Defeat Dementia
The evidence and a vision for action

Nerve fibres in a healthy adult human brain.
Zeynep M. Saygin, McGovern Institute, Wellcome Images.
Alzheimer’s Research UK is the driving force behind dementia research in the UK. Without their drive, expertise, passion and commitment to research, the challenge of dementia would be even greater.

Prof John Hardy, FRS
University College London

Rising to the Challenge: the power to Defeat Dementia

Dementia affects over 850,000 people in the UK and 44 million worldwide. It costs the economy in the UK £24 billion and over £360 billion globally each year. Dementia is a progressive and ultimately fatal condition. Over time symptoms grow worse and, in later stages, people require 24hr care, by which time they may be unable to communicate and experiencing acute psychiatric symptoms. No wonder it is now the most feared condition amongst those over 55 years.

Research is the only way to defeat dementia. For too long research funding for dementia has paled in comparison with other large scale disease areas like cancer and heart disease. As a result we are still without a treatment that stops or delays progression of the condition. The Prime Minister and the rest of the G8 leaders set out an ambition to ‘find a cure or disease modifying treatment by 2025’.

This report sets out the scale of the challenge in terms of both human and economic costs, and presents a blueprint for research action. It also sets out the challenge for governments, here in the UK and internationally, to tackle the major hurdles that are preventing us from delivering effective therapies.

THE ECONOMIC CASE

Working with the Office of Health Economics we have developed an economic model to examine the impact of hypothetical disease modifying treatments that would be effective across all the diseases that cause dementia. The analysis shows that the numbers of people with dementia in the UK are set to grow rapidly over the next 36 years from around 850,000 people today to 1,133,000 in 2025 and 2,014,000 by 2050.

However, if by 2020 a treatment was developed that could delay the onset of dementia by 5 years, compared to current projections without an intervention, there would be:

• Thirty-six per cent fewer (469,220) people with dementia by 2030 and hence 398,837 fewer informal carers required. The reduction in numbers of people with the condition would mean dementia would cost £14.1 billion less in 2030 than without a treatment.

• 666,000 fewer people with dementia by 2050 and 566,000 fewer informal carers required. The reduction in numbers of people with the condition would mean dementia would cost £21.2 billion less in 2050 than without a treatment. Thus an intervention that delays the onset of dementia by five years could reduce costs by 36 per cent in 2050.

This report examines a number of other scenarios that either delay onset or slow progression of dementia.

HOW WE WILL MEET THE CHALLENGE

In order to meet the challenge and find a disease modifying treatment that could have the scale of impact suggested by our modelling, Alzheimer’s Research UK is launching the biggest fundraising campaign in UK dementia research history, aiming to raise a minimum of £100 million over the next 5 years. Defeat Dementia represents a step change in the scale and ambition of the charity and is our response to one of the greatest medical challenges of our time.

The campaign gives us an opportunity to utilise our power, skills and expertise as a world leading charity. The strategic projects we will fund have been developed to address blockages in the current research environment and support innovative and novel ideas. For example, we will fund a number of Drug Discovery Institutes to bring treatments to patients faster and invest in supporting the clinical development of promising treatments.

We are Europe’s leading charity funder of dementia research. Since 1992, we have been committed to defeating dementia through research. In this time we have committed nearly £60 million to over 500 projects and established the UK’s only network of dementia research scientists, connecting fifteen centres of excellence and over 750 scientists at leading UK universities.

We have helped shape the current understanding of dementia, with our funding underpinning the discovery of 21 of the 22 known Alzheimer’s risk genes, and our investigation into the dangers of antipsychotic drug over-prescription saving countless lives. We know what research is required to deliver powerful impact.

Defeat Dementia represents a step change in the scale and ambition of the charity and is our response to one of the greatest medical challenges of our time.
Dementia in the UK and across the world

WHAT IS DEMENTIA? WHAT IS ALZHEIMER’S?

Dementia is a word used to describe a group of symptoms including memory loss, confusion, mood changes and difficulty with day-to-day tasks. The diseases that cause dementia are progressive, so over time symptoms grow worse. In later stages, people require 24hr care, by which time they may be doubly incontinent, unable to communicate and experiencing acute psychiatric symptoms.

Dementia can be caused by a number of different diseases – Alzheimer’s disease is the most well-known and the most common, causing about two thirds of cases. Around 500,000 people in the UK have Alzheimer’s.

Other diseases that cause dementia include vascular dementia, dementia with Lewy bodies and frontotemporal dementia. Often, dementia is caused by both Alzheimer’s disease and either vascular dementia or dementia with Lewy bodies at the same time – termed mixed dementia.

The majority of people with dementia (95-98 per cent) are over the age of 65. It’s estimated that 2-5 per cent of people with dementia are under 65. That is between 16,400 – 41,000 cases in the UK. These rare forms of dementia can affect people in their 30s, 40s and 50s. For further information on dementia please see: www.alzheimersresearchuk.org

WHAT ARE THE CURRENT TREATMENTS?

Current treatments provide modest help with symptoms, but for a limited time and only for some diseases. We need treatments that prevent, slow or halt the disease progression and these do not exist today.

It is also vital that we improve early detection of the diseases that cause dementia so new treatments can be put to work in the right people at the right time. Early detection allows people to plan for life with the condition and access the care and support services that are available. However, a timely diagnosis will become more vital as new treatments are developed, which are likely to be most effective when given as early as possible.

We must understand the causes of Alzheimer’s and other dementias. If we can gain a picture of the underlying pathology, we can use this evidence to develop treatments and target cohorts who are best suited to particular types of medicines. We can also use this knowledge to help people reduce their risk or develop interventions that may prevent dementia.

THE SCALE OF THE CHALLENGE

Estimates vary but there are currently over 850,000 people with dementia in the UK and about 44m people across the globe1. Inevitably, the condition has a devastating effect on an individual’s quality of life. People with dementia have a lower self-reported quality of life than both the population as a whole and those over 65 (who report lower quality of life than the whole population, mainly as a result of health conditions), and this gets progressively worse as the severity of the condition develops2. This effect on quality of life is far greater than that of other chronic illnesses. A study looking at the impact of 29 chronic diseases, but not dementia, on quality of life as measured by the EQ-5D found that people with Parkinson’s disease (0.44), depression (0.73) and arthrosis of the hip and knee (0.68) had the worst quality of life scores3. In a separate study the quality of life scores for mild, moderate and severe dementia were found to be 0.64, 0.39 and 0.24 respectively4. This suggests that people with moderate and severe dementia have a worse quality of life than any other chronic illness and those with mild dementia experience a worse quality of life than every other chronic disease except Parkinson’s disease.

We also know just how important carers are in supporting people with dementia. There are about 670,000 family members caring for people with dementia5 and without the hard work of informal carers the formal care system would collapse. Recent analysis from the Institute of Public Policy Research (IPPR) suggests that by 2017 there will not be enough informal carers to look after people requiring care6. The impact of dementia is wider than the emotional and physical impact on the individual. It also reaches into wider society as people leave the workforce to care for their loved ones. Defeating dementia will not only have a huge impact on the lives of those who will develop the condition in the future, but also those caring for loved ones with dementia.

KEY FACTS ABOUT DEMENTIA

• Dementia is difficult to diagnose
  - Early signs can be subtle
  - Symptoms overlap with other conditions
  - No quick or simple test

• There are currently no effective treatments that slow or stop dementia
  - Current treatments can help relieve symptoms of Alzheimer’s and dementia with Lewy bodies for a short period of time
  - There are no specific treatments, even for symptom relief, for frontotemporal dementia or vascular dementia

• There is currently no way to prevent dementia
  - Dementia is caused by a set of complex diseases
  - The best evidence is that a healthy lifestyle can help lower risk

• We currently don’t know the causes of dementia
  - There are complex genetic and environmental factors
  - There is a long pre-clinical phase among the diseases that cause dementia

1 A standard measure used to determine the quality of life lived by a person based on their answers to a set of questions based on the response of a sample of the general population on preferences for health states.
2 Suze Hewer, a Champion of Alzheimer’s Research UK.
The cost of dementia in the UK

Dementia not only devastates lives, but creates enormous cost to the wider economy. Alzheimer’s Research UK estimates that dementia will cost the UK economy £24 billion in 2014 through health and care costs and the huge contribution made by informal carers. Globally it is estimated that dementia costs the economy £357 billion each year. These figures are huge and prompt the question ‘what would be the economic impact of achieving the G7 nations’ aim of a disease modifying treatment by 2025?’

Alzheimer’s Research UK and the Office of Health Economics have developed an economic model to examine the impact of introducing a disease modifying treatment in 2020 that, for the sake of simplicity, would be effective across all the diseases that cause dementia to the UK population. The model assumes a staggered uptake over the first 5 years to reach a maximum of 80 per cent and does not include the cost of providing the treatment.

To illustrate the scale of benefit that might be achieved, we discuss how the trajectory of dementia could change in the event of two hypothetical interventions: one that would delay onset of the disease and one that would slow its progression. The model examines the impact on both the individual with dementia, in terms of their quality of life, and the impact on the UK economy.

In the model we use the best available evidence on prevalence of dementia and associated costs. The most recent UK study estimated there were 670,000 people aged 65 and over with dementia in 2011; this would equate to just over 700,000 people today. In 2010 Luengo-Fernandez and colleagues estimated there were 822,000 people of all ages with dementia in 2006. Our analysis looks at dementia in the 60+ population and uses these upper and lower estimates of prevalence. We have also calculated the mean based on the assumption that the actual prevalence rate will be roughly in between these two estimates. Using these three prevalence rates we have modelled the growth of numbers of people with dementia based on the latest population projections from the Office for National Statistics.

The analysis shows that the numbers of people with dementia are set to grow rapidly over the next 36 years from around 850,000 people today to 1,133,000 in 2025 and 2,014,000 by 2050. This is an alarming rate of growth, driven largely by the growing ageing population and progress made in reducing mortality in other disease areas. Age remains the largest determining factor in risk of developing dementia, so although there is some evidence beginning to emerge that the prevalence rates of dementia amongst the 60+ population may well be falling, or at least stabilising, the numbers of people with the condition will continue to grow.

It is inevitable that the associated costs will grow in parallel. The figures are startling. The cost today of £24 billion is already very high, but by 2025 this is expected to reach £32.5 billion and by 2050 dementia could be costing the UK economy £59.4 billion at today’s prices. The impact of these costs is already being felt by our health and care services. The IPPR suggests that by 2017 there will not be enough informal carers to look after people requiring care. People caring for their loved ones have propped up the system for a long time – if this crutch is removed the strain on the NHS and social care systems could stretch it to breaking point.

The number of lives that have and will be shattered by dementia and the enormous and increasing associated costs show just how important it is to find a disease modifying therapy as soon as possible.

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II Our modelling is based on analysis carried out by the Alzheimer’s Association in the USA in the report: The Lewin Group (2010) Changing the Trajectory of Alzheimer’s Disease: A National Imperative. Alzheimer’s Association

III We have used the mean to simplify the presentation in this report. Figures for the upper and lower estimates as well as an equal weight for other data used in the modelling are be found in the full report: Lewis, F et al (2014). The Trajectory of Dementia in the UK – Making a Difference. Alzheimer’s Research UK and Office of Health Economics
Delaying onset: human impact

We have modelled an intervention that would delay the onset of dementia by between 2 and 5 years and would become available in 2020. Figure 1 shows that if we could delay the onset of dementia by 2 years from 2020 then there would be:

- 184,000 fewer people with dementia and 156,000 fewer informal carers by 2030.
- 323,000 fewer people with dementia and 275,000 fewer informal carers by 2040.
- 383,000 fewer people with dementia and 325,000 fewer informal carers by 2050.

If we could delay onset by 5 years there would be:

- 469,000 (36 per cent) fewer people with dementia and 399,000 (36 per cent) fewer informal carers by 2030.
- 567,000 (34 per cent) fewer people with dementia and 482,000 (34 per cent) fewer informal carers by 2040.
- 666,000 (33 per cent) fewer people with dementia and 566,000 (33 per cent) fewer informal carers by 2050.

The potential is therefore huge – hundreds of thousands fewer people living with dementias in 2050, than will be the case if we do nothing.

Delaying onset: cost impact

An intervention that delays onset of dementia would also generate significant cost savings to the economy. Figures 2 and 3 show how much lower costs would be in comparison to the baseline cost for a 2 year and a 5 year delay of onset. They show that:

- In 2030 dementia would cost the economy £5.9 billion less (£32.2 billion compared to £38.1 billion) if onset could be delayed by two years in 2020.
- In 2050 dementia would cost the economy £12.9 billion less (£46.5 billion compared to £59.4 billion) if onset could be delayed by two years in 2020.
- In 2030 dementia would cost the economy £14.1 billion less (£24.0 billion compared to £38.1 billion) if onset could be delayed by five years in 2020.
- In 2050 dementia would cost the economy £21.2 billion less (£38.2 billion compared to £59.4 billion) if onset could be delayed by five years in 2020.

The analysis does not include the cost of providing the treatment, but is indicative of the economic impact in addition to the huge gains in well-being and quality of life that people will receive by being free from dementia for longer.
We have also modelled what would happen if from 2020 we could slow progression of dementia by 25 per cent and by 50 per cent. This would mean that each person treated would on average spend 25 or 50 per cent longer with mild dementia before progressing to moderate than they would otherwise have done if untreated and 25 or 50 per cent longer with moderate dementia before progressing to severe dementia.

Figure 4 shows that this type of intervention would inevitably mean more people with dementia because people would live longer with the condition. However, because people would live longer in those earlier stages and less time with severe dementia it would have a positive impact on quality of life. People would therefore be able to live better lives with dementia\(^2\).

Figure 5 shows that with a treatment that slowed progression, by 2050, although there would be more people with dementia, the proportions of those with severe dementia would significantly reduce as people spend longer in the earlier stages. By 2050 only 2 per cent of people would be living with severe dementia, compared to 14 per cent without an intervention. The average quality of life scores for mild, moderate and severe dementia are 0.64, 0.39 and 0.24 respectively (relative to full health being 1.00\(^2\)). This means that people will live for longer periods in the earlier stages of dementia and consequently have a much better quality of life while living with the condition. Given the devastating impact dementia has on those living with it, particularly as it progresses, this would make a huge difference to the lives of people with dementia.

Figure 6 shows that an intervention that would slow the progression of dementia by 25 per cent from 2020 would mean the costs of dementia would steadily reduce each year in comparison to the baseline trajectory to reach around £57.6 billion in 2050 compared with £59.4 billion in the absence of the treatment. That is £1.8 billion less than would be expected without the intervention. If progression could be slowed by 50 per cent, Figure 7 shows the total costs would be around £55.2 billion in 2050, making it £4.2 billion less.

This analysis demonstrates the huge difference a disease modifying treatment would make to individuals and those around them, and the huge economic savings that could be made. It shows why we need action now.
We need this type intervention in dementia. Dementia has been around for far longer than HIV/AIDS, and considerably longer than the first case described by Alois Alzheimer in 1906. The success we have achieved fighting HIV/AIDS shows just how far we still have to go if we are to defeat dementia. Despite the great initiatives to date we are still at the beginning of the journey.

**THE ALZHEIMER’S RESEARCH UK CAMPAIGN TO DEFEAT DEMENTIA**

The 2012 Prime Minister’s Challenge has inspired a significant step forward in the fight against dementia and created a landscape upon which we must now capitalise. With the London G8 Dementia Summit held in December 2013 forging a new international plan to drive progress in research, the world is watching and Alzheimer’s Research UK, as one of the world’s top dementia charities, is leading the fight. We have an opportunity to power a new phase of dementia research to help meet the overwhelming need.

Alzheimer’s Research UK is launching a campaign to raise £100 million over the next five years to build on the fundamental understanding that we have amassed in scientific research and move closer towards providing real benefit for people with dementia and their carers. Utilising our links with the international research community, government, the financial sector and the pharmaceutical industry, we will fund the best and brightest researchers and major new targeted projects that will grow the research field substantially, developing global partnerships and initiatives, and arming people with the advice and opportunities required to play their own part in defeating dementia.

This campaign will deliver a step change in our response to dementia, supporting world-class scientists and organisations to deliver answers that will make a difference to people’s lives.

‘My wonderful husband Andrew was only 43 when he was diagnosed with early-onset Alzheimer’s disease. Eight years on, he now needs 24-hour care in a nursing home and can no longer walk or talk and is fed by a tube. Although it’s probably too late for Andrew, I would dearly love to see new treatments found to help other people and their families living with this cruel disease. I believe it’s what Andrew would want too.’

Alzheimer’s Research UK’s Defeat Dementia campaign is essential and I’m backing it all the way.

Sarah King, A Champion of Alzheimer’s Research UK

This campaign will span the full spectrum from fundamental discovery to patient benefit.

1. We will invest £30 million in a network of Drug Discovery Institutes, both in the UK and Europe. Developing drugs for complex diseases like Alzheimer’s requires a multi-faceted approach, bringing together basic science, clinical expertise and participating patients. Our Institutes will achieve all three by locating within leading academic establishments that have close links to clinical research units and hospitals. This approach will enable innovative drug discovery research but will also efficiently leverage capital infrastructure and resources.

2. We will launch a ground-breaking £20 million Global Clinical Development Fund dedicated to taking promising new treatments into testing in people, bringing them closer to the hands of patients, sooner. The fund will enable the academic and Small Medium Enterprise (SME) sectors to perform innovative studies in carefully selected cohorts where the treatment is targeted to the most appropriate patients thereby maximizing the potential to see a positive effect from a drug. By de-risking novel treatments we will create a market of new potential medicines for pharmaceutical industry investment and significantly increase the probability of providing people with dementia with the treatments they need.

3. With the support of a major philanthropic foundation, we will launch the Alzheimer’s Research UK Stem Cell Research Centre. Based at the University of Cambridge, we will bring together two world class research institutes: the Gurdon Institute, Cambridge, and the Institute of Neurology, UCL. The Centre will focus on understanding key disease mechanisms, finding out their genetic causes and finding new potential drug interventions for Alzheimer’s disease.

4. We will double our investment and expand our Alzheimer’s Research UK Research Network, connecting fifteen centres of excellence at leading universities throughout the UK, uniting established and prospective dementia researchers and investing in capacity building in the dementia research field.

5. We will introduce a new Prevention Fund to challenge the scientific community to answer the biggest questions in prevention, seed-funding the very best ideas.

How we will Defeat Dementia

Since the first death from AIDS was reported in 1981 we have seen amazing progress made by the international research community to defeat the disease. Although today we still don’t have cure, antiretroviral drugs are so effective that with access to treatment and under the right medication management programme people can expect to live a long life and are unlikely to die as a result of complications resulting from the condition. This was achieved in less than 30 years and was dramatically accelerated by the creation of a Global Fund in 2002.

By de-risking novel treatments we will:

- **Focus on rapid translation** so treatments can be delivered into testing in people sooner. The fund will enable the academic and Small Medium Enterprise (SME) sectors to perform innovative studies in carefully selected cohorts where the treatment is targeted to the most appropriate patients thereby maximizing the potential to see a positive effect from a drug.

- **Create a market of new potential medicines** for pharmaceutical industry investment and significantly increase the probability of providing people with dementia with the treatments they need.

- **Double our investment** and expand our Alzheimer’s Research UK Research Network, connecting fifteen centres of excellence at leading universities throughout the UK, uniting established and prospective dementia researchers and investing in capacity building in the dementia research field.

- **Introduce a new Prevention Fund** to challenge the scientific community to answer the biggest questions in prevention, seed-funding the very best ideas.
Powering change: Influencing governments, investors, industry and the international research community

FIVE STEPS TO DEFEAT DEMENTIA

One hundred million pounds over five years will make a huge difference, but our campaign will also focus on our power to catalyse change by leveraging funding from other global sources. We have developed an unparalleled network of the leading researchers in the field and have used this to generate innovative ideas and strategy that will identify the best ways to defeat dementia.

This insight and expertise will not only guide our funding, but also that of governments and other funders. By using these networks and our influence, we believe that we can make the field attractive to investors.

Nearly 7 times as much is spent on cancer research as is spent on dementia research each year

At Alzheimer’s Research UK we have set out our £100 million campaign to meet the challenge over the next five years. We believe a realistic aim for the UK government is a further doubling of funding from 2013, every five years through 2025, taking spending from £66 million in 2013 to £132 million by 2020 and £264 million by 2025. This investment must focus on targeting funds at the most promising research and should be linked to targets for high quality impact to ensure value for money.

The money can be found. The Science and Research Funding budget is over £4.5 billion per annum and the main UK research councils receive over £2.5 billion each year. We therefore need to ensure that a greater portion of this money is allocated to the highest quality, innovative ideas in dementia research.

The Prime Minister and other G7 leaders have pledged to find a cure or disease modifying treatment by 2025. This is a very welcome and ambitious target and currently the scale of funding does not match this ambition. The UK government funded just over £52 million of research into dementia in 2012/13, and will increase this to £66 million by 2015. The combined government and charitable spend on dementia in 2012/13 was £73.8 million, and when we compare this to the £503 million spent on cancer research in 2012/13 it is clear that this is nowhere near enough.

Fifth step to defeat dementia

The Alzheimer’s Research UK Campaign will create a step change in research into dementia, but we cannot do it alone. In order to defeat dementia we need to ensure that governments and the international community share our vision. We must harness the promising international momentum created by the formation of a World Dementia Council and Global Dementia Innovation Envoy and provide solutions to the challenges that need to be overcome to defeat dementia.

There is a growing body of research that shows a link between certain risk factors (mainly the key cardiovascular risk factors) and dementia. Current evidence cannot tell us how likely any one individual is to develop dementia based on their exposure to these risk factors, but it is important to make people aware of these potential risks and how they can mitigate them. We would like to see more public health messaging surrounding dementia and more proactive initiatives to reduce the possible risks.

While the only way to truly defeat dementia is to find an effective treatment, it is important that people who are living with the condition are given the best possible support. Innovation in technology is key to supporting people and potentially helping to treat the condition, for example, artificial intelligence may eventually help people to retain their memory and other innovations stemming from can improve the lives of people living with dementia. There should be more support for research into these promising areas.

1. INCREASE FUNDING

‘To defeat dementia by 2025 we must increase funding in line with this ambition’

Alzheimer’s Research UK’s investment over the next five years aims to deliver a 20 per cent increase in the number of dementia researchers in the UK, but with additional spending from government and other private and philanthropic investors there should be an ambition for a 50 per cent increase in the numbers of dementia researchers by 2020. This would ensure that any additional investment is focused on encouraging the best and brightest minds to work in the dementia field.

The UK life sciences sector is growing rapidly and the UK is becoming a global leader in drug development and clinical trials. Research has a positive impact on GDP and with the right investment dementia has the potential to be the next big growth area. A report by the Health Economic Research Group at Brunel, the Office of Health Economics and RAND in 2008 found that the rate of return of public / charitable research investment from GDP gains is about 30 per cent.

While their analysts focused on all types of medical research, it gives an indication of the annual rate of return to investment that will be generated by a quantum leap of funding for dementia research. There is not only a hugely compelling moral and human case for investment, but also a compelling economic one.

2. INCREASE CAPACITY

‘We must encourage the best minds to do more high quality research into dementia’

Treatments are the key to curing dementia and more must be done to accelerate promising candidates into development. This will involve partnership working from governments and the international funding community. At Alzheimer’s Research UK we are funding a series of Drug Discovery Institutes and working closely with the international funding community to deliver research that focuses on developing treatments that will bring real patient benefit as quickly as possible.

Through the development of our Dementia Consortium we are also working with the pharmaceutical sector to create a bridge between fundamental academic research and the pharmaceutical industry’s drug discovery programmes. The Consortium will provide funding, resources and expertise to both increase the number of, and capitalise upon, new drug targets emerging from across the academic sector that hold promise of bringing patient benefit. The Consortium addresses a fundamental gap in the market concerning the transfer of promising, early stage research into drug development.

In the UK, the pharmaceutical industry employs 165,000 people and, and invests approximately £13.3 million per day (nearly £4.9 billion per year) in research and development. We need to do more to ensure a greater proportion of these funds are channelled into dementia research by making the field attractive to investors.

3. DEVELOP BETTER TREATMENTS FASTER

‘We must deliver better treatments and make them available faster’

Increasing investment will only make a difference if we can get drugs to patients as quickly as possible while still ensuring they are safe and effective. However, currently there are a number of regulatory barriers that are preventing optimum conditions for research into dementia:

• The time it takes to get regulatory approval for clinical trials.
• The prohibitive nature of exclusivity licences because of the time it takes to develop therapies for dementia.
• The additional length of time it takes to get dementia drugs to people.

We would like to see changes to how research is regulated and are calling for the length of time it takes to get approval of clinical trials to be reduced, and better access to patient data that is essential in supporting researchers find effective treatments. We would also like to work more closely with the NHS to help secure greater participation in clinical trials.

We would also like to see commitment for governments to work with the regulatory authorities, both nationally and internationally, to create new avenues to encourage investment in drug discovery: for example, conditional licensing contingent upon Phase 4 data generation and increased data exclusivity times as currently afforded for ‘Orphan’ treatments. Agreements to afford more generous licensing and exclusivity could be dependent upon an agreement to a certain level of investment from the pharmaceutical industry. This type of agreement would generate huge amounts of new investment into dementia research and increase the likelihood of success.

4. REMOVE REGULATORY BARRIERS FASTER

‘We need to break down the regulatory barriers that are curtailing potential research investment’

Dementia can destroy lives and while we are working towards effective treatments we need to do more to prevent the condition and improve the lives of people living with the symptoms.

Stigma is an issue that continues to blight progress in dementia research and support for people with dementia and their carers. More must be done to raise awareness of dementia and the fact that it is a medical condition, like cancer or heart disease, not just a natural part of ageing.

There is a growing body of research that shows a link between certain risk factors (mainly the key cardiovascular risk factors) and dementia. Current evidence cannot tell us how likely any one individual is to develop dementia based on their exposure to these risk factors, but it is important to make people aware of these potential risks and how they can mitigate them. We would like to see more public health messaging surrounding dementia and more proactive initiatives to reduce the possible risks.

While the only way to truly defeat dementia is to find an effective treatment, it is important that people who are living with the condition are given the best possible support. Innovation in technology is key to supporting people and potentially helping to treat the condition, for example, artificial intelligence may eventually help people to retain their memory and other innovations stemming from can improve the lives of people living with dementia. There should be more support for research into these promising areas.

5. IMPROVE LIVES

‘Improve the lives of people with dementia’

The Alzheimer’s Research UK Campaign will create a step change in research into dementia, but we cannot do it alone. In order to defeat dementia we need to ensure that governments and the international community share our vision. We must harness the promising international momentum created by the formation of a World Dementia Council and Global Dementia Innovation Envoy and provide solutions to the challenges that need to be overcome to defeat dementia.
Numerous people worldwide have dementia, and this is predicted to rise to 135m by 2050. 135m by 2050 is predicted to rise to 44m people worldwide having dementia and this is predicted to rise to 135m by 2050.

Dementia costs the UK economy £24 billion per year. We have helped shape the current understanding of dementia, with our funding underpinning the discovery of 21 of the 22 known Alzheimer's risk genes, and our investigation into the dangers of antipsychotic drug over-prescription saving lives. 21 of 22 known Alzheimer's risk genes.

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It is time to
Defeat Dementia

The world is waking up to the scale of dementia and the impact it is having globally. Too many people are having their lives destroyed and the cost to the economy continues to grow. Alzheimer’s Research UK has been instrumental in helping the UK Government to place dementia on a global platform and champion the need for a quantum leap in funding for research into this condition.

The challenge is great, but our ambitious fundraising programme will allow Alzheimer’s Research UK to build on our success to date by funding cutting-edge research that will focus on developing new treatments as quickly as possible to improve the lives of millions of people worldwide living with dementia.

References:
14. HERG, OHE, RAND (2008) Medical Research: What’s it worth? Estimating the economic benefits from medical research in the UK. Medical Research Council, the Wellcome Trust and the Academy of Medical Sciences
23. See http://dementiachallenge.dh.gov.uk/map/
If you are interested in discussing Defeat Dementia in more detail, please contact Dr Matt Norton, Head of Policy and Public Affairs on 01223 824575.