“The Dementia Iceberg”: New Bupa report uses PSSRU research

by Josie Dixon, Research Fellow, PSSRU at LSE

Worldwide there are an estimated 36.5 million people with dementia, a number that is expected to rise to 115 million people by 2050. In high-income countries, only 20 to 50 per cent of people with dementia have a formal diagnosis, with the diagnosis rate in England and Wales currently at 43.8 per cent. Many people are also diagnosed late, often at a time of crisis such as an emergency hospital admission.

In research conducted for Bupa, we estimate that by introducing a cognitive test for all 75 year olds in England and Wales, approximately 3,500 people each year could be diagnosed with dementia at an annual cost of around £16 million. Of these, at least 2,000 people would otherwise never have received a diagnosis and the remaining 1,500 people are diagnosed earlier than they otherwise would have been.

The new report from Bupa, The Dementia Iceberg, can be accessed at www.bupa.com/dementia

A timely diagnosis enables people to plan for their future care while they still have capacity and facilitates access to a range of symptomatic treatments, care and support. These include pharmacological treatments such as dementia drugs (acetylcholinesterase inhibitors and memantine), psycho-social interventions including cognitive stimulation therapy, and support and psychological therapy for carers. Appropriate treatment and support can help to improve quality of life for people with dementia and their carers, and also has the potential to be cost-saving by, for example, helping to delay entry to residential care.

The Bupa report

The Bupa report The Dementia Iceberg was launched last month. It calls on governments worldwide to increase dementia diagnosis rates and to consider different ways, including the introduction of cognitive testing, to achieve this goal. The report contains a wide range of useful information and advice for people interested or concerned about dementia and its diagnosis. The report also draws on research carried out in the Personal Social Services Research Unit (PSSRU) at the LSE that examines how the introduction of a cognitive test for people aged 75 could increase dementia diagnosis rates and what the likely costs would be.

The PSSRU model

Our study used a simple form of economic modeling to estimate the number of additional people that could be diagnosed, as well as the number of people that could be diagnosed earlier, if a one-off cognitive test for all 75 year olds was introduced in England & Wales, Spain, Australia and New Zealand. The study also examined what it might cost to administer in England and Wales.

The key assumptions used in our model come from previous research:

- The test takes place in a primary care setting using the Mini Mental State Examination (MMSE).
- The test is administered by clinical nurses with involvement from general practitioners.
- The test is administered during a standard 15-min appointment
- 81 per cent of people will agree to the test (Holsinger et al. 2011).
- 52 per cent of those identified as having cognitive impairments will go on to a specialist or memory clinic for further diagnostic tests (Boustani et al. 2005).
Key findings

In England and Wales, there are an estimated 16,683 people aged 75 living with dementia. More than half of these people (9,374 or 56.2 per cent) do not have a diagnosis.

- By testing all 75 year-olds in England and Wales, 3,514 people (just over 21 per cent of all people aged 75 with dementia) could receive a diagnosis each year.
- This includes at least 1,974 people who would otherwise never have received a diagnosis, with the remaining number (1,540 people) being diagnosed earlier than they otherwise would have been, thus avoiding diagnosis late or at a time of crisis such as an emergency hospital admission or upon entry to a care home.
- The cost of administering a cognitive test to all 75 year olds in England and Wales who agree to one and for carrying out formal diagnostic assessments is estimated to be around £16 million.

By adapting the model to alternative population, dementia prevalence and diagnosis rates, the numbers of people who could benefit from a cognitive testing programme for 75 year olds was also estimated for three further countries (Spain, Australia and New Zealand). The estimates are given in Table 1 below.

Table 1: Estimated additional and earlier dementia diagnoses in four countries if a one-off cognitive test was introduced for all 75 year olds.

<table>
<thead>
<tr>
<th>Country</th>
<th>People aged 75 living with dementia</th>
<th>People aged 75 living with dementia, without a diagnosis</th>
<th>The number of people each year who would receive a diagnosis as a direct result of having a cognitive test at age 75</th>
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<tbody>
<tr>
<td>England and Wales</td>
<td>16,683</td>
<td>9,374</td>
<td>3,514 (1,974 who would otherwise never receive a diagnosis and 1,540 diagnosed earlier)</td>
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<tr>
<td>Spain</td>
<td>16,581</td>
<td>10,115</td>
<td>3,814 (2,326 who would otherwise never receive a diagnosis and 1488 diagnosed earlier)</td>
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<tr>
<td>Australia</td>
<td>5,699</td>
<td>3,467</td>
<td>1,311 (800 who would otherwise never receive a diagnosis and 511 diagnosed earlier)</td>
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<tr>
<td>New Zealand</td>
<td>1,131</td>
<td>622</td>
<td>230 (129 who would otherwise never receive a diagnosis and 101 diagnosed earlier)</td>
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</table>

Total across all four countries: 8,869 (including 5,229 who would otherwise never receive a diagnosis and 3,640 diagnosed earlier)

Although the research does not compare a one-off cognitive test for 75 year olds with other methods of raising diagnosis rates, it highlights the need for improving systems to diagnose dementia and indicates how many people could potentially benefit from the introduction of cognitive testing.

References


Further information

http://blogs.lse.ac.uk/healthandsocialcare/2013/10/14/the-dementia-iceberg-new-bupa-report-uses-pssru-research/
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