

National Dementia & Antipsychotic Prescribing Audit 2012



National Report

Electronic copies of the national report can be found at www.ic.nhs.uk/dementiaaudit

For further information about this report, email: enquiries@ic.nhs.uk or contact:

Clinical Audit Support Unit (CASU)
Health and Social Care Information Centre
1 Trevelyan Square
Boar Lane
Leeds
LS1 6AE

Copyright © 2012, Health and Social Care Information Centre, National Dementia and Antipsychotic Prescribing Audit 2012. All rights reserved.



The
Information
Centre
for health and social care

Health and Social Care Information Centre (HSCIC) is England's central, authoritative source of essential data and statistical information for frontline decision makers in health and social care. The HSCIC managed the publication of the 2012 report.

National Dementia & Antipsychotic Prescribing Audit 2012

Key findings on the prescription of
antipsychotics for people with
dementia in England

Report for the audit period
2006 to 2011

Contents

Executive Summary.....	2
Introduction.....	3
Background to the audit.....	3
What is Dementia?	3
What are antipsychotics?	4
Methodology.....	4
Data Quality	5
Response rates	5
Limitations.....	6
Quality and Outcomes Framework (QOF).....	6
Audit Findings	7
Participation	7
Diagnosis of dementia	7
Prescriptions	9
Antipsychotic medication.....	9
Medication for dementia	12
Conclusion	13
Further Information	14
References.....	15
Appendix 1 – Data items	16
Demographics table.....	16
Prescription table.....	17
Appendix 2 – Diagnosis and drug codes	18
Diagnosis codes.....	18
Drug codes.....	19
Appendix 3 - Participation by SHA and PCT.....	21
Appendix 4 - List of anonymised GP prevalence values (above 2.01 per cent).....	24

Executive Summary

This report describes the results of the National Dementia and Antipsychotic Prescribing Audit which collects demographic and prescribing information for people with dementia from primary care clinical systems.

This report provides the results of the audit, at a national and Strategic Health Authority (SHA) level, which covers people with a diagnosis of dementia and any prescription of antipsychotic medication or any alternative medication including drugs for dementia, hypnotics and anxiolytics and antidepressants over a six year period (2006 to 2011).

The key findings from the audit were:

- The number of people newly diagnosed each year with dementia in the participating practices has increased by 67.7 per cent in the last six years (from 2006 to 2011)
- There is a higher prevalence of diagnosed dementia in women (66.3 per cent) than in men
- The majority of people diagnosed with dementia are aged 65 years and above (94.7 per cent)
- There was a decrease of 10.25 percentage points in the number of people with dementia receiving prescriptions of antipsychotic medication for people with dementia from 17.05 per cent in 2006 to 6.80 per cent in 2011
- There has been a 51.8 per cent reduction in the number of people with dementia receiving a prescription of antipsychotic medication from 2008 to 2011

GP level analysis providing each submitting practice with individual results as well as PCT summary reports will be available in August 2012 to support the national findings. Further information can be found on the audit website at: www.ic.nhs.uk/dementiaaudit

Introduction

Approximately 750,000 people in the UK live with dementia and the National Health Service (NHS) aims to provide them with the best dementia care possible. The National Dementia and Antipsychotic Prescribing Audit (DAP) plays an important part in this. It is estimated that around 25 per cent of people with dementia (180,000 people) are currently being prescribed antipsychotic medication designed to treat conditions such as schizophrenia¹. For around 36,000 people with dementia, antipsychotic drugs are generally considered the right treatment option but they are often prescribed inappropriately to people with dementia¹.

The use of antipsychotic medication can lead to serious side effects for people with dementia. The Government has made a commitment to reduce the inappropriate prescribing of antipsychotic medication for people with dementia.

The National Dementia and Antipsychotic Prescribing Audit (DAP) is commissioned by the Department of Health (DoH) and delivered through the Health and Social Care Information Centre (HSCIC). The audit collects information from GP practices on the prescribing of antipsychotic drugs for people with dementia.

The audit aims to:

- Provide publicly available information on the current prescribing of antipsychotic medication for people with dementia and their carers
- Provide information to support the Government's commitment to reduce the inappropriate prescribing of antipsychotic medication
- Help GP practices identify where services can be improved

Background to the audit

In 2008 the Department of Health (DoH) commissioned an independent review of the prescribing of antipsychotic drugs for people with dementia. The review was initiated following concerns about the over-prescription of antipsychotic drugs for people with dementia that were highlighted in a number of critical reports by the Alzheimer's Society² and the All Party Parliamentary Group on Dementia³.

The National Dementia Strategy⁴, published in February 2009, identified 17 key objectives to improve the quality of care for people with dementia. The strategy has been a catalyst for a change in the way services for people with dementia are delivered.

The DoH report, written by Professor Sube Banerjee: *The use of antipsychotic medication for people with dementia: Time for action*¹ was published in November 2009. It highlighted a need to ensure that antipsychotic drugs are only prescribed to people with dementia when necessary.

In 2010 the Department of Health commissioned the HSCIC to carry out an audit to generate data on the use of antipsychotic medication for people with dementia in each primary care trust in England to generate baseline data.

What is Dementia?

Dementia is a term used to describe a set of symptoms which may include loss of memory, mood changes, and problems with communication and reasoning. Dementia is a progressive disease, which means the symptoms will gradually get worse. How quickly dementia progresses depends on the individual. Each person is unique and experiences dementia in their own way.

Drugs have been developed that can alleviate some of the symptoms of some types of dementia. These drugs include the three acetylcholinesterase inhibitors:

- Aricept (donepezil)
- Exelon (rivastigmine)
- Reminyl (galantamine)

A fourth drug Ebixa (memantine) is available, which works in a different way to the acetylcholinesterase inhibitors.

For further information on dementia please visit the Alzheimer's Society website: www.alzheimers.org.uk

What are antipsychotics?

Many people with dementia experience behavioural and psychological symptoms which may include agitation and aggression. Antipsychotics are a group of medications that are usually used to treat people with mental health conditions such as schizophrenia. Antipsychotics may help some people experiencing behavioural and psychological symptoms of dementia. However, they may also cause serious side effects and in many cases are inappropriately prescribed.

There are many types of antipsychotic drugs, including aripiprazole, olanzapine, quetiapine and haloperidol. However, only one antipsychotic drug - risperidone - is licensed for use for people with dementia in specific circumstances. It is not illegal to prescribe antipsychotic drugs that are not licensed for people with dementia, however, any use must be for good reason.

For further information on antipsychotic medication for people with dementia please visit the Alzheimer's Society website: www.alzheimers.org.uk/antipsychotics

Methodology

The National Dementia and Antipsychotic Prescribing Audit (DAP) collects information from primary care GP practice clinical systems in England, specifically data on patient demographics, diagnosis and prescriptions for people with dementia.

Data was collected from a GP practice system using either the automated data extract function or manual queries. The query extracts data where a diagnosis of dementia has been recorded in the patient record (see Diagnosis Code list [Appendix 2](#)). Where a diagnosis of dementia has been identified the query searches for possible prescriptions of medications (any prescription not just prescriptions specifically for dementia) in this case prescriptions of an antipsychotic or alternative medication including drugs for dementia, hypnotics and anxiolytics and antidepressants (see Drug code list [Appendix 2](#)). The audit was therefore able to capture the number of people diagnosed with dementia from participating practices and any prescription of antipsychotic medication.

Following collection the audit data was cleaned and then validated using the Medical Research Information Service (MRIS) to remove discrepancies in the data, in particular the removal of incorrect or duplicate patient records.

The National Dementia and Antipsychotic Prescribing Audit is supported by the National Clinical Director for Dementia, Alistair Burns, and the Royal College of General Practitioners. In addition, the DAP has approval from the National Information Governance Board (NIGB) Ethics and Confidentiality Committee (ECC) to collect the data required to conduct the audit.

45.7 per cent of GP practices in England submitted information on people with a diagnosis of dementia which equates to 130,340 people alive and registered on a GP practice system at the time of data extraction (31st December 2011). This equates to 48.9 per cent of the number of people with a diagnosis of dementia reported on the 2010/2011 Quality and Outcomes Framework (QOF) register.

The analysis provided within this report is based on 196,695 patients who have been coded with a diagnosis of dementia and have been actively registered at a participating GP practice during the six year audit period. There were additional records submitted to the audit, however, they were deemed inadmissible due to varying levels of data quality issues which rendered the records inappropriate for use and therefore are not included in this analysis (see [Data Quality](#) section).

Data Quality

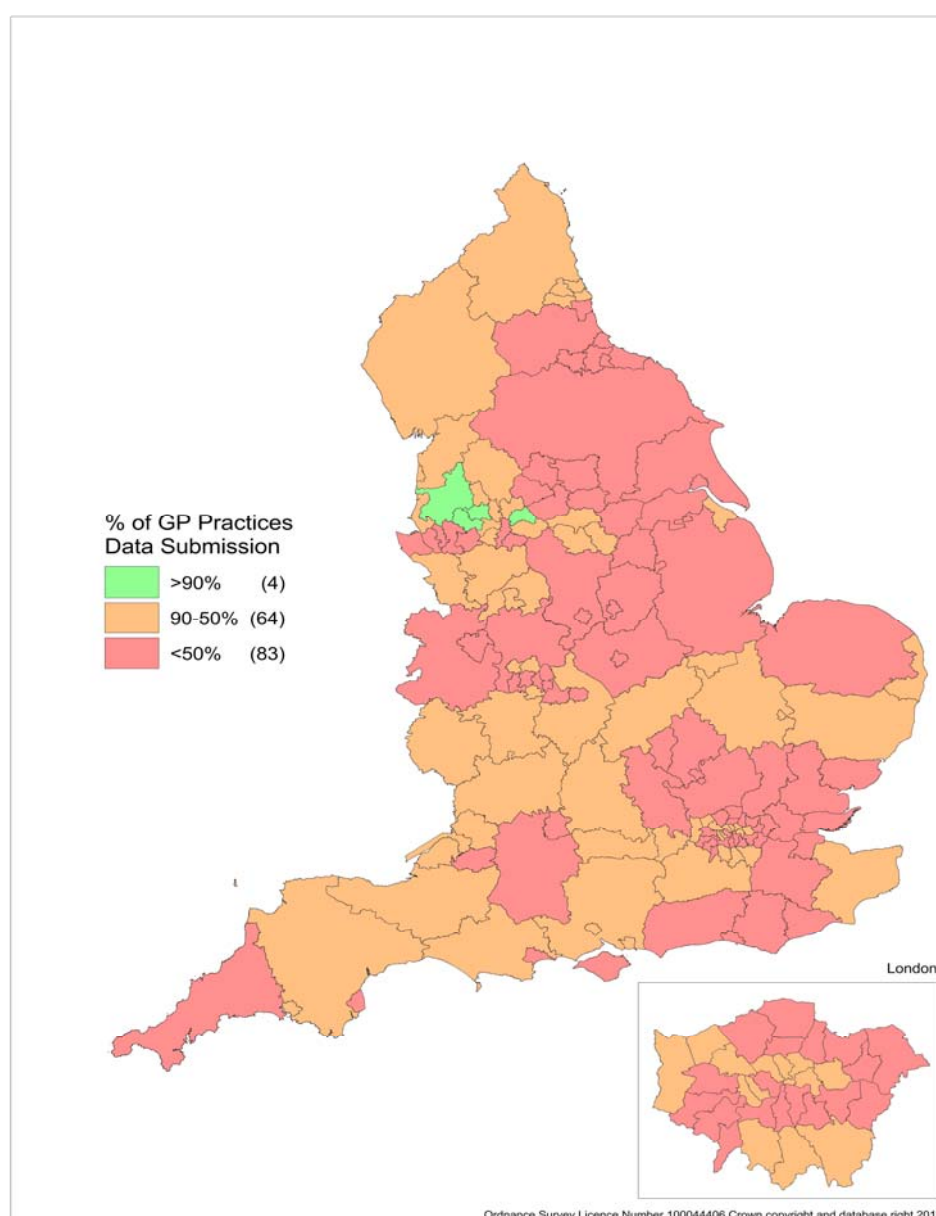
Response rates

In December 2011 communications were distributed to each GP practice in England (approximately 8,426) outlining the data collection method for the audit. Practices were asked to submit data by using either an automated data extract function, where compatible with the clinical system, or manual queries (MIQUEST).

For practices that were able to use the automated data extract function, a deadline of the 6th February 2012 to actively opt out of the audit was provided. Less than two per cent of GP practices opted out of the audit. 52.3 per cent of practices did not participate for various reasons including technical errors and limited resource.

3,850 GP practices actively participated in the audit representing 45.7 per cent of GP practices in England. The audit obtained 100 per cent Primary Care Trust (PCT) coverage with practice participation within each PCT ranging from 2.4 per cent to 95.4 per cent as illustrated in Map 1.

Map 1: Percentage of GP practice participation within each PCT in England



In total the participating practices submitted 298,812 patient records. However, not all of the records submitted to the audit were admissible for analysis purposes due to a variety of data quality issues making them unusable. Table 1 shows a summary of the records submitted and records removed, with a breakdown of these records by reason for non-inclusion within the audit. Of the 298,812 patient records submitted 95,261 were removed from the final dataset, leaving 203,551 records which were made up from 196,695 unique people with a diagnosis of dementia.

Table 1: Summary of records submitted to the audit and those removed from analysis

Number of records	
298,812	Total records submitted to the audit
95,261	Total records removed – reasons for exclusion;
59,072	Patient died or left practice before 2006
17,185	Invalid dates of death, registration/deregistration or diagnosis
9,407	Duplicate records - either due to duplicate system entry or duplicate data submissions
4,642	Patients outside of audit time period
3,737	Invalid NHS Numbers
1,218	Other Registration validation issues
203,551	Total number of records in the audit
196,695	Total number of unique patients in the audit

Limitations

There are a number of limitations of the audit data which must be taken into consideration when interpreting the findings. These include:

- **Coverage**
The audit findings are based on the information provided from participating practices. Not all practices in England were able to participate in the audit due to either technical issues or the resources available to manually extract and submit data.
- **Coding of diagnosis**
The audit only collected data where the diagnosis of dementia was correctly coded within the electronic patient record. In many cases the diagnosis may be recorded within the patient's notes and therefore information on those patients is not included in the audit.
- **Data Quality**
Poor quality data submissions resulted in the removal of a number of patient records due to issues such as incorrect date formats or duplicate records.

Quality and Outcomes Framework (QOF)

The Quality and Outcomes Framework (QOF)⁵ is the annual reward and incentive programme detailing GP practice achievement results which in 2006 introduced the indicators for dementia.

The diagnosis codes used to extract patient data for the audit are based on those specified within QOF, however, variation in participation have resulted in differences in prevalence figures provided. The slightly differing time period for prevalence reporting between the audit (1st January 2006 to 31st December 2011) and QOF (April 2010 to March 2011) must be taken into consideration. It must also be noted that the increase in prevalence of dementia reported may be due to the improvements in the recording and accuracy of clinical coding of dementia influenced by the introduction of the QOF indicators rather than a natural increase in diagnosis.

Audit Findings

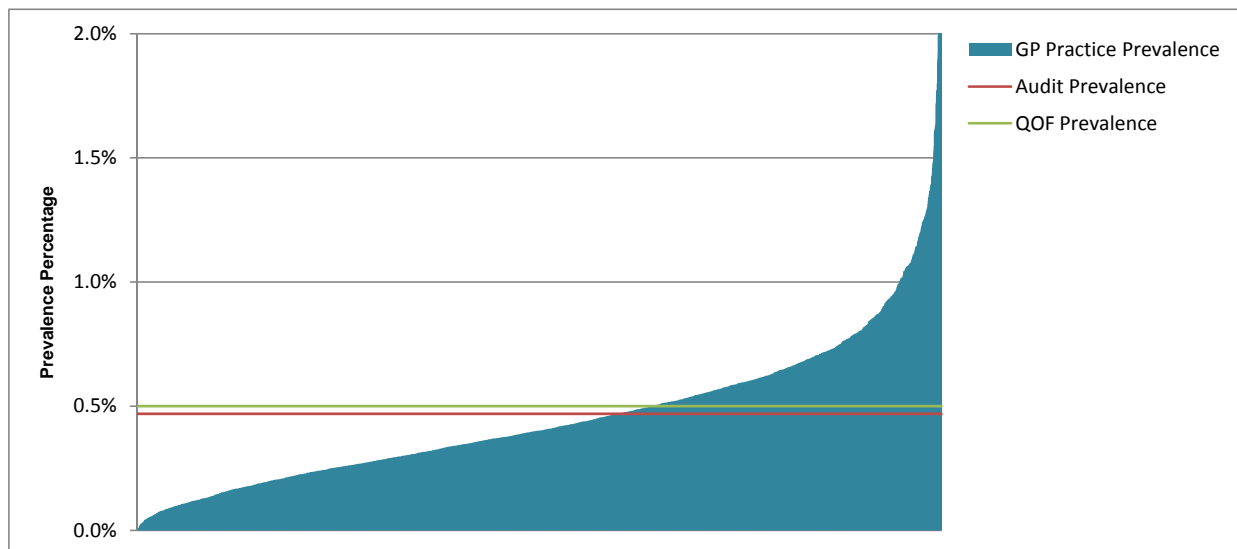
Participation

The audit collected information from 3,850 GP practices from 151 PCTs in England. Following data validation the auditable dataset included 196,695 patients with a diagnosis of dementia.

Practice participation within each PCT varied from 2.4 per cent to 95.4 per cent. Chart 1 shows the prevalence of dementia within participating GP practices which ranges from 0.01 per cent to 75.5 per cent, against the QOF reported 2010/11 prevalence for England of 0.5 per cent⁵ and the audit prevalence which is 0.47 per cent.

For the purposes of illustration Chart 1 shows practices with prevalence ranging from zero to two per cent, 19 practices have prevalence ranging from 2.01 per cent to 75.5 per cent (a list of anonymised GP prevalence values can be found in [Appendix 4](#)). Prevalence values will be fully reported within the GP level analysis which will be available in July.

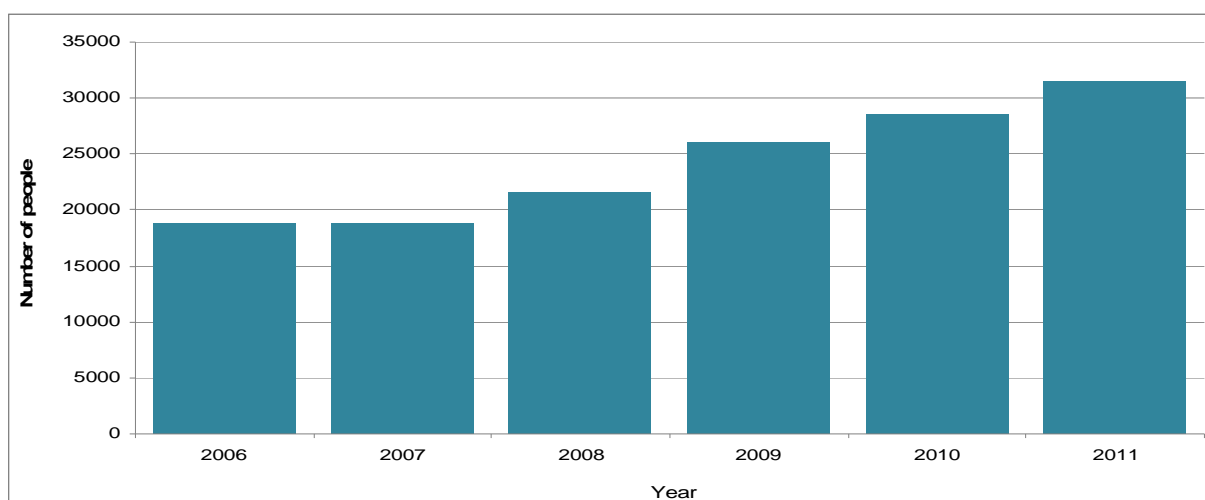
Chart 1: Prevalence of dementia within each GP Practice, England



Diagnosis of dementia

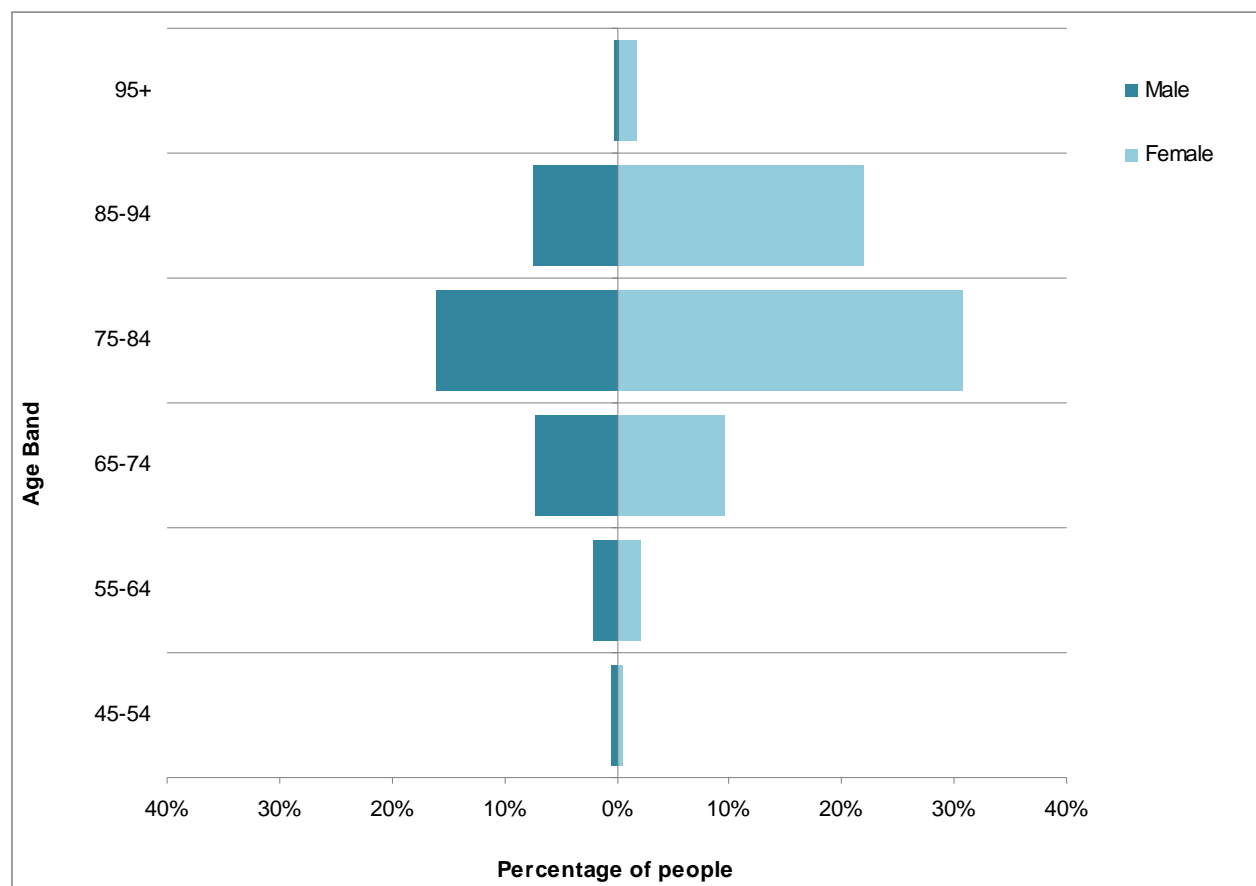
The audit shows that the number of people newly diagnosed with dementia each year in the participating practices in England has increased by 67.7 per cent in the last six years from 18,762 new diagnoses in 2006 to 31,455 in 2011 (Chart 2).

Chart 2: Number of people newly diagnosed with dementia within each audit year, 2006 to 2011, England



Nearly two thirds (66.3 per cent) of people diagnosed with dementia included in the audit were female showing a higher prevalence of diagnosed dementia in women than in men.

Chart 3: Age/sex distribution of people with a diagnosis of dementia, at the end of the audit period, England



The majority of people diagnosed with dementia are aged 65 years and above (94.7 per cent) with only 5.3 per cent aged under 65 years.

The highest percentage of people with dementia (46.6 per cent) is shown in the 75 to 84 years of age band (Chart 3) with double the number of women diagnosed with dementia than men. A similar pattern can be seen in the 85 to 94 years of age and 95+ years of age groups.

A small proportion of people diagnosed with dementia included in the audit (0.2 per cent) were under 45 years of age.

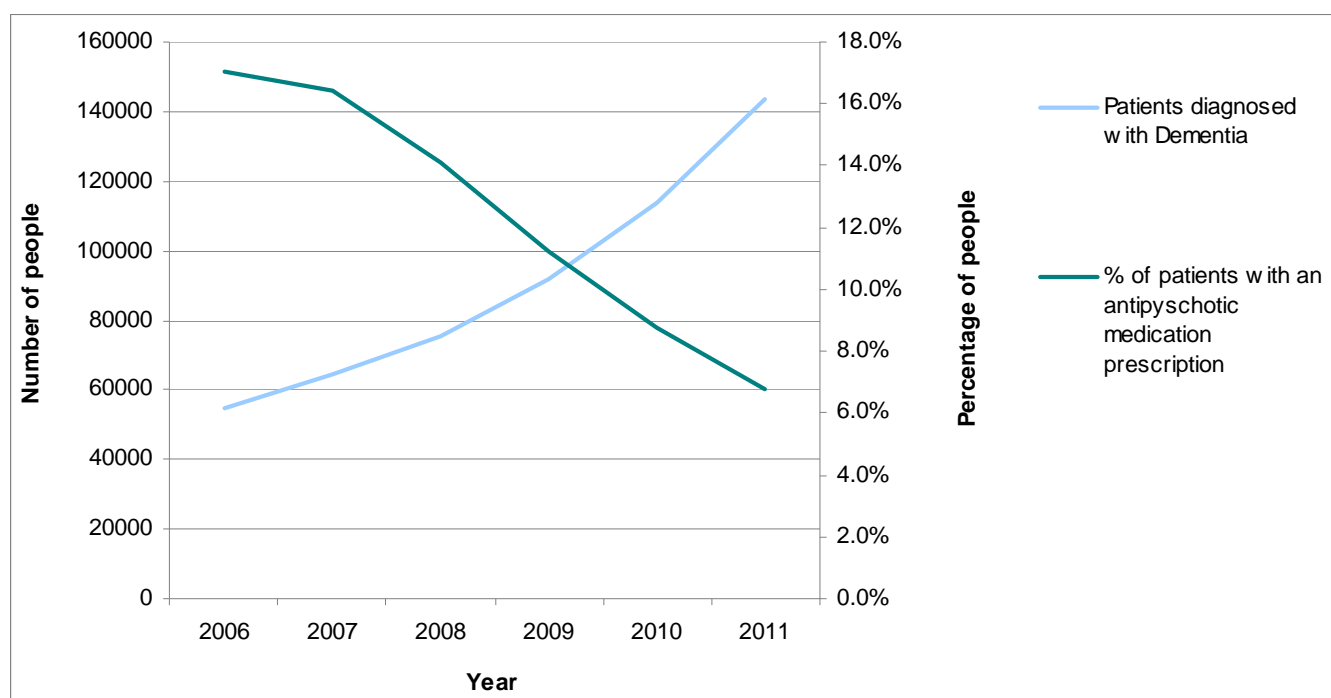
Prescriptions

Antipsychotic medication

In contrast to the recorded increase in the number of people diagnosed with dementia the percentage of people receiving a prescription of antipsychotic medication for people diagnosed with dementia has decreased. Over the last 5 years the audit shows a decrease of 10.25 percentage points in the prescription of antipsychotic medication from 17.05 per cent in 2006 to 6.80 per cent in 2011.

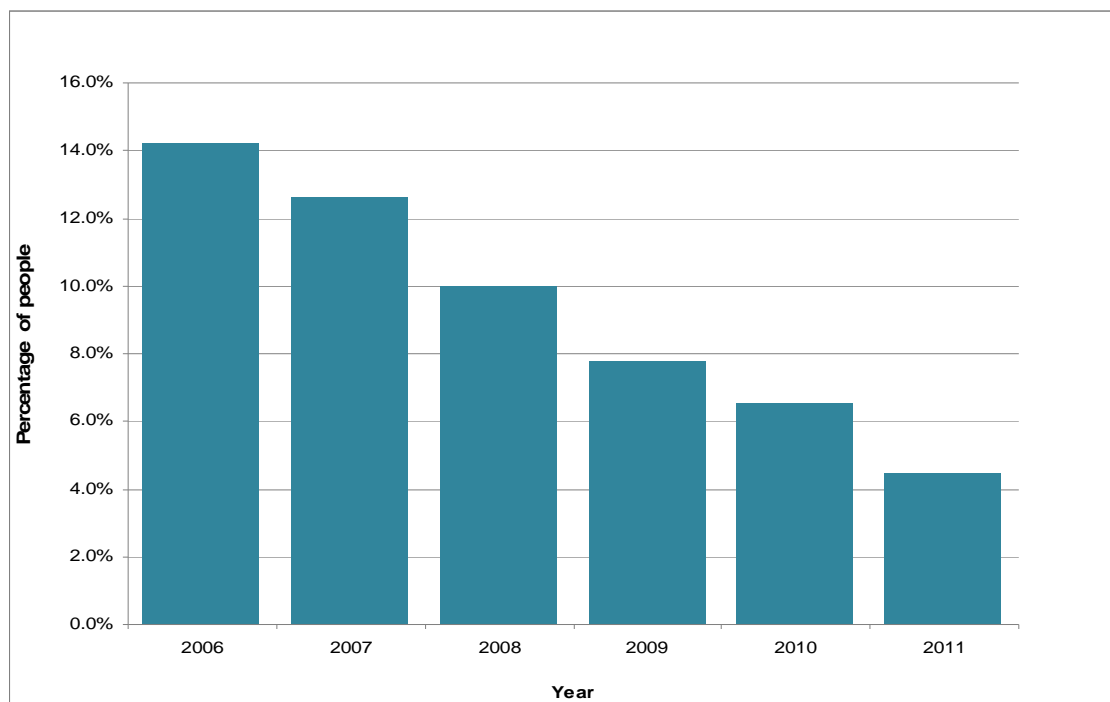
In particular the report shows a 51.8 per cent reduction (from 2008 to 2011) in the number of people with dementia receiving a prescription of an antipsychotic medication.

Chart 4: Number of people with dementia and the percentage of those receiving an antipsychotic medication prescription, time trend, England



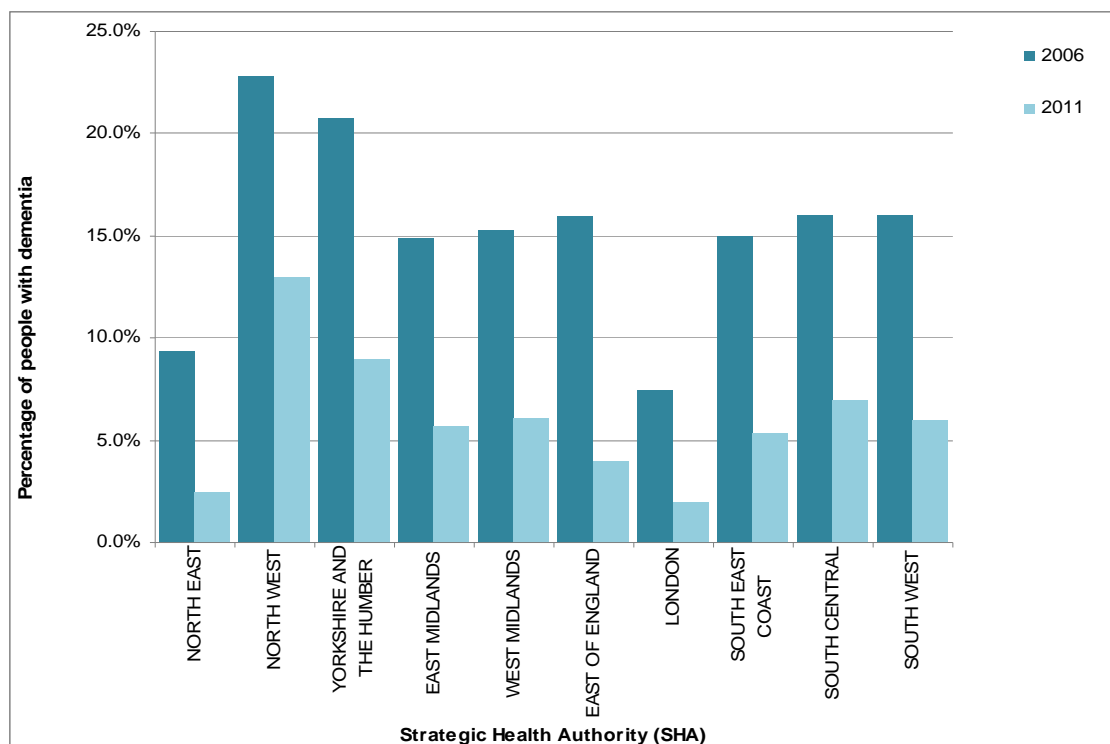
The prescriptions for antipsychotics in people newly diagnosed (diagnosed each year with a prescription of an antipsychotic within 12 months of diagnosis) with dementia have also reduced from 14.25 per cent in 2006 to 4.46 per cent in 2011 (Chart 5).

Chart 5: Percentage of people newly diagnosed with dementia within each year with a prescription of an antipsychotic drug within 12 months of diagnosis, time trend, England



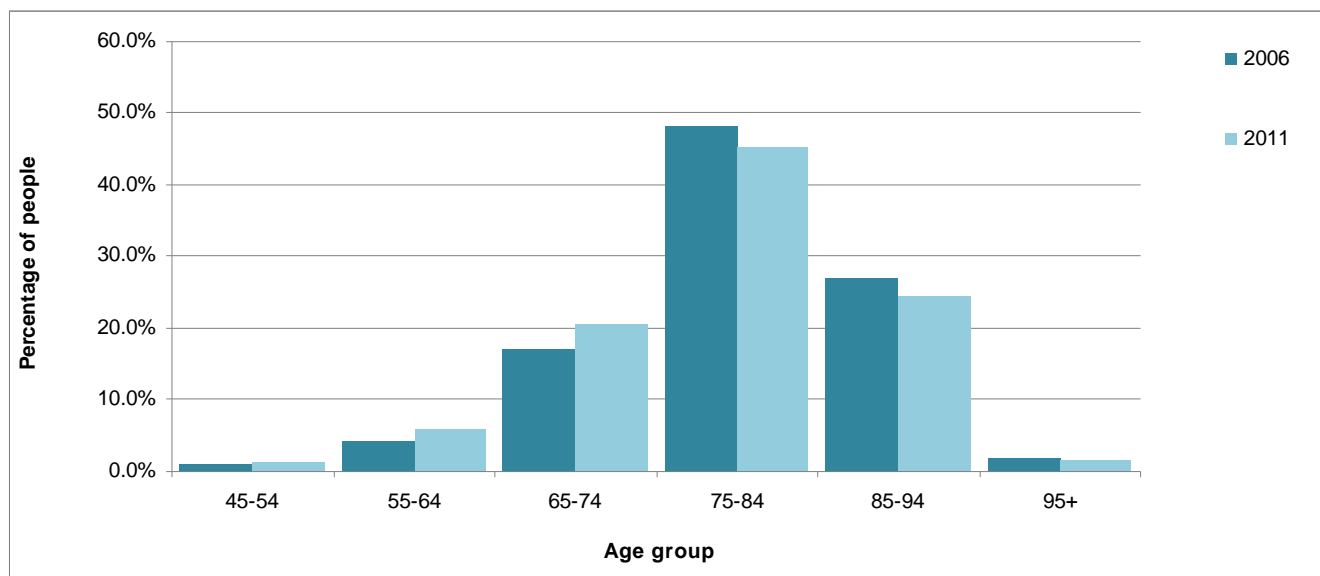
When looking at the results by SHA the percentage point decrease in the prescription of an antipsychotic ranges from 5.48 to 11.98 percentage points.

Chart 6: Percentage of people diagnosed with dementia with an antipsychotic prescription, comparison between years 2006 and 2011, SHA



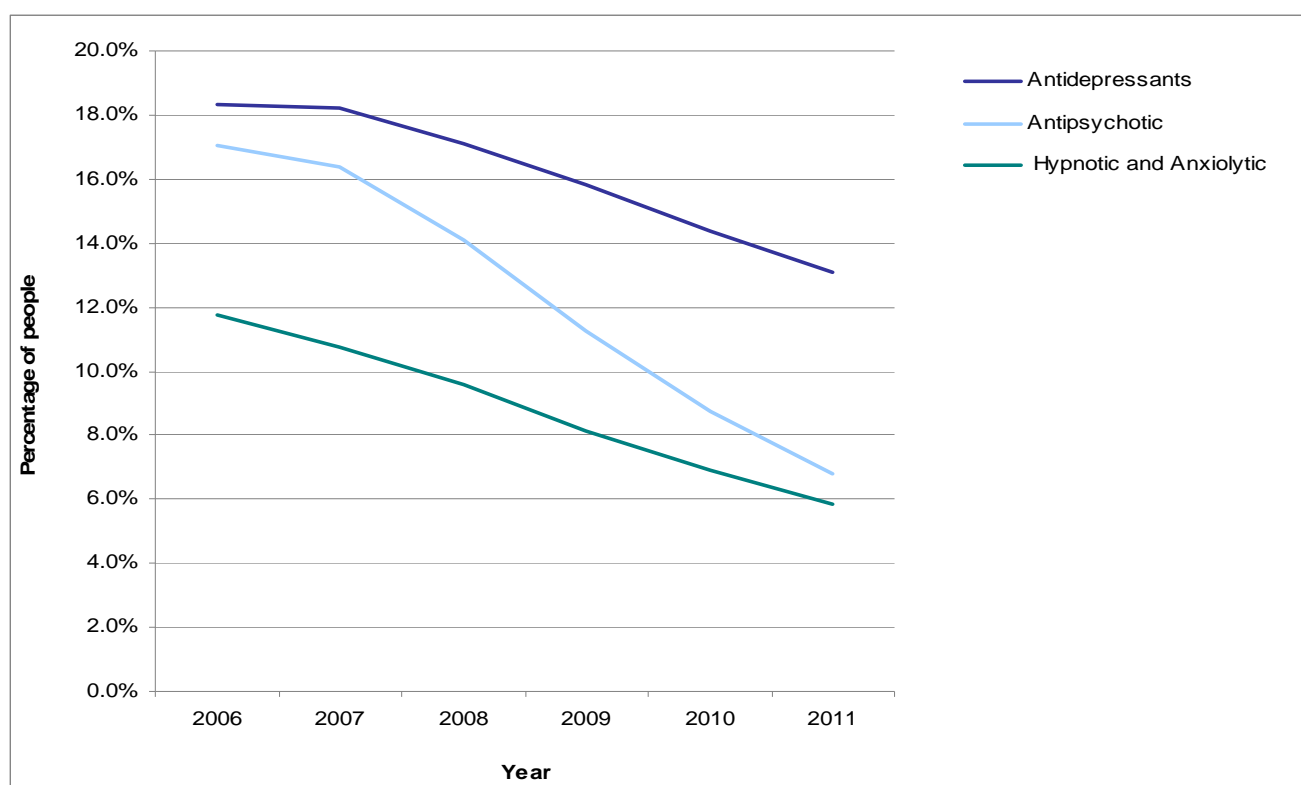
In 2011 the majority of people with dementia prescribed antipsychotic medication were 65 years of age and above with the highest proportion in the 75 to 84 year age band (45.3 per cent).

Chart 7: All people with dementia with a prescription of an antipsychotic, broken down by age group, between years 2006 to 2011, England



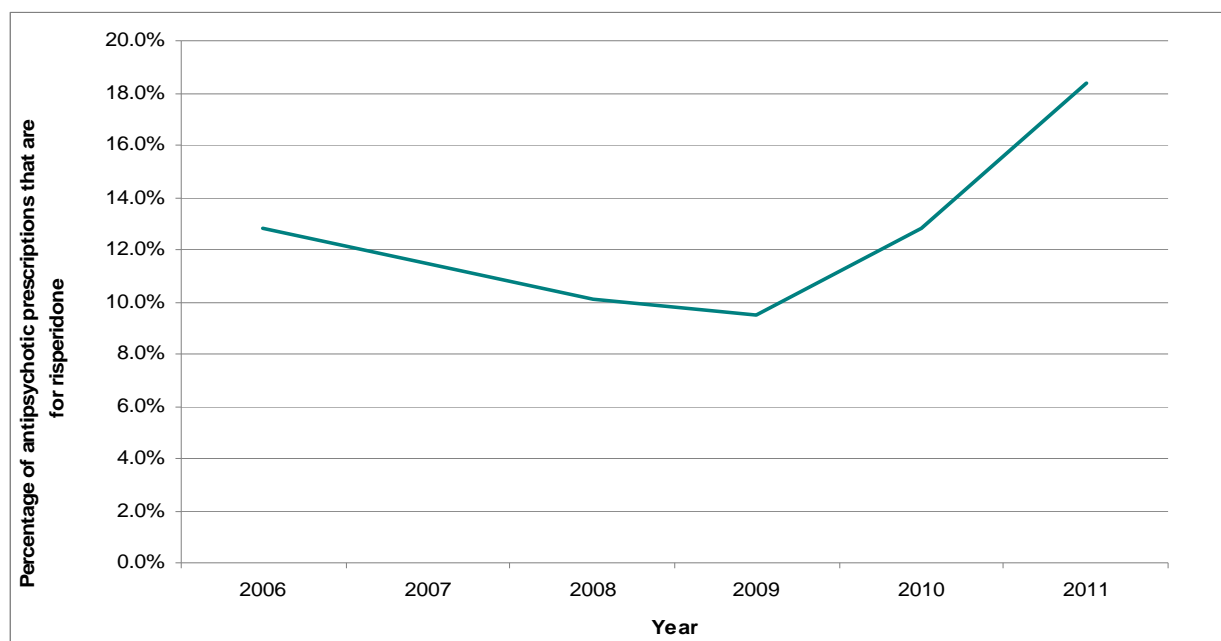
Over 17 per cent of people diagnosed with dementia in 2006 had one or more prescription of an antipsychotic medication in the same year, which had reduced to 6.8 per cent in 2011. A similar trend in the prescription of antidepressants and hypnotics can be seen (Chart 8).

Chart 8: Percentage of people diagnosed with dementia with 1 or more prescription, time trend, England



Only one antipsychotic drug, Risperidone, is licensed (granted in 2008) for the treatment of dementia-related behavioural disturbances in the UK, specifically for short term use⁷. Chart 9 shows an increase in the proportion of antipsychotic prescriptions that are for Risperidone for people diagnosed with dementia of 8.88 percentage points between 2009 and 2011.

Chart 9: Percentage of antipsychotic prescriptions that are for Risperidone, from years 2006 to 2011, England

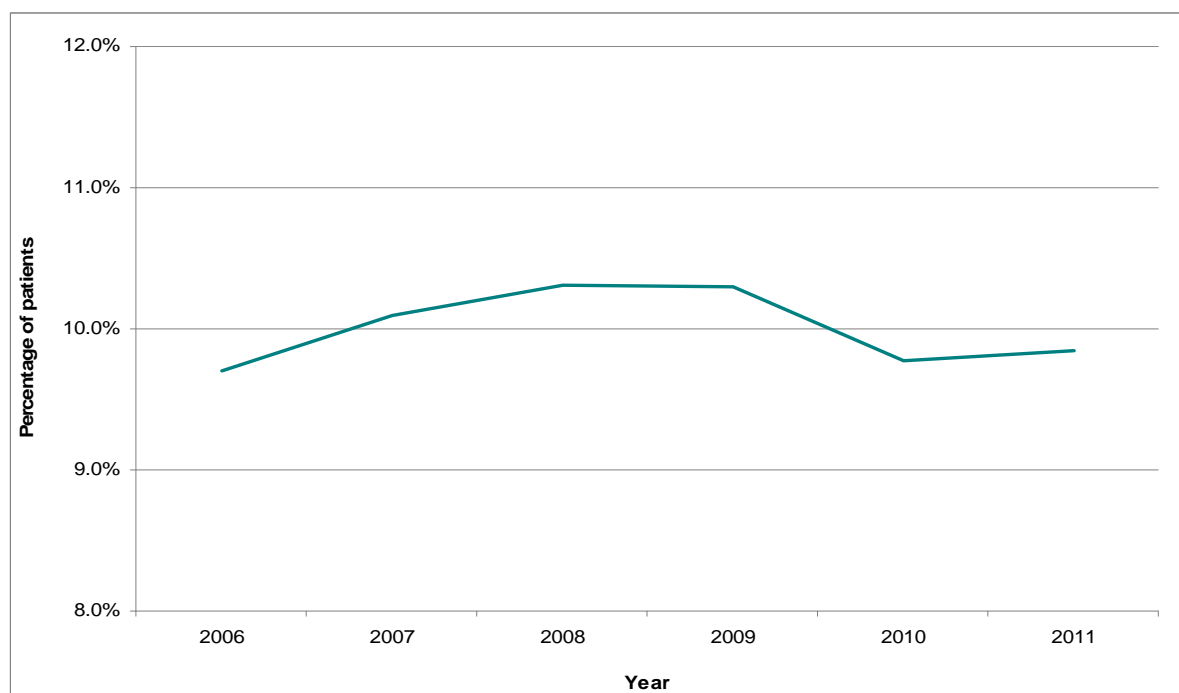


Medication for dementia

The National Institute for Health and Clinical Excellence (NICE) guidelines for dementia recommend three drugs for managing dementia, donepezil, galantamine and rivastigmine⁶. Memantine has been added (March 2011) to these options for managing moderate and severe Alzheimer's disease.

The prescriptions of donepezil, galantamine, rivastigmine and memantine show little variation across the audit period, varying between 9.7 per cent and 10.3 per cent over the six audit years.

Chart 10: Percentage of people diagnosed with dementia with a prescription of an anti-dementia drug, time trend, England



Conclusion

The National Dementia and Antipsychotic Prescribing Audit (DAP) collected patient demographic, diagnosis and prescription information for 130,340 people with a diagnosis of dementia, alive and registered on a GP practice system at the end of the audit period, from just under half (48.9 per cent) of GP practices in England. This identifies just under half of the number of people diagnosed with dementia currently recorded on the QOF register (2010/11 QOF register of 266,697).

The audit shows that a higher proportion of women are diagnosed with dementia than men with the majority of people diagnosed with dementia aged 65 years and above.

The audit also shows that over the last six years there has been an increase in the number of people diagnosed with dementia. Despite this increase, whether this is due to improved diagnosis coding and recording on practice clinical systems, the implementation of QOF or a natural increase in the number of people diagnosed with dementia, the audit suggests that the proportion of dementia sufferers receiving prescriptions of antipsychotic medication is decreasing.

A general trend is highlighted, with variation across SHAs, in the decrease of the overall prescriptions of antipsychotic medication in people with a diagnosis of dementia from 2006 to 2011. However an increase in the prescribing of risperidone between 2009 and 2011 of 8.88 percentage points is shown. In contrast, the prescribing of anti-dementia drugs (donepezil, galantamine, rivastigmine and memantine) shows little variation over the last six years.

It must be noted that the audit only provides information collected from primary care clinical systems, therefore, there is still a large proportion of people diagnosed with dementia within the community and specialist services which are not captured within this report. Organisations are encouraged to use local audit data where possible to allow local level reporting to assist in service improvements for people with dementia.

Further Information

This National Report presents the key findings from the National Dementia and Antipsychotic Prescribing Audit. This summary is supported by GP Level Analysis containing local results for participating practices in England which will be available in August 2012.

For more information or access to the GP Level Analysis please visit the audit webpage at: www.ic.nhs.uk/dementiaaudit

For further information about this report, please contact The Health and Social Care Information Centre's Contact Centre on 0845 300 6016 or email enquiries@ic.nhs.uk.

A patient and carer information leaflet and poster has also been developed to provide clear information to patients and carers about the audit and the use of patient data. Copies of the leaflet and poster can be downloaded from the audit website at www.ic.nhs.uk/dementiaaudit.

If you would like more information on antipsychotic medication for people with dementia please visit the Alzheimer's Society website: www.alzheimers.org.uk/antipsychotics

To support commissioners in their challenge to improve services for people with dementia the DoH have developed the Dementia Commissioning Pack which provides commissioners with a range of service specifications, tools and templates to help deliver these changes. It sets a standard of what good, integrated dementia care should look like for commissioners, providers, people with dementia and carers alike.

For further information on the Dementia Commissioning Pack please visit the [DoH website](#).

References

1. Department of Health. Professor Sube Banerjee: The use of antipsychotic medication for people with dementia: Time for action. November 2009
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_108303
2. Alzheimer's Society. *Dementia UK: The full report*. 2007
http://alzheimers.org.uk/site/scripts/download_info.php?fileID=2
3. All Party Parliamentary Group on Dementia. Always a last resort: Inquiry into the prescription of antipsychotic drugs to people with dementia living in care homes. 2008
http://alzheimers.org.uk/site/scripts/download_info.php?fileID=322
4. Department of Health. National Dementia Strategy. *Living well with dementia: a National Dementia Strategy*. February 2009
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_094058
5. Health and Social Care Information Centre. Quality and Outcomes Framework. Disease prevalence Quality and Outcomes Framework (QOF) for April 2010 - March 2011, England.
<http://www.ic.nhs.uk/statistics-and-data-collections/supporting-information/audits-and-performance/the-quality-and-outcomes-framework/qof-2010-11/qof-2010-11-data-tables/qof-prevalence-data-tables-2010-11>
6. National Institute for Health and Clinical Excellence. NICE clinical guideline 42. *Dementia: Supporting people with dementia and their carers in health and social care*. November 2006.
<http://www.nice.org.uk/CG42>
7. Medicines and Healthcare Products Regulatory Agency (MHRA): Antipsychotic drugs
<http://www.mhra.gov.uk/Safetyinformation/Generalsafetyinformationandadvice/Product-specificinformationandadvice-A-F/Antipsychoticdrugs/index.htm>

Appendix 1 – Data items

Demographics table

Field Number	Field Name	Data Item		Criteria
1	NHS Number	Unique patient identifier		Unconditional
2	Date of Birth	Date patient was born		< Diagnosis Date
3	Sex	Gender of patient		Chosen record
4	Patient Postcode	Patients usual address		Chosen record
5	Practice Code	National Code		
6	Practice Registration Date	Date the patient was registered on the GP practice register		Latest
7	Registration Status	Status of patients record (Currently registered, left or died)		
8	Diagnosis code (Earliest)	READ codes V2	CTV3 code	Earliest
		Eu02.% E00..% Eu01.% E02y1 E012.% Eu00.% E041. Eu041 F110. – F112. F116. (Code for Dementia)	X002w% Xa1GB% XE1Z6 (excluding X003E%)	
9	Diagnosis Date (Earliest)	Earliest date the patient was diagnosed with Dementia		Chosen record
10	Diagnosis code (Latest)	READ codes V2	CTV3 code	Latest
		Eu02.% E00..% Eu01.% E02y1 E012.% Eu00.% E041. Eu041 F110. – F112. F116. (Code for Dementia)	X002w% Xa1GB% XE1Z6 (excluding X003E%)	
11	Diagnosis Date (Latest)	Latest date the patient was diagnosed with Dementia		Chosen record

Prescription table

Field number	Field name	Data item		Criteria		
1	NHS Number	Unique patient identifier		Unconditional		
2	Practice Code	National Code				
3	Prescribed drug	READ codes V2	CTV3 code			
		dy1.. da9.. d18.. dy3.. daC.. d15.. dB1.. da4.. d16.. dy2.. da3.. d17.. d71.. da6.. d1a.. d73.. da5.. d1g.. d75.. daD.. d1f.. d76.. gde.. d1d.. d77.. da1.. d11.. d79.. d45.. d12.. d7c.. daB.. c81.. d7f.. daA.. dC1.. d7b.. da2.. d1h.. d7e.. da7.. d41.. d21.. d4p.. d4r.. d4t.. d4v.. d42.. d41.. d51.. d45.. d52.. d46.. d53.. da1.. d47.. d55.. d48.. d4w.. d4a.. d4b.. d4c.. d4e.. d4s.. d4f.. d4h.. d4u.. d4j.. d57.. d4n.. d4g..				
		(Code for Antipsychotic drugs and alternatives)				
		4	Prescribed Drug Start Date		Date the drug was prescribed	>= diagnosis date
		5	Prescribed Drug End Date		Date the drug prescription ended	

Appendix 2 – Diagnosis and drug codes

Diagnosis codes

READ code	Description
Eu02.%	[X]Dementia in disease EC
E00..%	Senile/presenile organic psych
Eu01.%	[X]Vascular dementia
E02y1	Drug-induced dementia
E012.%	[X]Subcortical vascular dement
Eu00.%	[X]Dementia in Alzheimer's
E041.	Dementia in conditions EC
Eu041	[X]Delirium superimp dementia
F110.	Alzheimer's disease
F111.	Pick's disease
F112.	Senile degeneration of brain
F116.	Lewy body disease

Drug codes

BNF Category	BNF Sub Category	Drug name	READ Code V2
Drugs for Dementia		Donepezil Hydrochloride	dy1..
		Galantamine	dy3..
		Memantine Hydrochloride	dB1..
		Rivastigmine	dy2..
Antidepressants	4.3.1 Tricyclic antidepressants	Amitriptyline Hydrochloride	d71..
		Clomipramine Hydrochloride	d73..
		Dosulepin Hydrochloride	d75..
		Doxepin	d76..
		Imipramine Hydrochloride	d77..
		Lofepamine	d79..
		Nortriptyline	d7c..
		Trimipramine	d7f..
	4.3.1 Tricyclic related antidepressants	Mianserin Hydrochloride	d7b..
		Trazodone Hydrochloride	d7e..
	4.3.3 Selective serotonin re-uptake inhibitors	Citalopram	da9..
		Escitalopram	daC..
		Fluoxetine	da4..
		Fluvoxamine Maleate	da3..
		Paroxetine	da6..
	4.3.4 Other antidepressant drugs	Sertraline	da5..
		Agomelatine	daD..
		Duloxetine	gde..
		Flupentixol	da1.. d45..
		Mirtazapine	daB..
		Reboxetine	daA..
		Tryptophan	da2..
		Venlafaxine	da7..
Hypnotics and anxiolytics	4.1.1 Hypnotics	Nitrazepam	d18..
		Flurazepam	d15..
		Loprazolam	d16..
		Lormetazepam	d17..
		Temazepam	d1a..
		Zaleplon	d1g..
		Zolpidem Tartrate	d1f..
		Zopiclone	d1d..
		Chloral Hydrate	d11..
		Clomethiazole	d12..
		Promethazine Hydrochloride	c81..
		Sodium Oxybate	dC1..
		Melatonin	d1h..
	4.1.2 Anxiolytics	Diazepam	d21..

BNF Category	BNF Sub Category	Drug name	READ Code V2
Drugs used in psychoses and related disorders	4.2.1 Antipsychotic drugs	Chlorpromazine	d41..
		Risperidone	d4p..
		Olanzapine	d4r..
		Amisulpride	d4t..
		Aripiprazole	d4v..
		Benperidol	d42..
		Clozapine	d4l..
		Flupentixol	d51..
			d45..
			d52..
			d46..
			d53..
			da1..
		Haloperidol	D47..
			d55..
		Levomepromazine	d48..
		Paliperidone	d4w..
		Pericyazine	d4a..
		Perphenazine	d4b..
		Pimozide	d4c..
		Promazine	d4e..
		Quetiapine	d4s..
		Sulpiride	d4f..
		Trifluoperazine	d4h..
		Zotepine	d4u..
		Zuclopenthixol	d4j..
			d57..
			d4n..
		Sertindole	d4q..

Appendix 3 - Participation by SHA and PCT

Strategic Health Authority (SHA)	Primary Care Trust (PCT)	Number of participating practices	Percentage of participating practices
NORTH EAST		177	43.1%
	COUNTY DURHAM PCT	29	38.2%
	DARLINGTON PCT	3	25.0%
	GATESHEAD PCT	25	71.4%
	HARTLEPOOL PCT	2	12.5%
	MIDDLESBROUGH PCT	3	12.0%
	NEWCASTLE PCT	18	50.0%
	NORTH TYNESIDE PCT	16	55.2%
	NORTHUMBERLAND CARE TRUST	29	61.7%
	REDCAR AND CLEVELAND PCT	7	29.2%
	SOUTH TYNESIDE PCT	22	75.9%
	STOCKTON-ON-TEES TEACHING PCT	4	15.4%
	SUNDERLAND TEACHING PCT	19	33.9%
NORTH WEST		772	58.7%
	ASHTON, LEIGH AND WIGAN PCT	62	95.4%
	BLACKBURN WITH DARWEN TEACHING CARE TRUST PLUS	17	56.7%
	BLACKPOOL PCT	16	66.7%
	BOLTON PCT	51	91.1%
	BURY PCT	31	88.6%
	CENTRAL AND EASTERN CHESHIRE PCT	37	71.2%
	CENTRAL LANCASHIRE PCT	82	92.1%
	CUMBRIA TEACHING PCT	55	59.8%
	EAST LANCASHIRE TEACHING PCT	40	59.7%
	HALTON AND ST HELENS PCT	14	25.5%
	HEYWOOD, MIDDLETON AND ROCHDALE PCT	22	53.7%
	KNOWSLEY PCT	8	24.2%
	LIVERPOOL PCT	36	37.1%
	MANCHESTER PCT	26	24.5%
	NORTH LANCASHIRE TEACHING PCT	21	53.8%
	OLDHAM PCT	46	92.0%
	SALFORD PCT	49	87.5%
	SEFTON PCT	28	50.0%
	STOCKPORT PCT	9	16.7%
	TAMESIDE AND GLOSSOP PCT	30	68.2%
	TRAFFORD PCT	23	52.3%
	WARRINGTON PCT	5	16.7%
	WESTERN CHESHIRE PCT	34	87.2%
	WIRRAL PCT	30	48.4%
YORKSHIRE AND THE HUMBER		266	31.0%
	BARNSELY PCT	29	63.0%
	BRADFORD AND AIREDALE TEACHING PCT	2	2.4%
	CALDERDALE PCT	3	10.3%
	DONCASTER PCT	6	13.3%
	EAST RIDING OF YORKSHIRE PCT	16	41.0%
	HULL TEACHING PCT	14	23.3%
	KIRKLEES PCT	11	15.1%
	LEEDS PCT	25	21.6%
	NORTH EAST LINCOLNSHIRE CARE TRUST PLUS	20	58.8%
	NORTH LINCOLNSHIRE PCT	6	27.3%
	NORTH YORKSHIRE AND YORK PCT	37	37.0%
	ROTHERHAM PCT	26	65.0%
	SHEFFIELD PCT	60	63.2%
	SOLIHULL CARE TRUST	9	26.5%
	WAKEFIELD DISTRICT PCT	2	4.8%

Strategic Health Authority (SHA)	Primary Care Trust (PCT)	Number of participating practices	Percentage of participating practices
EAST MIDLANDS		198	31.1%
	BASSETLAW PCT	2	16.7%
	DERBY CITY PCT	4	12.5%
	DERBYSHIRE COUNTY PCT	25	25.5%
	LEICESTER CITY PCT	5	7.7%
	LEICESTERSHIRE COUNTY AND RUTLAND PCT	30	35.3%
	LINCOLNSHIRE TEACHING PCT	26	25.5%
	NORTHAMPTONSHIRE TEACHING PCT	61	74.4%
	NOTTINGHAM CITY PCT	26	41.9%
	NOTTINGHAMSHIRE COUNTY TEACHING PCT	19	19.2%
WEST MIDLANDS		467	48.7%
	BIRMINGHAM EAST AND NORTH PCT	28	35.9%
	COVENTRY TEACHING PCT	25	36.8%
	DUDLEY PCT	22	40.0%
	HEART OF BIRMINGHAM TEACHING PCT	31	39.7%
	HEREFORDSHIRE PCT	15	62.5%
	NORTH STAFFORDSHIRE PCT	29	80.6%
	SANDWELL PCT	13	19.1%
	SHROPSHIRE COUNTY PCT	9	20.0%
	SOUTH BIRMINGHAM PCT	37	59.7%
	SOUTH STAFFORDSHIRE PCT	40	41.7%
	STOKE ON TRENT PCT	30	51.7%
	TELFORD AND WREKIN PCT	3	13.6%
	WALSALL TEACHING PCT	50	74.6%
	WARWICKSHIRE PCT	51	67.1%
	WOLVERHAMPTON CITY PCT	48	85.7%
	WORCESTERSHIRE PCT	36	52.2%
EAST OF ENGLAND		293	36.6%
	BEDFORDSHIRE PCT	13	22.4%
	CAMBRIDGESHIRE PCT	46	59.7%
	GREAT YARMOUTH AND WAVENEY PCT	21	77.8%
	HERTFORDSHIRE PCT	61	45.9%
	LUTON PCT	9	28.1%
	MID ESSEX PCT	16	31.4%
	NORFOLK PCT	25	27.2%
	NORTH EAST ESSEX PCT	17	37.8%
	PETERBOROUGH PCT	21	75.0%
	SOUTH EAST ESSEX PCT	5	7.2%
	SOUTH WEST ESSEX PCT	4	4.9%
	SUFFOLK PCT	37	54.4%
	WEST ESSEX PCT	18	46.2%
LONDON		706	45.5%
	BARKING AND DAGENHAM PCT	9	20.5%
	BARNET PCT	25	34.7%
	BRENT TEACHING PCT	45	62.5%
	BROMLEY PCT	39	75.0%
	CAMDEN PCT	27	65.9%
	CITY AND HACKNEY TEACHING PCT	33	70.2%
	CROYDON PCT	39	61.9%
	EALING PCT	40	48.8%
	ENFIELD PCT	13	20.0%
	GREENWICH TEACHING PCT	3	6.3%
	HAMMERSMITH AND FULHAM PCT	24	75.0%
	HARINGEY TEACHING PCT	26	43.3%
	HARROW PCT	22	56.4%
	HAVERING PCT	9	17.3%
	HILLINGDON PCT	41	83.7%

Strategic Health Authority (SHA)	Primary Care Trust (PCT)	Number of participating practices	Percentage of participating practices
	HOUNSLOW PCT	4	7.0%
	ISLINGTON PCT	28	66.7%
	KENSINGTON AND CHELSEA PCT	34	75.6%
	KINGSTON PCT	4	14.3%
	LAMBETH PCT	25	48.1%
	LEWISHAM PCT	17	34.7%
	NEWHAM PCT	39	60.9%
	NHS BEXLEY	1	3.3%
	REDBRIDGE PCT	20	40.8%
	RICHMOND AND TWICKENHAM PCT	7	21.9%
	SOUTHWARK PCT	13	27.1%
	SUTTON AND MERTON PCT	33	60.0%
	TOWER HAMLETS PCT	30	83.3%
	WALTHAM FOREST PCT	12	25.0%
	WANDSWORTH PCT	19	39.6%
	WESTMINSTER PCT	25	48.1%
SOUTH EAST COAST		283	44.0%
	BRIGHTON AND HOVE CITY PCT	16	32.7%
	EAST SUSSEX DOWNS AND WEALD PCT	12	26.1%
	EASTERN AND COASTAL KENT PCT	59	51.8%
	HASTINGS AND ROTHER PCT	16	47.1%
	MEDWAY PCT	11	17.5%
	SURREY PCT	77	56.6%
	WEST KENT PCT	49	46.2%
	WEST SUSSEX PCT	43	45.3%
SOUTH CENTRAL		291	57.1%
	BERKSHIRE EAST PCT	36	67.9%
	BERKSHIRE WEST PCT	34	61.8%
	BUCKINGHAMSHIRE PCT	28	46.7%
	HAMPSHIRE PCT	73	49.7%
	ISLE OF WIGHT NHS PCT	6	33.3%
	MILTON KEYNES PCT	13	46.4%
	OXFORDSHIRE PCT	64	77.1%
	PORTSMOUTH CITY TEACHING PCT	17	58.6%
	SOUTHAMPTON CITY PCT	20	54.1%
SOUTH WEST		397	53.6%
	BATH AND NORTH EAST SOMERSET PCT	13	46.4%
	BOURNEMOUTH AND POOLE TEACHING PCT	17	37.8%
	BRISTOL PCT	44	77.2%
	CORNWALL AND ISLES OF SCILLY PCT	24	33.8%
	DEVON PCT	59	55.7%
	DORSET PCT	37	61.7%
	GLOUCESTERSHIRE PCT	51	59.3%
	NORTH SOMERSET PCT	17	65.4%
	PLYMOUTH TEACHING PCT	35	81.4%
	SOMERSET PCT	48	63.2%
	SOUTH GLOUCESTERSHIRE PCT	20	71.4%
	SWINDON PCT	7	25.0%
	TORBAY CARE TRUST	10	47.6%
	WILTSHIRE PCT	15	23.1%
Total number of participating practices		3850	45.7%

Appendix 4 - List of anonymised GP prevalence values (above 2.01 per cent)

GP Practice	Prevalence of Dementia
1	2.01%
2	2.01%
3	2.03%
4	2.08%
5	2.25%
6	2.27%
7	2.29%
8	2.30%
9	2.39%
10	2.57%
11	2.80%
12	2.88%
13	2.99%
14	3.11%
15	3.28%
16	3.39%
17	4.00%
18	6.30%
19	75.47%

The Health and Social Care Information Centre (HSCIC) is working to make information more relevant and accessible to the public, regulators, health and social care professionals and policy makers, leading to improvements in knowledge and efficiency.

The HSCIC is a special NHS health authority that collects, analyses and distributes data to reduce the burden on frontline staff, releasing more time for direct care.

This work remains the sole and exclusive property of The HSCIC and may only be reproduced where there is explicit reference to the ownership of The HSCIC. This work may be re-used by NHS and government organisations without permission. Commercial re-use of this work must be granted by The HSCIC.

Copyright © 2012.

Health and Social Care Information Centre, National Dementia and Antipsychotic Prescribing Audit 2012. All rights reserved.

Need to know more?

T. 0845 300 6016
E. enquiries@ic.nhs.uk
www.ic.nhs.uk

Health and Social Care Information Centre
1 Trevelyan Square
Boar Lane
Leeds
LS1 6AE