Overview Future trends

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The King's Fund is launching a new programme of work to stimulate debate about the changes needed for health and social care to meet the challenges of the future. Our Time to Think Differently programme aims to generate new thinking about how to address these challenges and deliver a transformation in services for patients. To ensure this work is rooted in a clear understanding of the issues that will drive change, we have undertaken a review of some of the most significant trends and drivers that we believe will affect health and social care services over the next 20 years.

Here, we provide a summary of these drivers and their key implications. We do not explore in depth the consequences for the way in which care may be delivered, rather we hope these ideas provide a stimulus and evidence base for future debate and thinking. A comprehensive analysis of the drivers of change in health and social care can be found on our website (www.kingsfund.org.uk/think). We hope the analysis will provide a valuable resource to support policy-makers and health and social care leaders in engaging in long-term, strategic thinking about how services need to change.

Global context

Our analysis suggests an uncertain environment that could generate a range of 'shocks', both positive and negative.

Across the globe there is rapid growth in knowledge and technological capacity providing a wide range of opportunities for innovation and improvement. However, in the short- to medium-term the economic environment is challenging. The European Union is experiencing the most significant economic downturn since the great depression, with the path to recovery made uncertain by the current Eurocrisis (Sparrow *et al* 2012). Meanwhile, economic power is shifting from the United Kingdom and other developed countries to the emerging Brazil, Russia, India, China (BRIC) economies. *The Economist* (2012) has estimated that between 2007 and 2012 the United Kingdom's gross domestic product (GDP) per person fell by more than 5 per cent, while China's rose by 50 per cent. Security threats, such as acts of terrorism, attacks on UK cyberspace or international military crises, show no signs of diminishing (BBC 2010).

In the medium to long term, there are significant issues around sustainability as key resources, such as fossil fuels and rare elements, become scarce

and global temperatures rise, with economic and societal consequences that are hard to predict. One estimate suggests that there will be 200 million permanently displaced refugees by 2050 as a result of rising sea levels and desertification (Stern 2006). Finally, the global population is ageing, requiring many countries to rethink traditional models of welfare and retirement. Between 2012 and 2050 the proportion of the global population aged over 60 will double from 11 to 22 per cent (United Nations Population Fund and Help Age International 2012).

Financial context

Current spending projections suggest significant financial pressures on services for the next 20 years.

The sudden brake on revenue growth and investment in health and social care dominates the current horizon. After a period of comparative plenty from 2000 to 2010 with annual real-term growth rates in the NHS of 7 per cent, near zero growth is expected for the next five years and social care budgets face year-on-year cuts in most local authority areas. Many health and social care providers are already showing signs of financial distress and continued pressure on budgets is likely to make this position worse. Beyond that it is hard to see, but most signs point to continued austerity.

The Office for Budget Responsibility (OBR), the independent body charged with producing government economic forecasts, has calculated that from 2012 to 2016/17 the proportion of GDP spent on health will fall from 8 to 7 per cent as a result of current fiscal restraint (Office for Budget Responsibility 2012). The OBR suggests that funding will then rise from 7 to 8 per cent of GDP by 2032, if funding were to address predicted pressures from demographic change. However, a number of factors can drive health costs up at a faster rate than general inflation. Traditionally, the NHS has enjoyed 4 per cent per annum real-term growth to cope with these pressures. This inflation of input costs drives down net productivity. The OBR has calculated that if NHS productivity follows recent trends of a 0.2 per cent fall per annum, spend on health would need to rise to nearly 11 per cent of GDP by 2032. The OBR suggests that neither forecast is fiscally sustainable (Office for Budget Responsibility 2012). Our calculations are that a further £34bn of productivity gain would be needed between 2014/15 and 2032 to meet OBR central spending forecasts (Appleby 2012). Even the base assumption of a rise in spend to 8 per cent of GDP, the OBR says, would (alongside their other core assumptions) require either tax increases or reductions in other areas of public spending to avoid unsustainable public debt levels (Appleby 2012).

As we shall see below there are likely to be many pressures on health and social care spend from both rising demand and new opportunities to diagnose and treat. One of the challenges we face in predicting future demand is the uncertainty about the net impact of these pressures. When calculating the long-term costs of social care, the Commission on the Funding of Care and Support generated a range of scenarios for future demand based on differing assumptions about future disability. The pessimistic scenario added 14 per cent to costs, the optimistic scenario reduced costs by 14 per cent assuming a decrease of 1 per cent per year in age/gender specific disability rates (Commission on Funding of Care and Support 2011).

Demography

An ageing population with uncertainty about the future impact on services and society.

One of the most profound influences on the future health and social care system is our society's changing demography. The population in England is ageing. Boys born in 1901 were expected to live for 45 years and girls for 49 years. In 2012, boys can expect to live for 79 years and girls for 83 years (House of Commons 1999). Life expectancy is

expected to increase by a further four years for both sexes over the next 20 years (Office for National Statistics 2010). Current trends also suggest that healthy life expectancy is extending at the same rate as life expectancy, so as people live longer they are not experiencing more years of ill-health (Office for National Statistics 2012d). However, there are important socio-demographic differences. Not only can people from more deprived populations expect to live shorter lives, a greater proportion of their life is in poor health.

Extended life expectancy alongside falling fertility rates is driving significant change in the age structure of the population and rapid growth in the numbers of older people (Office for National Statistics 2012b). This change is magnified by the 'baby boom' generation, born shortly after the Second World War, now entering old age. By 2032, the number of people aged over 65 is expected to grow by more than a third from 9 million to 13.5 million (39 per cent) and the number of people aged over 85 is expected to double from 1.3 to 2.6m (106 per cent) (Office for National Statistics 2012a). Many older people will be living on their own. Current predictions suggest that the number of people over the age of 65 living on their own will grow from 3 million to 4.8 million by 2033 (Communities and Local Government 2010).

Not only is the population ageing, but it is becoming more diverse. Ethnic populations will make up 15 per cent of the UK population and 37 per cent of the population in London by 2031 (Wohland *et al* 2010). Immigration to the UK has been steady for several years at just under 600,000 people per year and net migration (immigration minus emigration) has fluctuated around 200,000 people per annum since 2001. In total, the population of England will grow by nearly 8 million over the next 20 years: net migration is expected to add 3.5 million and natural growth (births minus deaths) another 4.5 million (Office for National Statistics 2011).

An unanswered question is the impact that the demographic shift towards old age will have on society. As discussed above, some economic models suggest that the financial impact of ageing alone will be relatively modest (WRVS 2011). However, those aged over 85 are the highest consumers of health and social care, and also receive significant amounts of informal care (Ham *et al* 2012). If one looks at the broader determinants of health and pattern of disease they suggest that the financial impact will be greater than these models suggest. There is also significant uncertainty about the role of older people in society in 20 years' time. Groups advocating for older people argue that they could play an active economic and social role (Thane 2012). Much will depend on the health of the population as they enter old age.

Determinants of health and disability

The future economic context casts a shadow over recent improvements.

Our health is determined by a complex interaction between our individual characteristics, our lifestyle and the physical, social and economic environment. The physical environment is important but our social and economic environment, our incomes, and educational levels have by far the most significant impact on our health. Estimates vary as to the relative contribution of the different factors, particularly the relative role of environment and individual behaviour. All agree that health care accounts for less than 50 per cent of a population's health status (Bunker *et al* 1995; McGinnis *et al* 2002; Kuznetsova *et al* 2012).

Rising educational attainment, improved working and living conditions, and greater access to green space, all suggest a positive impact on population health. The recent rises in educational attainment are particularly significant, given the impact that this is known to have on health status. In the mid 1990s pupils from the highest income households were three times more likely to participate in higher education than those from lower income households. By 2009/10 this had fallen to twice as likely (Higher Education Funding Council for England 2010). An additional four years of education reduces five-year mortality rates by 16 per cent (Cutler *et al* 2006).

However, the current economic context casts a long shadow over these improvements. The deepest recession since the 1930s has brought significant threats to individual and family wellbeing, especially to those experiencing job insecurity, unemployment, or wage and benefit cuts. Recent research suggests welfare cuts are likely to place 269,000 households in serious financial difficulty (St Mungo's *et al* 2012). Given the worsening economic context, it is not clear whether the current upward trajectory in educational attainment and housing conditions will be sustained. This has significant implications for current health inequalities and makes it less likely that the current gap in life expectancy between rich and poor can be closed.

The health system will also have to respond to changing patterns of need driven by climate change, including exacerbations of chronic diseases. The scale of these changes is likely to be modest in the short and medium term, but there is a large degree of uncertainty in longer-term predictions (Department for Environment, Food and Rural Affairs 2012). The broader effects of climate change alongside the increased scarcity of resources are likely to have a bigger effect in the medium term. The impact is likely to be most keenly felt by older people on low incomes for whom rising energy and food prices could have significant health consequences.

Healthy behaviours

Current behavioural trends suggest that health inequalities may worsen.

There is a significant opportunity to improve the health of the population if individuals adopt more healthy behaviours. The prevalence of obesity has risen from 15 per cent in 1993 to 26 per cent in 2010 (NHS Information Centre 2012). Some predictions suggest that by 2035 46 per cent of men and 40 per cent of women will be obese, resulting in more than 550,000 cases of diabetes and around 400,000 additional cases of heart disease and stroke (Wang *et al* 2011). More positively, smoking rates have fallen to around 20 per cent, but the rate of decline is slow at 0.4 per cent a year, and slower still in more disadvantaged groups. 28 per cent of people in manual occupations still smoke compared with 13 per cent in non-manual occupations (Office for National Statistics 2012c). Smoking is one of the primary reasons for the gap in life expectancy between rich and poor (NHS Information Centre 2012b).

More disadvantaged groups are also more likely to have a cluster of unhealthy behaviours – smoking, drinking, low consumption of fruit and vegetables, low levels of physical activity. While the proportion of the population that engages in three or four unhealthy behaviours has declined from around 33 per cent in 2003 to 25 per cent in 2008, these reductions have been seen mainly among those in higher socio-economic and educational groups. People with no qualifications were more than five times as likely as those with higher education to engage in all four poor behaviours in 2008, compared with only three times as likely in 2003 (Buck and Frosini 2012).

Analysis of people's attitudes to their health and adopting healthy behaviours suggests that only 40 per cent of the population are highly motivated to adopt healthy lifestyles; the remaining 60 per cent have a more negative and fatalistic attitude towards their health (Department of Health 2012). Those with more negative attitudes tend to come from more deprived areas. If current trends and attitudes continue the population will carry a large burden of avoidable ill-health into the future and health inequalities are likely to grow.

There is a more optimistic picture if one looks at the behaviour of young people. The past ten years has seen significant falls in the rates of drinking, smoking and drug taking in the young (NHS Information Centre 2012a). Obesity rates are also falling and activity is increasing, largely through increased activity at school. However 80 per cent of children still have a poor diet and do not have the recommended amount of fruit and vegetables (Department for Environment, Food and Rural Affairs 2011).

Future patterns of disease and disability

A significant rise is expected in chronic and multiple chronic disease.

The past century has seen a shift from communicable diseases, such as tuberculosis and typhoid, to non-communicable diseases, such as cancer and heart disease. This, alongside the continued decline in mortality rates and growing life expectancy, means that disease is, in the main, something that people now live with rather than die from. The next 20 years will see a doubling in the number of people with some diseases, for example, those who have had and survived cancer. By 2030 there will be a 100 per cent rise in the number of people with arthritis to 17 million (Arthritis Care 2012), and the number of older people with care needs is predicted to rise by 61 per cent (Wittenberg *et al* 2011).

For many people this means living with more than one disease or health problem. By 2018 the number of people with three or more long-term conditions is predicted to rise from 1.9 million (2008) to 2.9 million (2018) (Department of Health 2012). Three core factors are driving the anticipated growth in the number of people with chronic disease and disability: the growing number of older people; risk factors such as obesity and inactivity; and the growing capacity to treat.

The population also faces continuing threats from communicable disease. The number of people with human immunodeficiency virus (HIV) is continuing to rise (Health Protection Agency 2011) and anti-microbial resistant bacteria have the potential to undermine the effectiveness of currently effective medicines (ECDC/EMEA 2009).

In many disease areas, such as heart disease, there are also distinct social gradients in the prevalence and incidence of disease, with people from more deprived populations experiencing more disease and more multiple diseases. For example, the presence of a mental health disorder increased as the number of physical morbidities increased, and was much greater in more deprived than in less deprived people. Analysis by The King's Fund on the broader determinants of health and healthy behaviours suggests that, if anything, these health inequalities are likely to worsen rather than improve over the next 20 years.

While medical advances will continue to offer new treatment options, the biggest impact on population health in the future and the greatest opportunity to reduce the burden of chronic disease is from a change in population lifestyles supported by more effective chronic disease management and secondary prevention measures.

Medical advances

The pace of innovation is breath-taking but the future funding model is under challenge.

The pace of innovation in genetics, biotechnology, material sciences and bioinformatics has been breath-taking. It has already brought benefits to patients with diseases such as cancer and heart disease and now holds out new hope for people with neurodegenerative diseases, such as multiple sclerosis and Parkinson's. Some predict that we may see new therapies that are able to cure cancer or stay the progression of dementia but the timescale in which this might happen is very uncertain.

Low-cost genetic sequencing, genome mapping, biomarker tests and targeted drugs and treatments are some of the advances that could enable professionals to provide tailored health information and create personalised treatments to improve patient outcomes (Cho *et al* 2012). Precision medicine is set to revolutionise our ability to predict, prevent,

monitor and treat a whole range of conditions, from haemophilia to cancer, radically improving patient outcomes and overall population health (Couzin-Frankel 2011; Ioannidis *et al* 2011). Six out of ten people are likely to develop a disease that is at least partly genetically determined (Hayden 2012). Better targeted drugs and treatments have implications for the development of pharmaceuticals – reducing the time required to bring treatments to market, but also the pool of eligible patients and potential profits. This trade-off may inhibit the speed at which new therapies enter mainstream use.

There is increasing impetus to deliver care at a distance through video-conferencing supported by the digital transfer of clinical information. This could include remote intensive care monitoring systems, already in use in the United States, that enable hospitals to deliver intensive care using staff observing patients across multiple intensive care units from a single remote location (New England Healthcare Institute 2007). Significant growth is predicted in the use of home-based technologies that support individuals and their carers to manage their long-term conditions. Robotic-based surgical procedures are also growing rapidly; rising from 80,000 in 2007 to 205,000 in 2010 (Barbash and Glied 2010).

Advances in diagnostics and medical devices, leading to reductions in cost and size, should further improve outcomes and enable more care to be delivered outside hospital settings. Advances in drug delivery, including the use of microchips, are reducing drug errors and improving efficacy (Manias 2011). The challenge for the NHS is to support and benefit from this innovation given a highly constrained budget. The total spend on medicines has increased over the past 20 years from £2.3bn to £12.2bn (NHS Information Centre 2011b). It is unlikely that this growth can be sustained.

The challenge is to ensure innovation delivers real value to the NHS and is not just about doing more things to more people. For example, the experience in surgery is that reducing the trauma associated with surgery, while improving outcomes and reducing length of stay, has extended the range of eligible patients, and so increased overall activity. There is a real risk that diagnostic advances, especially with the advent of more home testing will fuel, rather than help meet, demand.

Information technologies

Information technologies offer huge opportunities to improve health and social care but it is not certain that these opportunities will be grasped.

Information technologies arguably provide the greatest opportunity for health and social care services to improve productivity and bridge the gap between constrained resources and growing demand.

Computer processing power and data continue to grow exponentially in the era of 'Big Data' (Brown *et al* 2011). At the same time, new devices, sensors, and screens will enable everyone to access data everywhere and at any time, so-called ubiquitous computing (Leading Edge Forum 2008). By 2032 everyone should be able to access the internet everywhere. In health and social care there will be new opportunities to capture, relay and interpret vital signs and other information, both in the home and other care settings.

The impact of social media and the internet on health and social care can be expected to grow, particularly alongside increased transparency of information about services and outcomes. Patients and doctors are already using social media such as Twitter and Facebook to post medical problems and seek help finding diagnoses. Researchers are gathering data from 'crowds' of patients to provide new insights into their condition. PatientsLikeMe – the data-driven social network – has conducted by far the largest amount of crowd-sourced health studies thus far, and have more than one million users with rare diseases (Patients Like Me 2012).

In health and social care, apps have found a wide array of uses. They are playing a critical role in empowering service users and supporting professionals. In April 2012, there were 13,600 health-related apps available through Apple's app store (Miller 2012). In health and social care, the web and digital communication offer new ways to communicate with patients and service users, but some of the most needy patients are currently not able to take advantage of this, though the divide is being bridged quite rapidly. Older people are the fastest growing group of users of the internet (Ofcom 2012).

Information technology has driven, and is likely to continue to drive, changes in the relationship between professionals and patients. Technology can put more power in the service user's hands. The challenge will be to develop services that recognise the differing capacity and inclination of people to grasp this power. New technologies are also likely to challenge current care processes and business models in health. Health care delivery can be expected to transcend local and national geographic boundaries, as health professionals no longer need to be in the same geographical location as patients in order to manage their care. Information technology will also influence the ways in which professionals manage and make use of knowledge and change the way in which professionals are trained.

The workforce

Is the workforce fit for the future?

If technology is to enable a step change in productivity the health and social care workforce will need the appropriate skills and capabilities to embrace that technology and to support new ways of working. A critical factor will be how the future health and social care workforce engage with those that they are delivering care to. The patient/user is the most critical member of any multidisciplinary team. Equipping a workforce for the future is not something that can be left to future training curriculum. The majority of professional staff who will be working in health and social care in ten years' time are working in health and social care today.

As well as potential mismatch of skills there are some potentially significant mismatches in numbers within the workforce, driven both by training and budgetary constraints. Current estimates suggest:

- a potential oversupply of 2,000 hospital consultants by 2020 (Centre for Workforce Intelligence 2012)
- a potential shortfall of between 40,000 and 100,000 nurses by 2021 (Royal College of Nursing 2011)
- that the adult social care workforce would need to grow by 1 million people by 2025 if current service patterns are maintained (Skills for Care 2010).

These discrepancies suggest that without further action, the health and social care workforce will not be able to meet growing demand effectively. Greater international mobility and growing demand for health care staff across the world may accelerate an exodus to countries offering better pay, conditions and opportunities for progression, and reduce our capacity to recruit staff trained outside the United Kingdom. The forecasts for the nursing workforce suggest that this is an area of high risk (Royal College of Nursing 2011).

There is less to suggest shortages in the supply of care workers with lower skills, the main constraint here is likely to be future funding, particularly as the drive to raise standards may require increased salaries. Will we be able to afford the social care workforce we need, particularly as sources of informal care are shrinking while future demand from older people expands disproportionately?

Public attitudes and expectations

There are increasing demands for care services but strong support for a 'fair' NHS. Will it be sustained?

The public are becoming more demanding of health professionals and are seeking more engagement in decisions about their care (Economist Intelligence Unit 2009). Dignity and respect and the relational aspects of care are core drivers of satisfaction with health and social care services (King's College London and The King's Fund 2011). There is significant room for improvement in this aspect of care within the NHS, but particularly in social care. Both health and social care services will need to pay close attention to the relational aspects of care, particularly dignity and respect, if they are to meet public expectations.

The NHS is a highly valued element of English life and there is no evidence that the value of the NHS as an institution to the public is diminishing, though net satisfaction with the NHS has fallen recently from 70 per cent to 58 per cent (National Centre for Social Research 2012). The majority of the population currently support the model of tax-funded health care, free to all, and see health as an area that should be prioritised in government spending decisions. In 2011, 68 per cent chose health as their first or second priority for additional government spending (National Centre for Social Research 2012). Fairness in service provision is also highly valued, 73 per cent of the public agree that treatments should only be available on the NHS if they are available to everyone and not dependent on where you live and 73 per cent are opposed to the idea of the NHS 'only being available to those on lower incomes' (National Centre for Social Research 2012). In the short to medium term there is likely to be continuing public pressure to protect NHS funding. However, the lower satisfaction rates and lower support for investment in welfare by younger generations mean that the current high levels of support for the NHS may not be maintained. Conversely, there may be increasing support for social care provision as a growing proportion of the population have either direct or indirect experience of social services and appreciate their value.

Futures - a health warning

It is very tempting to use a past trend as a basis for future predictions. Yet trends are only patterns of change to date, they give no certainty about the future. For example, from the late 1980s to early 2000s the number of births each year was falling and could well have been expected to carry on falling or at least stay steady. Women in England were having smaller families and many were putting off families as they developed their careers. However, the number of births has risen steadily since 2003 as women born outside the United Kingdom and recently settled here have had children and have larger families than women born in the United Kingdom (Office for National Statistics 2012b).

It is also easy to misinterpret a trend. It has been suggested that the predicted rise in the number of people dying each year over the next 20 years will create new financial pressures on the hospitals. But this loses sight of the fact that the number of deaths each year has been falling steadily since the early 1980s. The number of people expected to die in 2032 is fewer than in 1984.

Finally, no trend exists in isolation, trends interact and the net impact is hard to predict. For example, the number of people that have a disease or disability is linked to a wide range of factors including lifestyles, socio-economic circumstances, the population's genetic risk profile and age, as well as the health care they receive. The number of people with Type 2 diabetes in 20 years will be dependent on trends in obesity and activity and new treatments. For example, if treatments developed through stem cell research can address the insulin deficiency and resistance, which are key features of Type 2 diabetes, the number of people with the condition may fall.

All the material presented here needs to be seen in this context, especially the timeline at the end of the paper. It presents a number of possible futures or indeed some elements of the future. When the future becomes the present it is likely to look very different. However, we believe a better understanding of some of these future scenarios can help health and social care organisations to be better prepared for the future and make better short-term decisions.

The drivers of change described do not act in isolation, but rather are highly interdependent with each other. The interplay between them means there are many possible scenarios for the future of health and social care.

Conclusion

The health and social care system in England is entering a period of immense challenge and opportunity.

Medical and technological advances could enable a shift in the delivery of care from large impersonal institutions to more therapeutic environments with a locus in the home. Social and technological change could support professionals to work with those they care for in a collaborative partnership with consequent benefits for the quality of the therapeutic relationship. A much stronger focus on prevention and support for improved population lifestyles, particularly for the disadvantaged, could bring about significant health gains and help bridge current health inequalities. Older people rather than being a drain on society could help strengthen local communities and bring net economic benefits. All of this is possible.

However, unprecedented financial pressures in the short to medium term could threaten the viability of many health and social care providers in the statutory, private, and voluntary sectors and pressures in the wider economy could threaten the wellbeing of many in the population. If people's expectations are not met, there could be a significant decline in support for the NHS. Staff could be put under increasing strain and if not equipped with the necessary skills could disengage from patients. The use of new technologies could depersonalise care further. How providers and commissioners respond to these challenges will be critical for future public support for a universal tax-funded health system and for any future reform of social care.

Beyond the next five years, the predicted rise in the number of people with disease and disabilities are sobering. The imperative to derive value from every pound of health and social care spend is never likely to have been greater than it will be over the next 20 years. Innovation cannot be just about doing more things to more people. New technologies will need to be exploited to the full to drive up productivity or the NHS and social care services could struggle as they try to meet growing demand with no equivalent growth in resources. A need for creative and innovative workforce and service planning has never been more critical.

It is time to think differently about health and social care. To access the full analysis on which this summary is based and to join the debate go to www.kingsfund.org.uk/think

Future trends: A possible timeline

| YEAR | FUTURE POSSIBILITY |
|------|--|
| 2013 | Patientslikeme and other websites continue to connect and empower patients |
| 2014 | Mounting financial pressures threaten viability and sustainability of many health and social care providers |
| 2015 | General Election expect health and social care to be a hot topic for debate |
| 2016 | Expect the majority of the population to access the web through mobile devices |
| 2017 | Routine use of electronic health record in most health and social care settings expected |
| 2018 | Predict 2.9 million people will have three or more chronic conditions (1 million more than 2008) with an additional cost of £5 billion (Placeholder1) |
| 2019 | Microchips improves delivery of and compliance with medications |
| 2020 | Possible oversupply of 2,000 doctors |
| 2021 | Potential shortfall of between 40,000 and 100,000 nurses |
| 2022 | Expect routine use of teleconsultations and remote monitoring |
| 2023 | Regenerative Medicine likely to have created new treatments for heart and bone disease |
| 2024 | Genetic profiling to predict risk of disease could be routine |
| 2025 | Adult social care workforce would need to grow by 1 million if current service patterns maintained 4 million people expected to have diabetes , nearly 30 per cent more than today |
| 2026 | 1 million people expected to have dementia with estimated care costs of nearly £35 billion |
| 2027 | Robots could be routinely used at home and in care settings |
| 2028 | R ise in global temperatures could be starting to have significant economic and environmental impact |
| 2029 | Around 4 million people likely to need help with daily living |
| 2030 | Arthritis expected to increase by 100 per cent to 17 million people |
| 2031 | Ethnic populations likely to make up 15 per cent of UK population , 37 per cent population in London |
| 2032 | 8 million more people living in England than in 2012 |
| | Life expectancy at birth expected to be around 87 years for women, 83 years for men |
| 2033 | 4.8 million people aged over 65, and 1.4 million people aged over 85 expected to be living on their own |
| 2034 | State pension age rises to 67 |
| 2035 | Up to 46 per cent men and 40 per cent women could be obese |

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