increasing concern about the level of microplastics in our environment, including drinking water, but no definitive evidence linking this to specific health conditions (36).

Well-being

The Measuring National Well-being Programme in the UK (37) measures progress against a set of headline indicators covering health, natural environment, personal finances and crime. The latest report (April 2018) gives a generally positive picture, with most indicators either improving or staying the same over the short-term (one year) and long-term (five years). The main points from the report were:

- Younger people (mainly aged 16 to 24) were more likely to report higher ratings of satisfaction with their health and engage in physical activities.
- The main challenges for younger people include unemployment, loneliness, having someone to rely on and a lack of sense of belonging to their neighbourhood.
- People in their early and middle years (mainly aged 25 to 54) were generally more likely to be in employment, but less likely to be satisfied with their leisure time.
- Older people (mainly aged 75 and over) were more likely to be satisfied with their income, leisure time, feel they can cope financially and belong to their neighbourhood.
- The main challenges for older people are lower satisfaction with their health and lower engagement with an art or cultural activity.

However, there are emerging threats to the health and wellbeing of the population, for example gambling – a recent report estimated that 3.9% of adults in Great Britain are “at-risk” gamblers, which rates being much higher in men than women. (38)

9. Vulnerable Groups

Key messages: Health and outcomes for some of the most vulnerable groups in our society are much worse than the population as a whole, for example those who are dependent on alcohol and drugs, destitute, have learning disabilities or are undocumented migrants

Much of the data presented here cover the whole population. However it is well known that the health and outcomes for some of the most vulnerable people in society are much worse. It is also recognized that while the numbers of people in these vulnerable groups is relatively low, their need for services and support is high. This section provides a snapshot of some of these vulnerable groups but comparable data was often not easily available for all 4 nations.

An estimated 595,131 individuals are alcohol dependent in England (39). While Class A drug use in England and Wales has been decreasing over the last 20 years, there has been an upward trend in recent years in both adults and in particular 16-24 year olds (40) with 3756 drug related deaths in 2017 (41).

Over 1.5 million individuals including 365 000 children in the UK were estimated to be destitute during 2017 with food banks providing over 1 million emergency supplies in 2016/17 (42,43)

In 2015 there were an estimated 1 087 100 people with learning disabilities in England. This population dies considerably younger than the general population: 13-20 years for men and 20-26 years younger for women (44).

Undocumented migrants, including failed asylum seekers face limited access to healthcare services with increasing evidence that the current NHS charging regulations in England are resulting in increased morbidity (45,46) By definition it is hard to know the size of this group but it has been estimated that there are 120 000 undocumented children in the UK alone (47).

10. Vulnerable Groups

Key message: The health of the public is likely to worsen by 2025 due to both worsening trends (eg obesity) and an ageing population (eg dementia).

Section 4 highlighted the health-related SDG indicators where the UK is not predicted to reach its target by 2030. In addition, this section highlights a few predictions that have been made for the state of the health of the public by 2025 (assuming no change):

- By 2025 38% of adults in the UK are predicted to be obese, the highest levels in Europe (48)
- More than 5 million people in the UK with have diabetes by 2025 (49)
- One million people in the UK will have dementia by 2025 and this will increase to 2 million by 2050 (50)

- Between 2015 and 2025 the number of people age 65 and over in England and Wales will increase by 19.4% and the number living with disability will increase by 25% from 2.25million to 2.81 million (due to increasing prevalence of many conditions, notably dementia). (51)
- Multi-morbidity prevalence is estimated to increase, with the proportion with 4+ diseases in England almost doubling between 2015 (9.8%) and 2035 (17.0%). Two-thirds of those with 4+ diseases will have mental ill-health (dementia, depression, cognitive impairment no dementia). (52)

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