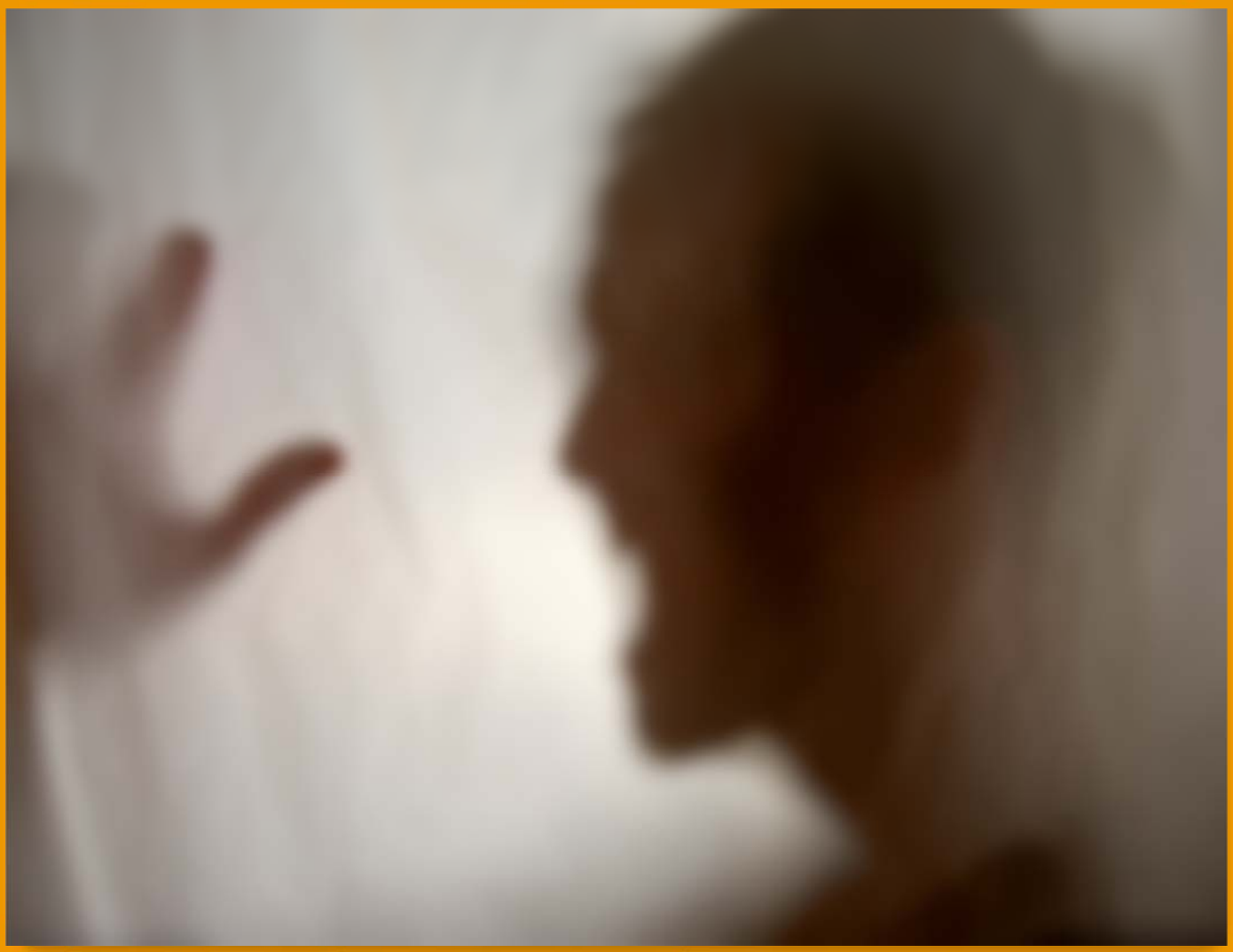
POMH-UK
PRESCRIBING OBSERVATORY FOR MENTAL HEALTH-UK

RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS



Prescribing antipsychotic medication for people with dementia

POMH-UK Quality Improvement Programme. Topic 11c: supplementary audit
Prepared by the Prescribing Observatory for Mental Health UK for:

East London NHS Foundation Trust

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Data control statement for POMH-UK quality improvement programme 11c: Prescribing antipsychotic medication for people with dementia

Data ownership and control

In line with the original memorandum of understanding between POMH-UK and member healthcare organisations (predominantly mental health NHS Trusts), the following statement outlines the agreement regarding ownership of the audit data in this quality improvement programme.

Control of the local data submitted to POMH-UK is retained by the healthcare organisation that submitted them. These data have been made available to POMH-UK in a way that is anonymous, with the exception of the identity of the source organisation. The aggregate data from all participating organisations have been analysed by POMH-UK, to produce this customised report. This report summarises the national results, and local results at organisation and clinical team level, benchmarked anonymously against the other organisations taking part.

Data Sharing

There is a publication strategy allowing POMH-UK to publish the anonymous aggregated data on its web site and/or in appropriate scientific journals. Any organisations requesting these audit data will be referred to the POMH-UK reports appearing in the public domain or provided with a list of member healthcare organisations and asked to approach them individually. It is each organisation's decision whether, and with whom, to share their data.

Data for Quality Improvement

Given that the data are collected for the purpose of quality improvement they are not necessarily representative of performance across the Trust. The use of data for ranking or judgement at an organisational level may therefore not be appropriate. Participation in POMH QIPs can be considered to indicate engagement in quality improvement. Relative and absolute performance against the practice standards should always be considered with the above caveats in mind.

Reflection by clinical teams on their benchmarked performance is perhaps the most potent element of POMH-UK programmes. In addition to performance against the clinical standards, the audit data include demographic, diagnostic and other relevant clinical information that provide a context for interpretation and understanding of practice, which can inform local strategies and systems to achieve improvement. The data collected are designed to be suitable for this clinical purpose, and not for objective ranking of healthcare organisations, for which they are untested and would not necessarily be appropriate.

How to read this report

The term 'Trust' has been used throughout this report to refer to all healthcare organisations that participated.

Executive summary

An executive summary of this report starts on page 4. This provides an overview of national performance against the practice standards. It also provides a summary of the key findings relating to national prescribing practice (page 5) that may usefully prompt local reflection and discussion.

Practice standards

Page 15 of this report defines the standards against which prescribing practice was measured in this quality improvement programme (QIP). These practice standards were derived from evidence-based guidelines and agreed by an expert advisory group.

Method

Page 16 provides an outline of the methodology of the QIP. This includes the nature of the clinical audit data collected and how these were checked.

National level results

This section begins on page 18. The demographic and clinical characteristics of the total patient audit sample are described. The findings of the data analyses are presented in graphs and tables, primarily to show the extent to which clinical prescribing across the participating services is meeting the practice standards.

Trust level section

The analyses presented in this section, starting on page 37, allow Trusts to compare the quality of their local practice, in absolute terms, with the practice standards and, in relative terms, with that of the other, anonymous, participating Trusts.

Each of the benchmarked graphs in this section provides evidence of performance on a particular aspect of prescribing practice across all Trusts individually and the total national sample (TNS). In each figure, the Trust(s) on the left-hand side is closest to meeting the relevant standard while the Trusts on the right are further away from meeting the standard.

Team level results

This section starts on page 48. The figures allow individual clinical teams in each Trust to compare their practice with each other and against the national data. For each figure, the team(s) on the left-hand side is closest to meeting the standard. The bar on the far right shows the total national sample (TNS) and the bar next to this shows the overall Trust performance.

Executive summary

Background

The Prescribing Observatory for Mental Health (POMH-UK) runs audit-based Quality Improvement Programmes (QIPs) that focus on discrete areas of prescribing practice. Membership of POMH-UK is open to all NHS, private and not-for-profit providers of mental health services (NHS Trusts/healthcare organisations) in the UK. This report focuses on the first supplementary audit for QIP 11: Prescribing antipsychotic medication for people with dementia. The baseline audit was conducted in 2011 (n=10199) and there was a re-audit in 2012 (n=12790).

Practice standards

The standards are derived from the NICE-SCIE Guideline on supporting people with dementia and their carers in health and social care – CG042 (2006). Standards 1, 3, 4 and 5 were developed from CG042 point 1.7.2.4; standard 2 was developed from CG042 point 1.7.1.1.

The audit data presented provide evidence of compliance for each Trust and the national sample with specific recommendations from this NICE guideline.

PRACTICE STANDARDS FOR AUDIT:

1. The clinical indications (target symptoms) for antipsychotic treatment should be clearly documented in the clinical records.

2. Before prescribing antipsychotic medication for behavioural and psychological symptoms in dementia (BPSD), likely factors that may generate, aggravate or improve such behaviours should be considered.

3. The potential risks and benefits of antipsychotic medication should be considered and documented by the clinical team, prior to initiation.

4. The potential risks and benefits of antipsychotic medication should be discussed with the patient and/or carer(s), prior to initiation.

5. Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of:
   a) therapeutic response
   b) possible adverse effects.

Sample

During April and May 2016, 58 specialist Mental Health Trusts or healthcare organisations (listed in Appendix B) within the UK participated in this supplementary audit of prescribing antipsychotics for people with dementia. Data were received for 10199 patients with a diagnosis of dementia under the care of 508 clinical teams. One thousand, seven hundred and ninety-four (18%) patients with dementia were prescribed one or more antipsychotics. Where antipsychotic treatment was prescribed with no comorbid psychosis present, this had been for less than three months in 420 (4%) patients, and more than three months in 1108 (11%) patients.

Key national findings

Prevalence of antipsychotic prescribing for BPSD

Focusing on the prescribing of antipsychotic medication for behavioural and psychological symptoms of dementia (BPSD), and taking into account differences between the three audit samples in the prevalence of clinical factors associated with the use of antipsychotics for BPSD, the data suggest that the prevalence of antipsychotic use decreased between 2011 and 2012 (by 23%) and this decrease was maintained in 2016 (19% down from 2011).

Clinical rationale for antipsychotic prescribing

Documentation of the clinical reasons for prescribing antipsychotic medication has been consistently good; compliance with this practice standard being over 95% at all three audits.

Agitation, aggressive behaviour and evident or assumed psychotic symptoms remain the most common targets for antipsychotic treatment. The demographic and clinical predictors for being prescribed antipsychotic treatment have also remained the same.

As neither the demographic or clinical variables associated with being prescribed an antipsychotic, nor the clinical rationale for such prescriptions have changed, the explanation for the reduction in the prevalence of use must lie elsewhere. One potential explanation may be that the threshold of severity of behavioural disturbance that prompts prescribing may have increased; however, this is speculative.

While the prevalence of use of cholinesterase inhibitors has remained relatively constant since 2011, the use of memantine has increased markedly; being higher in this supplementary audit in the subsample currently prescribed an antipsychotic. One possible explanation for this is that there may be an overlap in the target symptoms/behaviours for these medicines.

Initiating antipsychotic medication

In 2016, in the sample of patients who were prescribed an antipsychotic, underlying causes of BPSD were considered in nearly three-quarters of cases and a non-pharmacological intervention had been tried prior to starting antipsychotic medication in two-thirds of cases. This suggests that most current practice is consistent with the recommendations relating to the use of antipsychotics in the NICE dementia guideline.

Since the baseline audit in 2011, there has been a modest increase in the proportion of patients for whom the risks and benefits of antipsychotic medication were considered and documented before treatment was initiated. However, by 2016 there was still no documentation that the risks and benefits had been considered in just under half of cases in the sample. There was no documented discussion of these risks and benefits with the patient and/or carer in two-fifths of cases.

Continuing antipsychotic prescribing

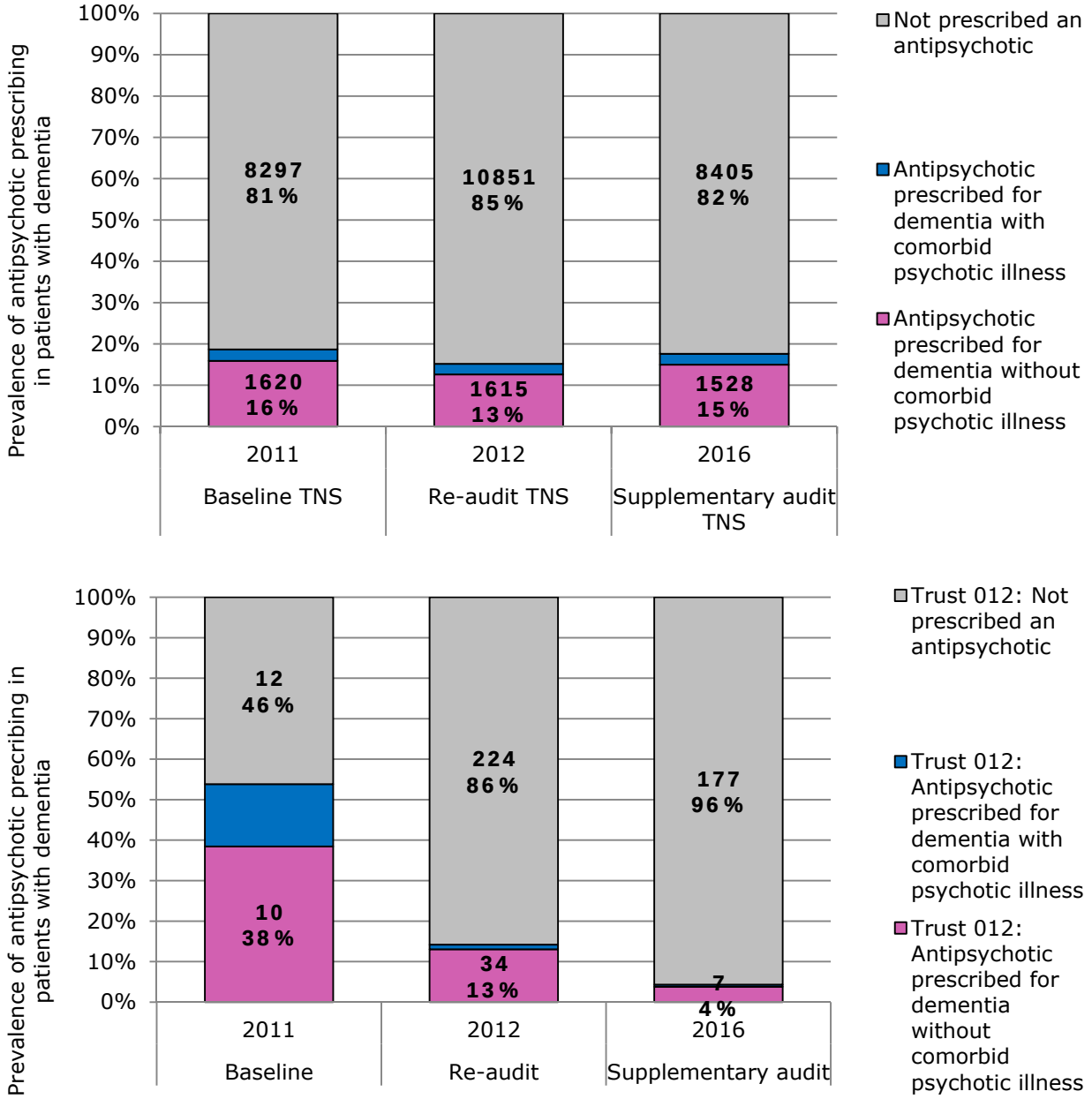
In 2016, over three-quarters of patients had a medication review in the previous six months and the patient and/or carer had been involved in almost all cases.

There has been a steady increase over time in the proportion of patients on continuing antipsychotic medication for whom potential adverse effects were considered at medication review. However, by 2016 there was still no documented evidence that this was the case in over two-fifths of patients. Review of the continuing risks and benefits of antipsychotic treatment is a clear target for quality improvement.

Key Trust findings

The national data in Figure 1 suggest that antipsychotic prescribing for BPSD (i.e. for those patients with no comorbid psychosis) reduced between 2011 and 2012 but rose again by 2016. However, the likelihood of a patient being prescribed an antipsychotic is associated with a number of clinical variables (see Table 3). When statistical analyses took account of the differences in these predictive demographic and clinical characteristics in the three audit samples, it was found that the chances of being prescribed an antipsychotic for BPSD fell by 23% between 2011 and 2012 and by 19% between 2011 and 2016.

Figure 1. Prevalence of antipsychotic prescribing in patients with dementia at baseline, re-audit and supplementary audit in the total national sample (n=10199) (top figure) and your Trust (bottom figure, n=185) in each audit.

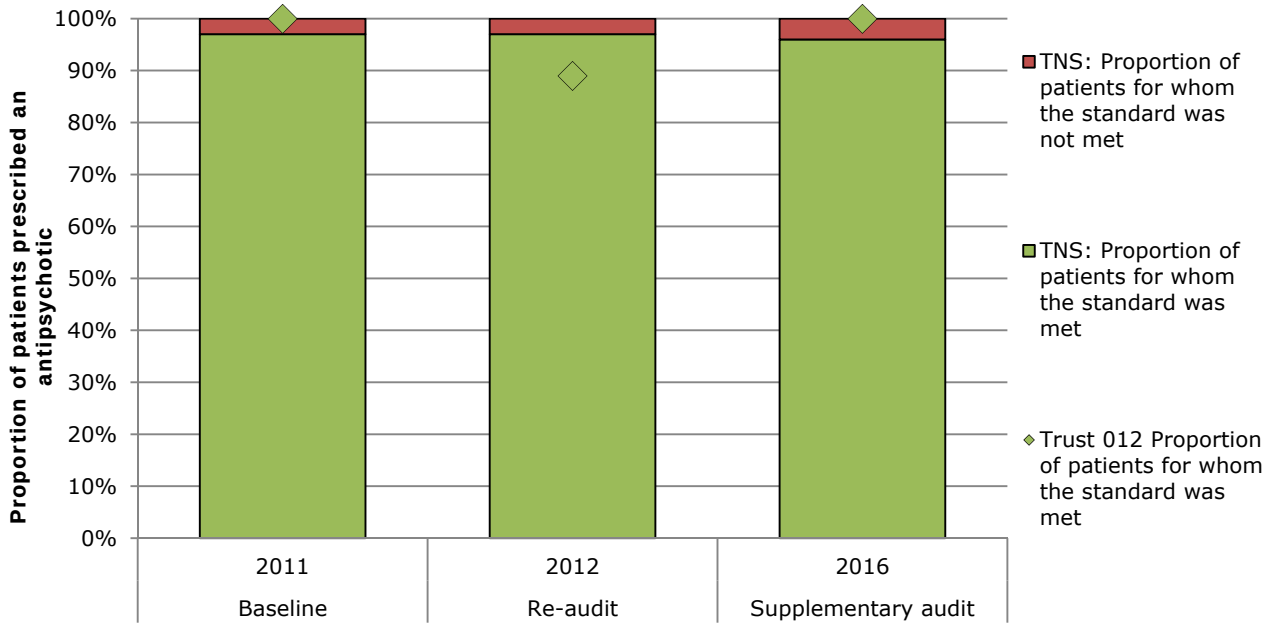


When considering the prevalence of antipsychotic prescribing for people with dementia in your Trust, factors such as patient age, clinical setting, type of dementia, dementia severity and the proportion of patients with comorbid psychosis should be taken into account. You should also consider the size of your sample and how it was selected.

Subsample of patients prescribed antipsychotic medication

Performance against practice standard 1 is shown in figure 2 below. Documentation of clinical indications (target symptoms) for antipsychotic prescription has been consistently very good.

Figure 2. Proportion of patients with dementia prescribed an antipsychotic for whom the clinical indications (target symptoms) for antipsychotic treatment were clearly documented in the clinical records in each audit, in the total national samples (TNS) and your Trust (n=8)

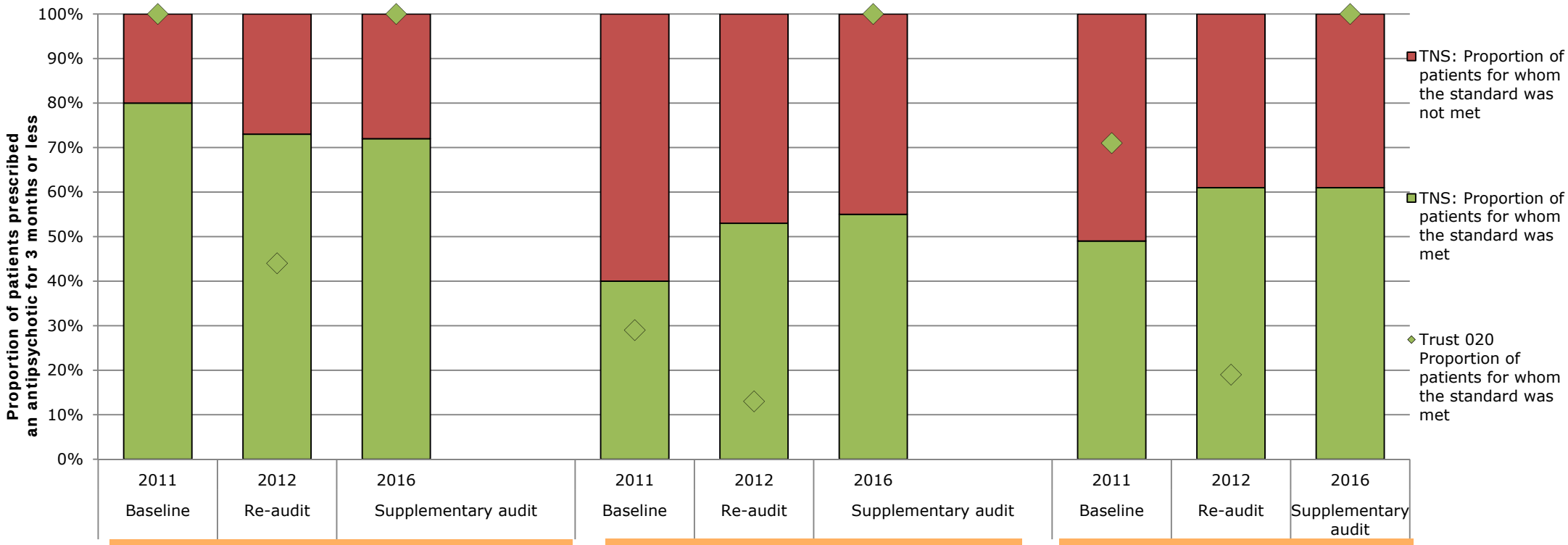


Practice standard 1
The clinical indications (target symptoms) for antipsychotic treatment should be clearly documented in the clinical records.

Pre-treatment screening in patients recently initiated on antipsychotic medication

Performance against practice standards 2, 3 and 4 was tested in the subset of patients who had been prescribed antipsychotic medication for three months or less (n=420, 2016 supplementary audit).

Figure 3. Proportion of patients with dementia prescribed an antipsychotic for whom the practice standards regarding pre-treatment screening prior to antipsychotic initiation were met in each audit, in the total national samples (TNS) and your Trust (n=4)



Practice standard 2
Before prescribing antipsychotic medication for BPSD (behavioural and psychological symptoms of dementia), likely factors that may generate, aggravate or improve such behaviours should be considered.

Practice standard 3
The potential risks and benefits of antipsychotic medication should be considered and documented by the clinical team, prior to initiation.

Practice standard 4
The potential risks and benefits of antipsychotic medication should be discussed with the patient and/or carer(s), prior to initiation.

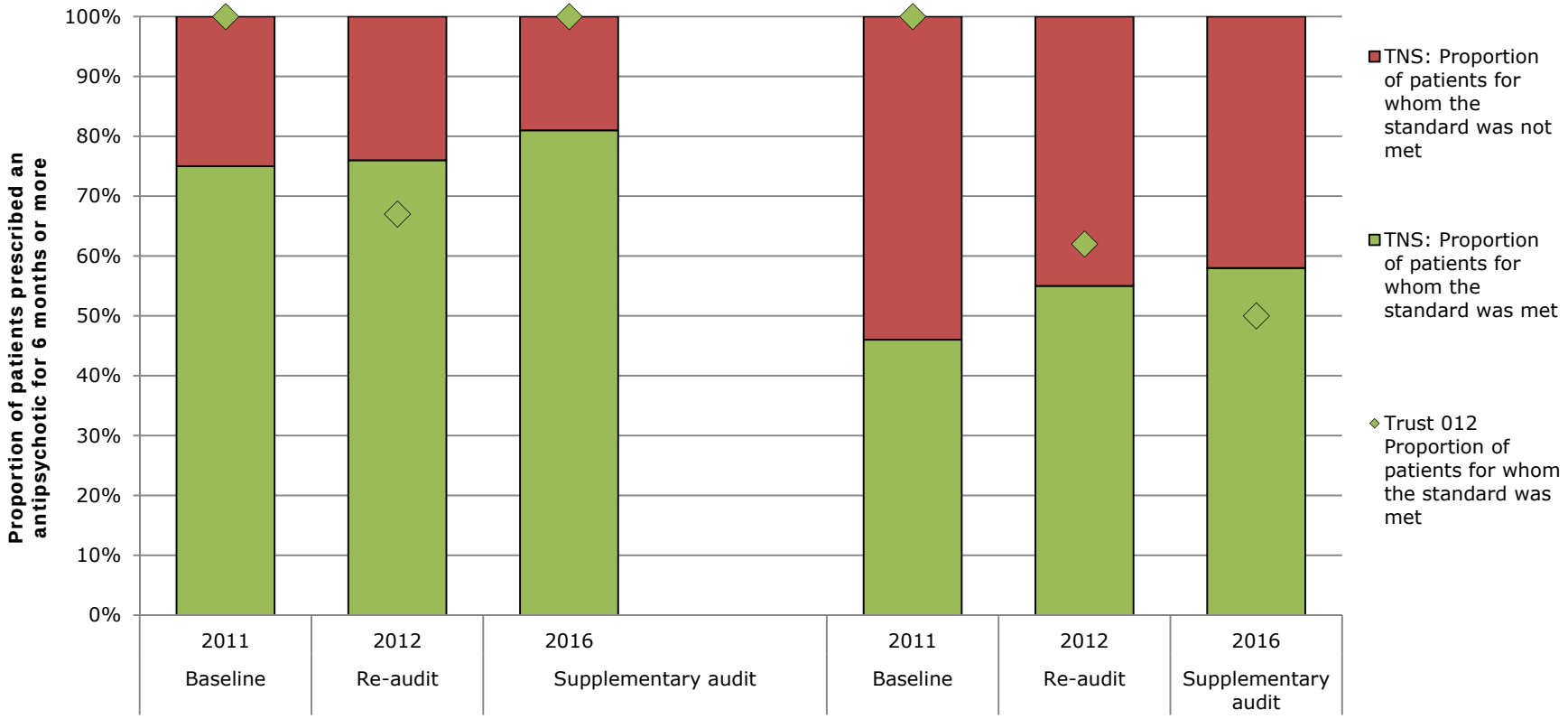
Since the baseline audit, there has been a modest increase in the proportion of patients for whom standards 3 and 4 were met.

Long-term monitoring in patients on continuing antipsychotic medication

Performance against practice standard 5 was tested in the subset of patients who had been prescribed antipsychotic medication for more than six months (n=887, 2016 supplementary audit).

A medication review is more likely to take account of therapeutic response than adverse effects and this has been a consistent finding across all three audit cycles, although there has been some modest improvement in the proportion of reviews that take account of adverse effects.

Figure 4. Proportion of patients with dementia prescribed an antipsychotic for whom the practice standards regarding continuing treatment with antipsychotic medication were met in each audit, in the total national samples (TNS) and your Trust (n=2)



Practice standard 5a
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of **therapeutic response.**

Practice standard 5b
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of **possible adverse effects.**

Table of contents

List of figures

List of tables

Introduction

POMH-UK

The Prescribing Observatory for Mental Health (POMH-UK) runs national audit-based quality improvement programmes open to all specialist mental health services in the UK. The aim is to help mental health services improve prescribing practice in discrete areas ('Topics').

Those interested in learning more about the role of POMH-UK should visit the website: http://www.rcpsych.ac.uk/pomh. There are also reviews of the POMH-UK quality improvement methodology in the following publications:

Barnes TRE, Paton C. The role of the Prescribing Observatory for Mental Health (Editorial). British Journal of Psychiatry 2012; 201: 428-429

Barnes TRE, Paton C. Improving prescribing practice in psychiatry. International Review of Psychiatry 2011; 23: 328-335

This report presents the supplementary audit results for a quality improvement programme (Topic 11c) addressing prescribing antipsychotic medication for people with dementia.

Clinical background

Please refer to the baseline report (Topic 11a) for the clinical background. This can also be found in the 'member's area' of the POMH website: www.rcpsych.ac.uk/pomh/members. Log-in details can be obtained from your Trust POMH-UK lead.

Practice standards

These practice standards have been derived from relevant recommendations in the NICE-SCIE Guideline on supporting people with dementia and their carers in health and social care – CG042 (2006). Standards 1, 3, 4 and 5 were developed from CG042 point 1.7.2.4; standard 2 was developed from CG042 point 1.7.1.1.

PRACTICE STANDARDS FOR AUDIT

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5. Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of:
   a) therapeutic response
   b) possible adverse effects.

Method

The Prescribing Observatory for Mental Health (POMH-UK) invited all National Health Service (NHS) Trusts and other healthcare organisation in the United Kingdom providing specialist mental health services to participate in a quality improvement programme on the use of antipsychotics in people with dementia. All Trusts and clinical teams were self-selected in that they chose to participate. All participating Trust/healthcare organisations (hereafter referred to as 'Trusts') are listed in alphabetical order in Appendix B.

This quality improvement programme has involved a series of clinical practice audits addressing the use of antipsychotic medication in people with dementia. On each occasion, a data collection tool was sent to Trusts with directions to allow clinical teams to audit all patients on their caseload who had a diagnosis of dementia, or (if the caseload were too large to audit) to use the Trust's electronic patient record system to identify all patients with a diagnosis of dementia and take a sample of every nth patient numerically. For this supplementary audit, Trusts were instructed to collect the audit data during April 2016 and submit these data online during May 2016.

The following data were collected on each patient with dementia:

- Demographic variables (age, gender, ethnicity),
- Setting in which the patient was currently receiving care,
- Severity and subtype of dementia,
- Other psychiatric diagnoses,
- Psychiatric medication prescribed.

In addition, the following data were collected on each patient with dementia who had been prescribed one or more antipsychotic medications:

- Details of all antipsychotic medication currently prescribed and the clinical indications,
- Details of the service that held prescribing responsibility,
- Antipsychotic treatment duration.

The following data were collected on each patient with dementia who had been prescribed one or more antipsychotic medications for less than three months:

- Whether underlying causes of BPSD and non-pharmacological interventions had been considered,
- Risk/benefit analysis and patient/carer involvement in this.

The following data were collected on each patient with dementia who had been prescribed one or more antipsychotic medications for more than three months:

- Medication review,
- Side effect review,
- Patient and/or carer involvement in reviews.

As this section asked about medication reviews in the last six months, only patients who had been prescribed an antipsychotic for six months or longer were included in the analysis. Patients prescribed antipsychotics for three to six months were included in all other analyses where applicable.

A copy of the data collection tool can be found in Appendix C.

Data cleaning

Data were collected using Formic Fusion (electronic survey software) and stored and analysed using IBM SPSS Statistics.
Data were cleaned to correct instances of obvious data entry error. Details of corrections are held on file by POMH-UK; please contact pomh-uk@rcpsych.ac.uk if you wish to examine these.

All figures presented in this report are rounded to zero decimal places for simplicity. Therefore, the total percentages for some charts or graphs add up to 99% or 101%. The abbreviation 'TNS' on some charts refers to the combined data set of the 'total national sample'.

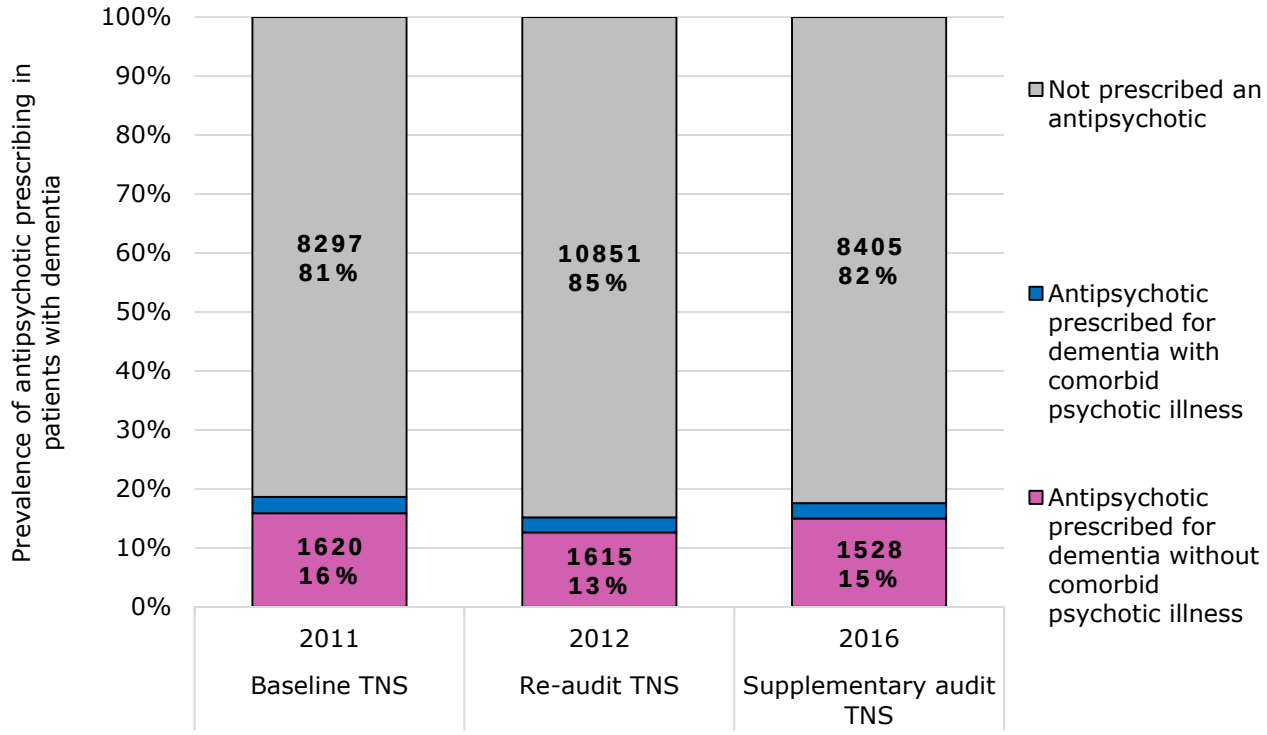
The POMH-UK Lead for each participating Trust will be sent an Excel dataset containing their Trust's data. This allows Trusts to conduct further analyses on their own data should they wish.

National level results

Prevalence of antipsychotic prescribing and characteristics of the audit sample

Since re-audit, there has been a small apparent increase in the prevalence of antipsychotic prescribing for people with dementia who do not have a co-morbid psychotic illness.
The national data in Figure 5 suggest that antipsychotic prescribing for BPSD among those patients with no comorbid psychosis reduced between 2011 and 2012 but rose again by 2016. However, the likelihood of a patient being prescribed an antipsychotic is associated with a number of clinical variables (see Table 3). When statistical analyses took account of the differences in these predictive demographic and clinical characteristics in the three audit samples, it was found that the chances of being prescribed an antipsychotic for BPSD fell by 23% between 2011 and 2012 and by 19% between 2011 and 2016.

Figure 5. Prevalence of antipsychotic prescribing in patients with dementia in the total national sample (TNS): baseline (n=10199), re-audit (n=12790) and supplementary audit (n=10199)



Patient demographics and clinical characteristics

Tables 1 and 2 provide information on the demographic and clinical characteristics of the total national samples of patients with dementia and the subsamples prescribed one or more antipsychotics, at each audit.

Table 1. Demographic characteristics of the total national samples: baseline, re audit and supplementary audit

Key demographic characteristics		2011 Baseline n=10199		2012 Re-audit n=12790		2016 Supplementary audit n=10199	
		Total sample n (%)	Subsample prescribed an antipsychotic n=1902 (%)	Total sample n (%)	Subsample prescribed an antipsychotic n=1939 (%)	Total sample n (%)	Subsample prescribed an antipsychotic n=1794 (%)
Gender	Male	3877 (38)	795 (21)	5119 (40)	834 (16)	4181 (41)	828 (20)
	Female	6322 (62)	1107 (18)	7671 (60)	1105 (14)	6018 (59)	966 (16)
Ethnicity	White British/Irish or White Other	9015 (88)	1662 (18)	10994 (86)	1709 (15)	8967 (88)	1603 (18)
	Black/Black British	220 (2)	55 (25)	383 (3)	54 (14)	247 (2)	50 (20)
	Asian/Asian British	283 (3)	52 (18)	538 (4)	54 (10)	239 (2)	33 (14)
	Mixed/Other ethnic group	147 (1)	33 (22)	350 (3)	41 (12)	185 (2)	32 (17)
	Not collected / not stated / refused	534 (5)	100 (19)	525 (4)	81 (15)	561 (6)	76 (14)
Age band	Mean age in years	81	79	81	79	81	79
	Range	29-104	29-100	21-103	30-102	22-103	36-101
	65 years or under	548 (5)	142 (26)	620 (5)	144 (23)	575 (6)	132 (23)
	66-75 years	1709 (17)	406 (24)	2247 (18)	462 (21)	1703 (17)	415 (24)
	76-85 years	4717 (46)	865 (18)	6202 (49)	901 (15)	4658 (46)	820 (18)
	86 years or over	3225 (32)	489 (15)	3731 (29)	432 (11)	3263 (32)	427 (13)
Clinical setting	Psychiatric ward	871 (9)	448 (51)	913 (7)	445 (49)	822 (8)	447 (54)
	Private continuing care	56 (1)	29 (52)	63 (1)	33 (52)	10 (<1)	2 (20)
	EMI nursing home	536 (5)	238 (44)	725 (6)	233 (32)	507 (5%)	172 (34)
	NHS continuing care	244 (2)	75 (31)	346 (3)	100 (29)	246 (2%)	75 (30)
	Nursing home	396 (4)	112 (28)	555 (4)	146 (26)	655 (6%)	192 (29)
	EMI residential home	520 (5)	135 (26)	509 (4)	136 (27)	459 (5)	124 (27)
	Medical/surgical ward	66 (1)	17 (26)	54 (<1)	9 (17)	50 (<1)	11 (22)
	Residential home	876 (9)	204 (23)	854 (7)	176 (21)	997 (10)	208 (21)
	Patient's own home	6568 (64)	635 (10)	8684 (68)	650 (7)	6200 (61)	537 (9)
	Other/unknown	66 (1)	9 (14)	87 (1)	11 (13)	150 (1)	17 (11)

Table 2. Clinical characteristics of the total national samples: baseline, re-audit and supplementary audit

Key clinical characteristics		2011 Baseline n=10199		2012 Re-audit n=12790		2016 Supplementary audit n=10199	
		Total sample n (%)	Subsample prescribed an antipsychotic n=1902 (%)	Total sample n (%)	Subsample prescribed an antipsychotic n=1939 (%)	Total sample n (%)	Subsample prescribed an antipsychotic n=1794 (%)
Severity of dementia	Mild	2392 (23)	217 (9)	3973 (29)	248 (7)	2327 (23)	133 (6)
	Moderate	4667 (46)	743 (16)	5361 (42)	731 (14)	3814 (37)	563 (15)
	Severe	1976 (19)	666 (34)	2469 (19)	709 (29)	2099 (21)	679 (32)
	Not known/not documented	1164 (11)	276 (24)	1287 (10)	251 (20)	1959 (19)	419 (21)
Type of dementia: ICD-10*	F00: Dementia in Alzheimer's disease	4989 (49)	770 (15)	6163 (48)	749 (12)	4947 (49)	757 (15)
	F00.2: Dementia in Alzheimer's disease, atypical or mixed type	2021 (20)	281 (14)	2672 (21)	320 (12)	2272 (22)	325 (14)
	F01: Vascular dementia	1613 (16)	446 (28)	1774 (14)	419 (24)	1336 (13)	358 (27)
	F02.3: Dementia in Parkinson's disease	228 (2)	68 (30)	362 (3)	79 (22)	311 (3)	73 (23)
	F02: Dementia, other (inc. frontotemporal dementia)	357 (4)	134 (38)	441 (3)	144 (33)	403 (4)	124 (31)
	F03: Unspecified dementia	617 (6)	140 (23)	895 (7)	161 (18)	725 (7)	128 (18)
	Dementia subtype not yet determined	460 (5)	74 (16)	483 (4)	67 (14)	205 (2)	29 (14)
Documented psychiatric diagnoses: ICD-10*	F05: Delirium	94 (1)	36 (38)	137 (1)	50 (36)	168 (2)	81 (48)
	F20-29: Schizophrenia spectrum disorder	200 (2)	169 (85)	237 (2)	185 (78)	212 (2)	169 (80)
	F31: Bipolar disorder	94 (1)	58 (62)	128 (1)	76 (59)	103 (1)	56 (54)
	F32-F39: Depression	1472 (14)	288 (20)	1552 (12)	261 (17)	1265 (12)	242 (19)
	F32.3: Psychotic depression	84 (1)	59 (70)	95 (1)	65 (68)	69 (1)	46 (67)
	F40-F44: Anxiety spectrum disorder	231 (2)	52 (23)	280 (2)	64 (23)	346 (3)	74 (22)
	F70-F79: Learning disability/mental retardation	99 (1)	23 (23)	97 (1)	25 (26)	192 (2)	40 (21)
	None documented	8013 (79)	1269 (16)	10168 (80)	1197 (12)	7865 (77)	1093 (14)
	Other psychiatric diagnosis	89 (1)	29 (33)	314 (3)	101 (32)	159 (2)	84 (53)
Detained under the Mental Health Act?	Yes	244 (2)	128 (52)	337 (3)	175 (52)	575 (6)	242 (42)

**The diagnoses are not mutually exclusive. Diagnoses that were only made in a small proportion of the total national sample have not been shown here, unless the diagnosis was thought to be relevant to the interpretation of the overall sample data.*

Predictors of antipsychotic prescription for BPSD

A multivariate regression analysis was performed on the data to focus on predictors of antipsychotic prescription in patients without a comorbid diagnosis of a psychotic illness (see Table 3). For such patients it might be reasonably assumed that the antipsychotic was prescribed for BPSD.

Those clinical settings associated with a greater likelihood of prescription of an antipsychotic may be proxies for variables not collected in the audit, such as level of dependency and degree and nature of behavioural disturbance.

The proportions of patients with the demographic and clinical characteristics associated with an increased chance of being prescribed an antipsychotic for BPSD differed across the three audit samples. When this was taken into account in statistical analyses, it showed that the chance of being prescribed an antipsychotic in 2012 had decreased by 23% compared with 2011 and in 2016 it had decreased by 19% compared with 2011.

Table 3. Direction of variables significantly and independently associated with antipsychotic prescription for BPSD in patients without comorbid psychosis

Variable		Probability of antipsychotic prescription
Age:	≤ 70	↑ Highest
	71 - 80	
	81 - 90	
	91+	↓ Lowest
Clinical setting:	Psychiatric ward	↑ Highest
	EMI nursing home	
	NHS continuing care	
	EMI residential home	
	Nursing home	
	Private continuing care	
	Residential home	
	Medical/surgical ward	
	Own home	
	Other	
	Supported/sheltered living	↓ Lowest
Type of dementia:	Other	↑ Highest
	Parkinson's disease	
	Vascular	
	Alzheimer's / Alzheimer's mixed	
	Unspecified	↓ Lowest
Severity of dementia:	Severe	↑ Highest
	Moderate	
	Mild	↓ Lowest
Detained under the Mental Health Act:	Yes	↑ Higher
	No	↓ Lower

Other medications prescribed

The table below shows the most commonly prescribed (>1%) psychotropic medicines in the total national sample of all patients with dementia, and how these compare across the subsamples of patients who are and are not prescribed antipsychotic medication. There has been an increase in the use of memantine over time, and this is particularly marked in the sub-sample of patients who are prescribed antipsychotic medication.

Table 4. Regular and PRN medicines other than antipsychotics prescribed in the total national samples of people with dementia at baseline (n=10199), re-audit (n=12790) and supplementary audit (n=10199)

	Baseline	Re-audit	Supplementary audit		
	Total sample n=10199	Total sample n=12790	Total sample n=10199	No antipsychotic prescribed n=8405	Antipsychotic prescribed n=1794
Medication prescribed	% prescribed this medicine either regular or PRN	% prescribed this medicine either regular or PRN	% prescribed this medicine either regular or PRN	% prescribed this medicine either regular or PRN	% prescribed this medicine either regular or PRN
Cholinesterase inhibitors	42%	44%	40%	43%	23%
Analgesic	19%	18%	22%	20%	32%
Memantine	4%	10%	20%	18%	27%
Antidepressant - SSRI	17%	15%	18%	17%	21%
Antidepressant - other	11%	12%	14%	12%	23%
Lorazepam	11%	9%	12%	8%	32%
Benzodiazepine - other	7%	6%	7%	5%	15%
Z-hypnotics	7%	6%	7%	5%	15%
Antidepressant - trazodone	5%	4%	4%	4%	8%
Anticholinergic	2%	2%	3%	3%	5%
Valproate	3%	2%	3%	2%	5%
Pregabalin	1%	1%	2%	2%	3%
Other	2%	2%	11%	11%	13%
None prescribed	20%	18%	14%	15%	8%

Fourteen percent of the total national sample were not prescribed any of the medications listed in the table above, 41% were prescribed one, 25% were prescribed two, 12% were prescribed three and 9% were prescribed four or more.

Antipsychotic initiation and prescribing responsibility

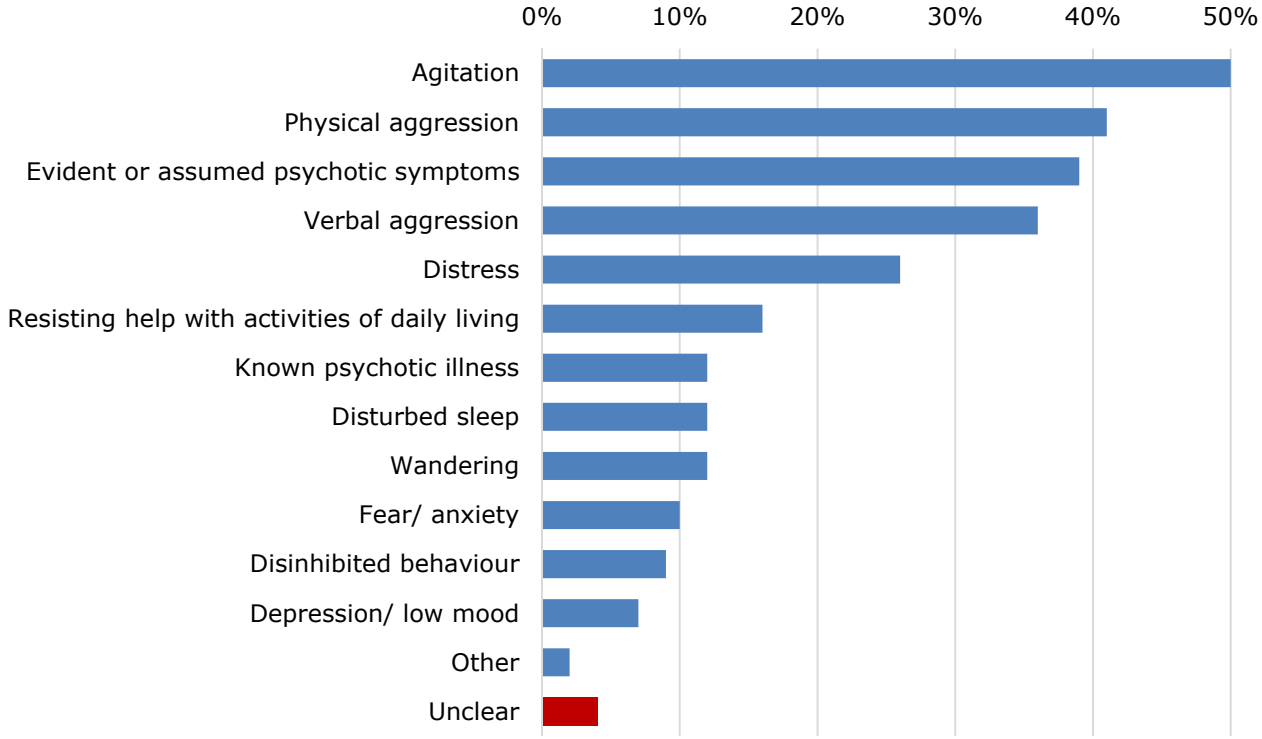
Practice standard 1
The clinical indications (target symptoms) for antipsychotic treatment should be clearly documented in the clinical records.

Practice standard 1 was met for 96% of patients.

Figure 6 shows the clinical indications/target symptoms for the currently prescribed antipsychotic medication(s), as documented in the clinical records at the time of initiation or at subsequent review. The red **'unclear'** bar indicates the proportion of patients for whom practice standard 1 was not met. This profile is very similar to those seen at baseline and re-audit.

Agitation, aggressive behaviour and evident or assumed psychotic symptoms remain the most frequent targets for antipsychotic treatment.

Figure 6. Antipsychotic indication profile* at supplementary audit: proportion of patients with the specified indication documented as a reason for antipsychotic medication (n=1794)



**Please note that indications are not mutually exclusive; i.e. one drug may be prescribed for more than one indication and similarly, more than one drug may be prescribed to target a particular indication.*

Prescribing responsibility

Over time, there has been a modest increase in the proportion of patients whose treatment was initiated in secondary care who subsequently received continuation prescriptions from secondary care (baseline 42%, re-audit 44%, supplementary audit 47%). However, primary care continues to take responsibility for half of those patients prescribed longer-term antipsychotic treatment (see Table 6).

Table 5. Prescribing responsibility at supplementary audit (n=1794)

Clinical setting in which antipsychotic prescribed	At initiation	Currently
Primary care	184 10%	897 50%
Secondary care	1474 82%	844 47%
Unknown	136 8%	53 3%

Table 6. Antipsychotic treatment duration at supplementary audit (n=1794)

Duration of treatment with any antipsychotic	Proportion of patients	Clinical setting in which antipsychotic currently prescribed		
		Primary care	Secondary care	Unknown
Less than three months (n=438)	24%	24%	76%	<1%
Three months – less than six months (n=233)	13%	45%	53%	2%
Six months – one year (n=365)	20%	57%	42%	1%
Longer than one year (n=758)	42%	63%	31%	5%

Antipsychotic prescribing practice

The following section shows data on the proportion of patients without a comorbid psychotic illness, who were prescribed one or more antipsychotics (n=1528; 15% of the total national sample).

Antipsychotic dosing

Table 7. Antipsychotics prescribed for more than 5% of this sub-sample, in descending order

1. Risperidone (n=802, 52%)
2. Quetiapine (n=284, 19%)
3. Olanzapine (n=198, 13%)
4. Aripiprazole (n=84, 5%)
5. Haloperidol (n=71, 5%)
6. Amisulpride (n=69, 5%)

Since re-audit the use of risperidone has increased (39% to 52% of the subsample) and the use of quetiapine has decreased (28% to 19%). The relatively low median doses of antipsychotics used suggest judicious prescribing for this population.

Table 8. Dosing details for the five most commonly prescribed antipsychotics

Drug	Use: n (%)			Dosage Median
	Monotherapy	Combination	PRN	
Risperidone	787 (98%)	15 (2%)	33 (4%)	1mg
Quetiapine	281 (99%)	3 (1%)	14 (5%)	50mg
Olanzapine	193 (98%)	5 (3%)	13 (7%)	5mg
Aripiprazole	81 (96%)	3 (4%)	3 (4%)	7.5mg
Haloperidol	61 (86%)	10 (14%)	24 (34%)	1mg

Pre-treatment screening in patients recently initiated on antipsychotic medication

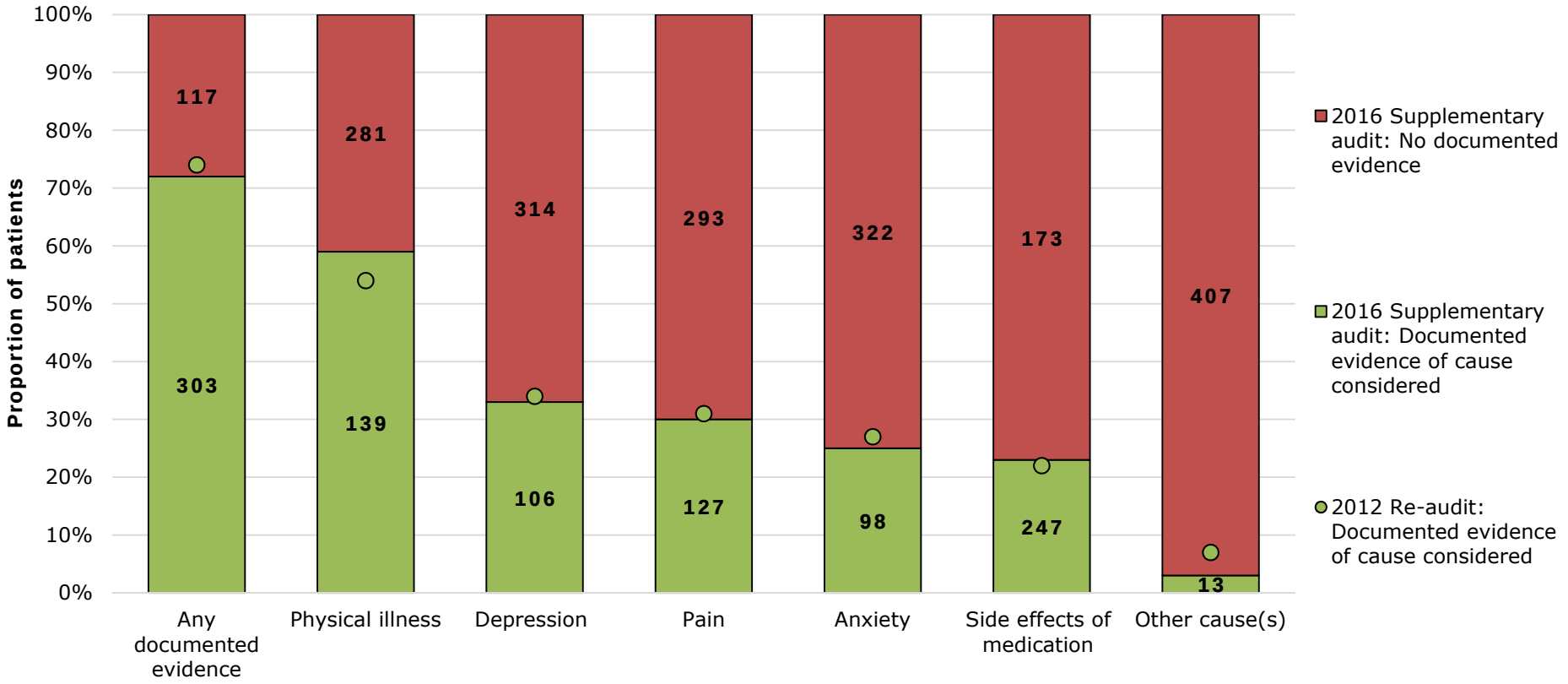
This section provides information on elements of current practice in relation to patients with no comorbid psychosis in whom the antipsychotic medication was initiated less than three months ago (n=420). These include the considerations and actions taken by clinical staff before the decision was made to prescribe an antipsychotic for BPSD.

Underlying causes of behavioural and psychological symptoms in dementia (BPSD)

Practice standard 2
Before prescribing antipsychotic medication for BPSD (behavioural and psychological symptoms of dementia), likely factors that may generate, aggravate or improve such behaviours should be considered.

Figure 7 on page 27 shows the proportion of patients currently prescribed an antipsychotic for whom there is documented evidence of consideration of possible underlying causes of BPSD. Practice at supplementary audit was very similar to re-audit.

Figure 7. Proportion of patients with dementia and no comorbid psychosis currently prescribed an antipsychotic for whom there is documented evidence that potential underlying causes of BPSD were considered: re-audit (n=461) and supplementary audit (n=420)



Non-pharmacological interventions

Figure 8 below shows that a non-pharmacological intervention for BPSD was tried in two-thirds of patients prior to starting antipsychotic medication.

Figure 8. Proportion of patients with dementia and no comorbid psychosis currently prescribed an antipsychotic for whom there is documented evidence that non-pharmacological interventions were tried before the antipsychotic was prescribed: re-audit (n=461) and supplementary audit (n=420)

'Other' approaches specified included use of a multisensory room and speech and language therapy.

It should be noted that non-pharmacological interventions for BPSD may not be appropriate for all patients, for example where the BPSD are severe and the patient is clearly distressed.

Practice standard 3
The potential risks and benefits of antipsychotic medication should be considered and documented by the clinical team, prior to initiation.

Note that these data relate to documentation in the clinical records, and may therefore underestimate what is done in practice. However, recording the specific risks and benefits of antipsychotic treatment in the clinical records of people with dementia is important, given that most of this prescribing is off-label and antipsychotic drugs are associated with clinically significant side effects in this patient subsample.

Between baseline and re-audit there was a modest increase in the proportion of cases for whom this standard was met. This improvement was maintained at this supplementary audit.

Figure 9. Proportion of patients with dementia and no comorbid psychosis for whom there is documented evidence that the potential risks and benefits of antipsychotic medication were considered and documented by the clinical team before the antipsychotic was prescribed: baseline (n=417), re-audit (n=461) and supplementary audit (n=420)

Practice standard 4
The potential risks and benefits of antipsychotic medication should be discussed with the patient and/or carer(s), prior to initiation.

Between baseline and re-audit there was a modest increase in the proportion of cases for whom this standard was met. This improvement was maintained at this supplementary audit.

Figure 10. Proportion of patients with dementia and no comorbid psychosis for whom there is documented evidence that the potential risks and benefits of antipsychotic medication were discussed with the patient and/or carer before the antipsychotic was prescribed: baseline (n=417), re-audit (n=461) and supplementary audit (n=420)

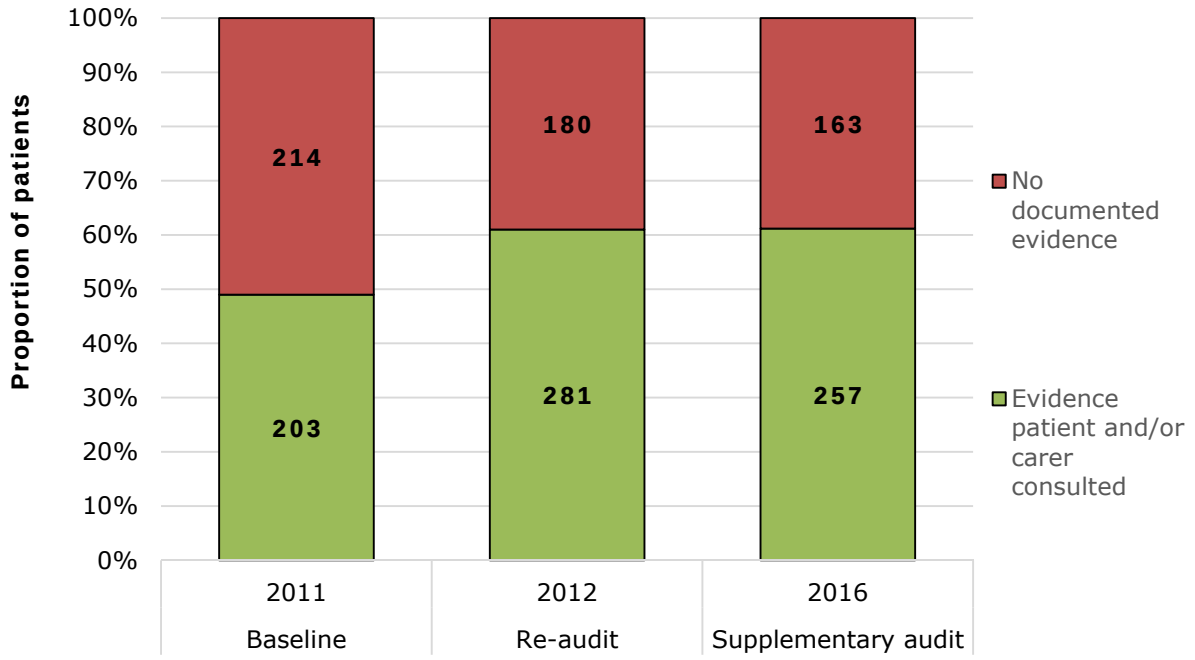


Table 9. Relationship between dementia severity and documented discussion about antipsychotic risks and benefits prior to initiation: baseline (n=417), re-audit (n=461) and supplementary audit (n=420)

Dementia severity	Documented discussion with patients about risk/benefits			Documented discussion with carers about risk/benefits		
	2011 Baseline	2012 Re-audit	2016 Suppl. audit	2011 Baseline	2012 Re-audit	2016 Suppl. audit
Mild	28%	33%	20%	44%	46%	35%
Moderate	21%	28%	28%	49%	59%	68%
Severe	11%	13%	18%	52%	60%	59%
Total	**16%**	**22%**	**20%**	**45%**	**56%**	**58%**

Long-term monitoring in patients on continuing antipsychotic medication

This section provides information on elements of current practice in relation to patients with no comorbid psychosis in whom the antipsychotic medication was initiated more than six months ago (n=887).

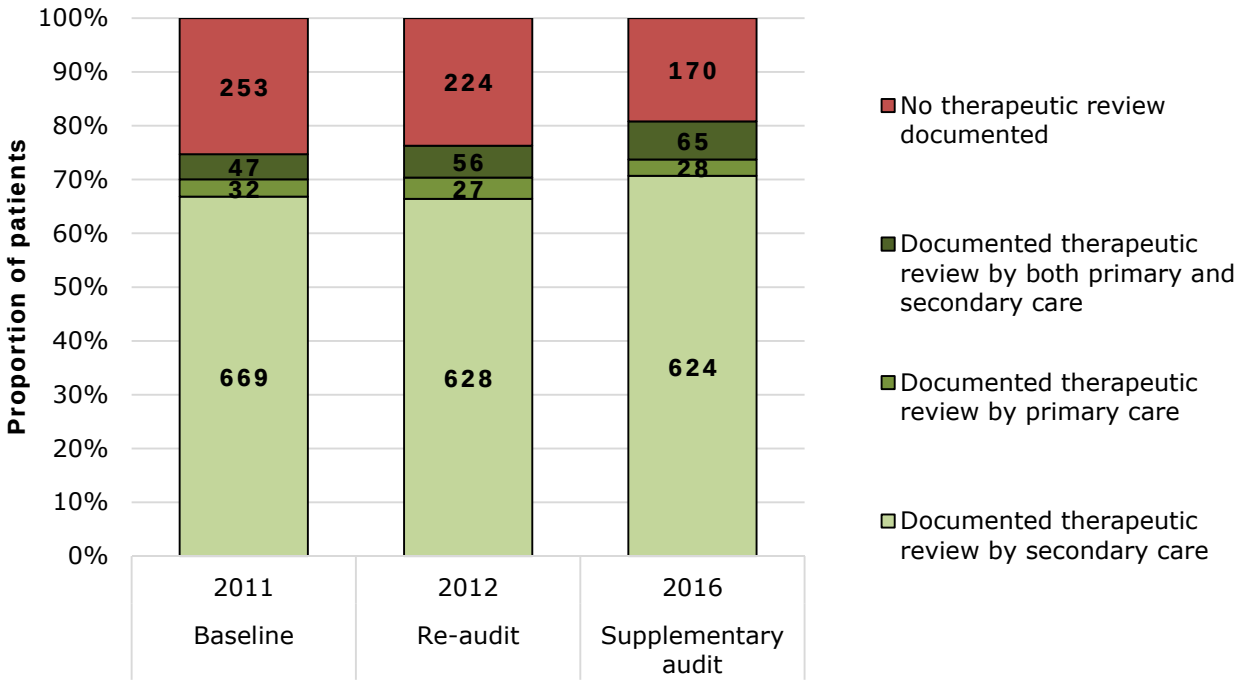
Medication review addressing therapeutic response

Practice standard 5
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of therapeutic response and possible adverse effects.

The figure below show the proportion of patients who have had a medication review that addressed therapeutic response in the past six months.

Since the baseline audit, the proportion of patients for whom the first element of this standard was not met has reduced from one-quarter to one-fifth.

Figure 11. Proportion of patients who have had a documented medication review addressing therapeutic response in the past six months: baseline (n=1001), re-audit (n=935) and supplementary audit (n=887)

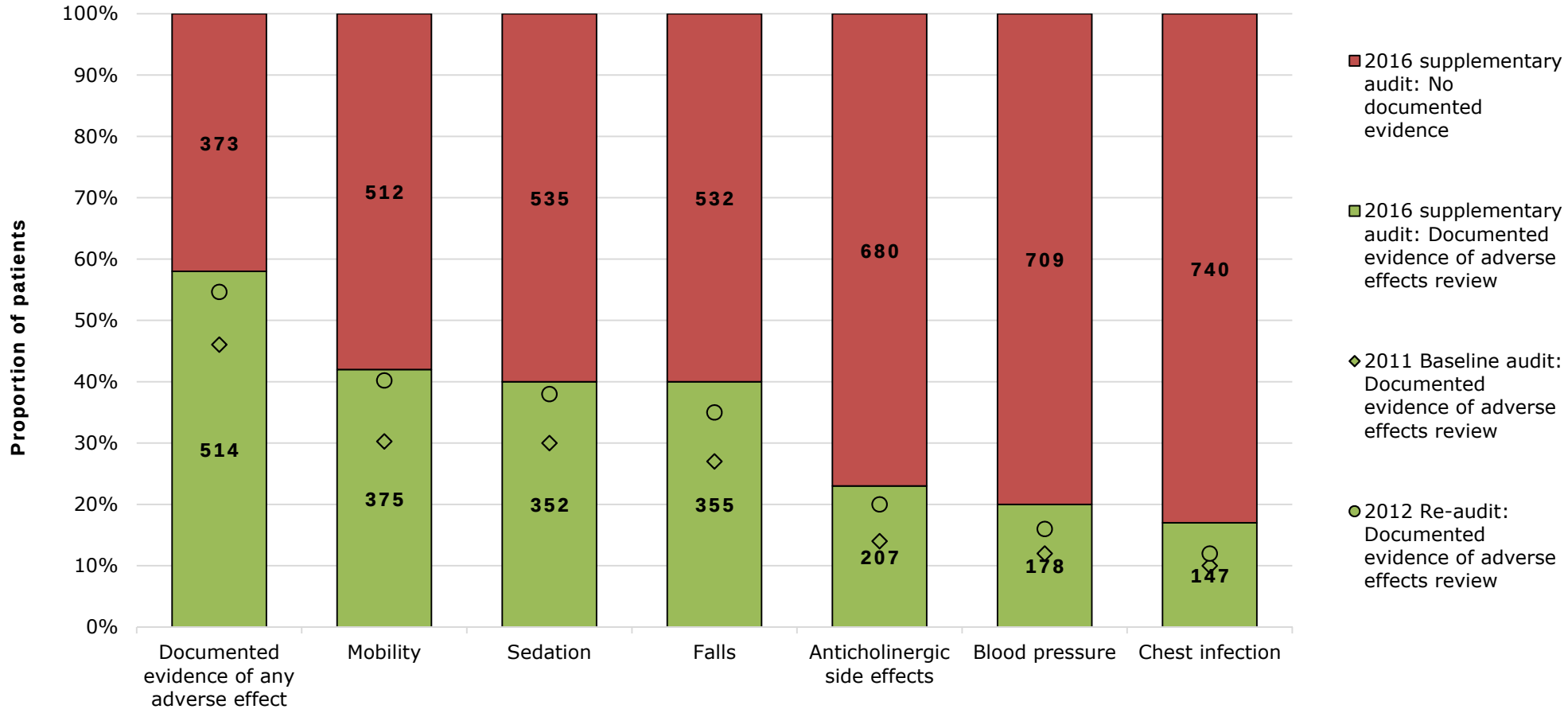


Medication review addressing adverse effects

Practice standard 5
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of therapeutic response and possible adverse effects.

There has been a modest but steady improvement in adherence to this standard since the baseline audit.

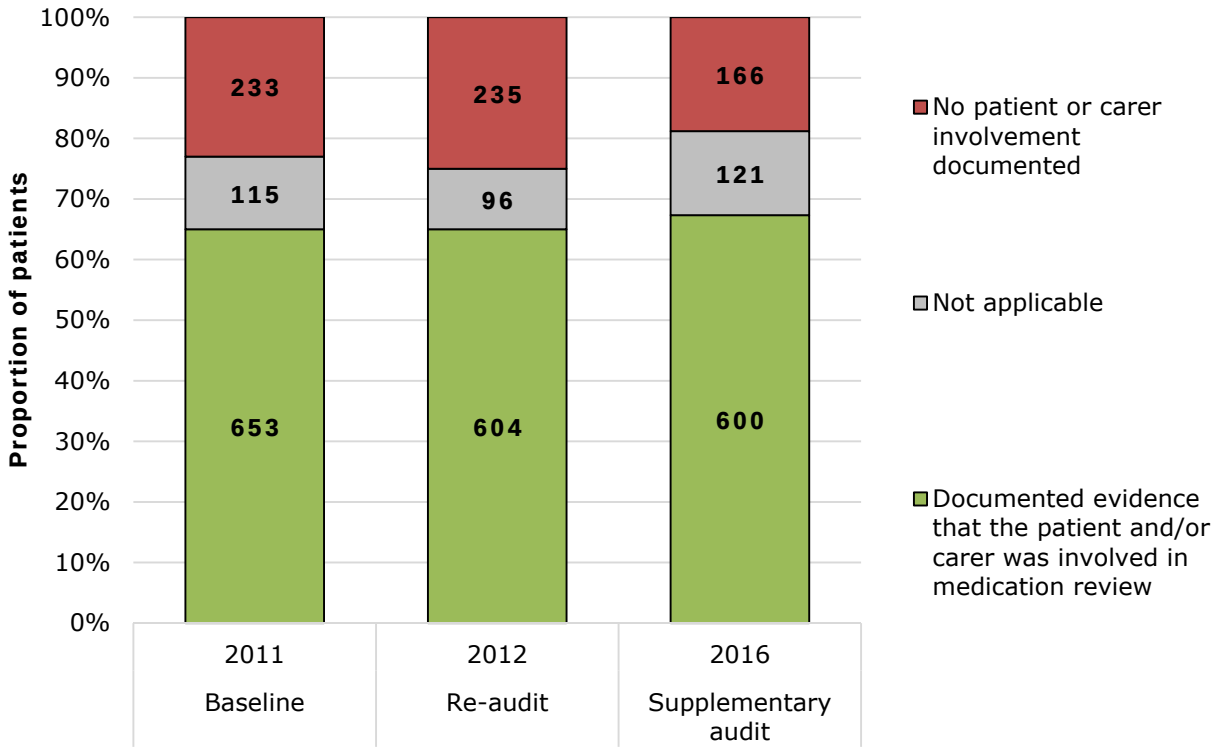
Figure 12. Proportion of patients who have had a medication review addressing possible adverse effects in the past six months: baseline audit (n=1001), re-audit (n=935) and supplementary audit (n=887)



Patient and carer involvement in review

There has been a modest improvement in the proportion of cases for whom this standard was met.

Figure 13. Proportion of patients and/or carers clearly documented as being involved in the medication review: baseline (n=1001), re-audit (n=935) and supplementary audit (n=887)

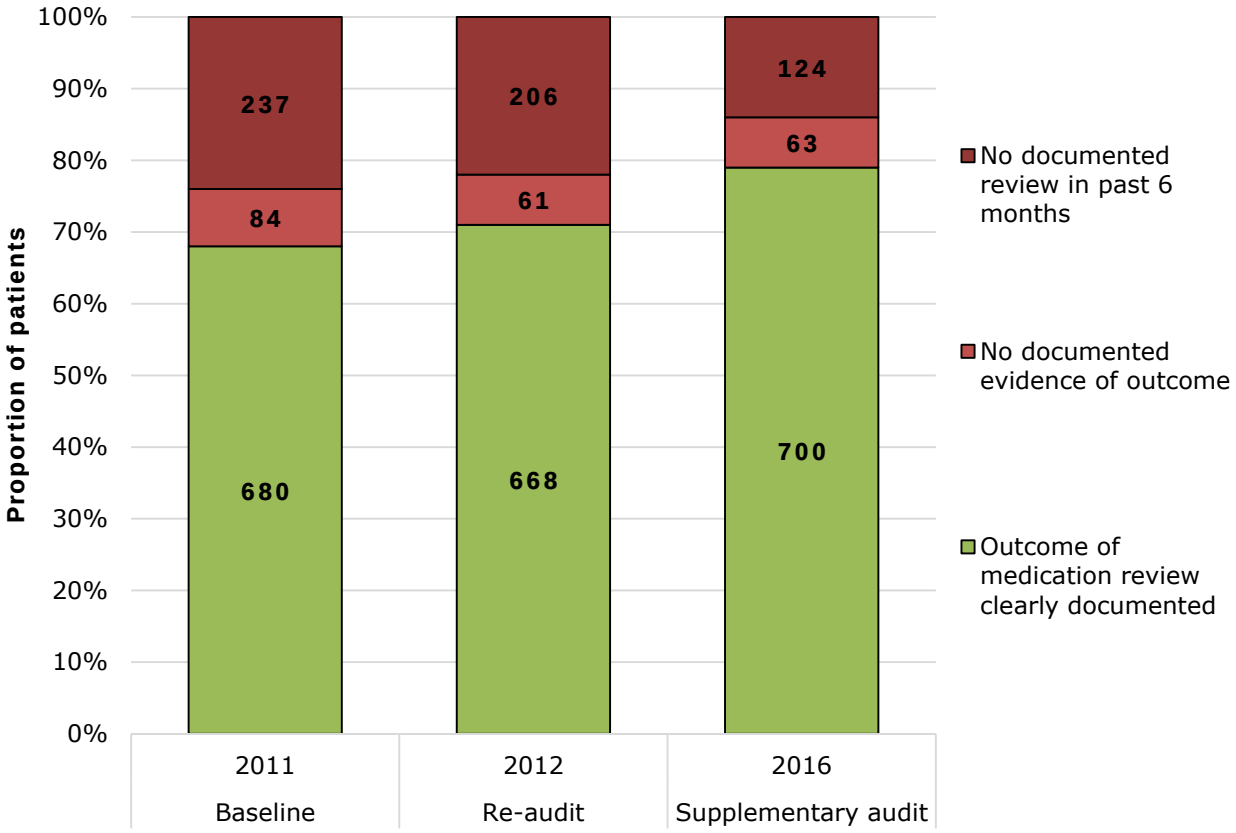


Documentation of the review outcome

The figure below shows the proportion of patients for whom there is documented evidence of the outcome of the most recent medication review (e.g. medication warrants continuation unchanged, change in dosage, change of drug required).

There was an improvement in performance against this standard at supplementary audit.

Figure 14. Proportion of clinical records in which the outcome of a patient's most recent medication review is clearly documented: baseline (n=1001), re-audit (n=935) and supplementary audit (n=887)



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Trust level results

Analyses presented in this section were conducted for each Trust and for the total national sample to allow benchmarking.

Data from each Trust or organisation are presented by code.

Charts in this section are ordered by performance against the practice standards so the position of each Trust will vary in each figure according to their practice.

Your Trust code is 012

Summary of national participation levels

Table 10. Number of clinical teams and patient records submitted by each of the 58 participating Trusts.

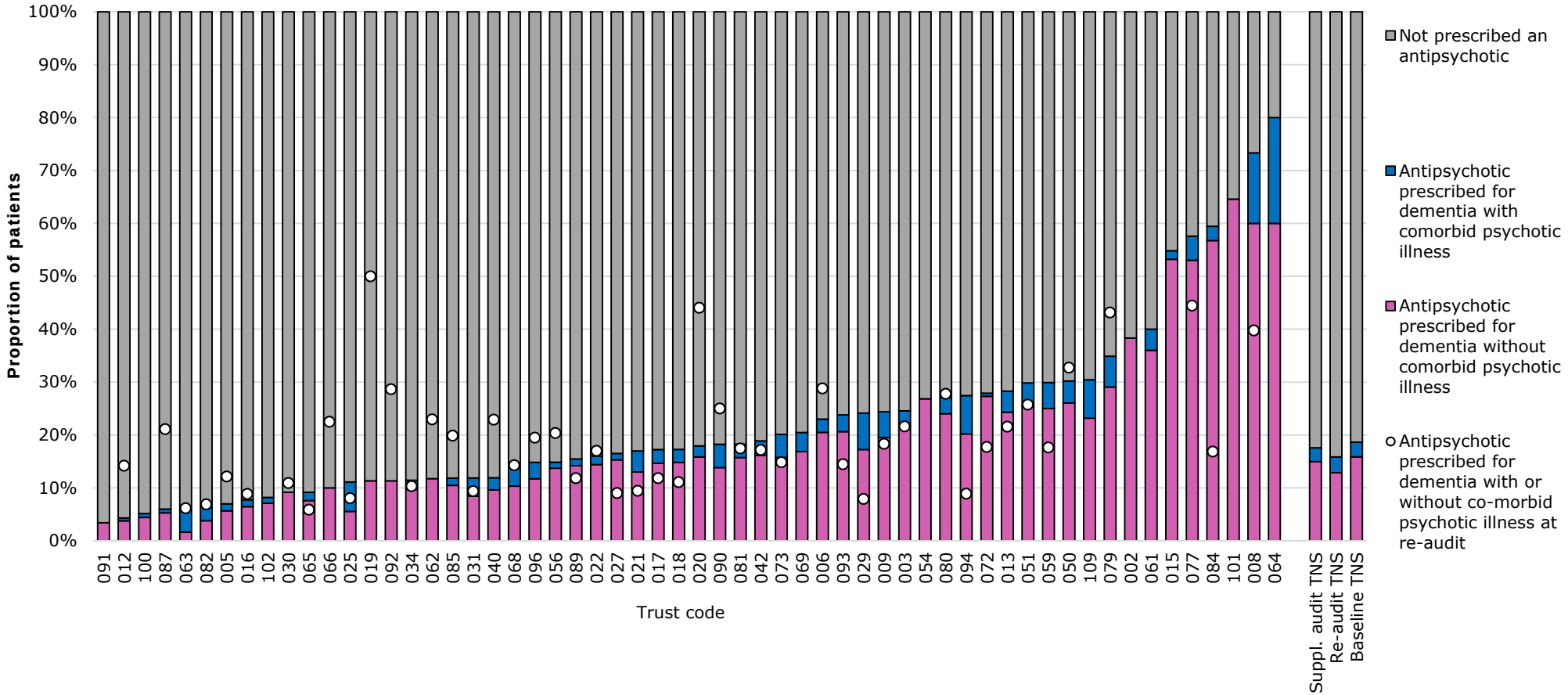
Trust code	2011 Baseline number of participating teams	2011 Baseline number of patients	2012 Re-audit number of participating teams	2012 Re-audit number of patients	2016 Supplementary audit number of participating teams	2016 Supplementary audit number of patients
2	2	200	-	-	3	60
3	10	113	11	148	11	175
5	11	1134	10	255	7	300
6	13	361	17	257	14	200
8	10	91	5	83	3	60
9	9	107	11	131	8	41
11	2	70	3	50	-	-
12	11	26	4	261	11	185
13	10	133	12	292	12	251
15	-	-	-	-	4	62
16	8	217	8	1016	7	310
17	7	110	9	279	4	116
18	20	420	32	822	24	614
19	10	317	2	22	4	53
20	9	125	7	109	5	145
21	6	196	11	202	12	100
22	17	254	20	434	15	243
25	13	951	8	1762	4	144
27	3	359	5	366	11	333
29	-	-	23	455	17	319
30	2	111	3	238	3	98
31	4	181	10	160	10	177
34	7	65	6	746	8	576
40	9	102	9	83	7	218
42	10	183	11	169	17	217
50	7	67	10	223	11	96
51	18	510	12	338	16	134
54	3	29	-	-	7	41
56	6	232	5	167	6	175
59	17	43	19	85	37	284
61	5	145	-	-	3	25
62	3	49	5	61	3	85
63	-	-	5	130	9	121
64	-	-	-	-	1	5
65	6	59	2	85	8	381
66	9	88	4	200	3	120
68	9	180	1	21	2	116
69	8	163	-	-	5	249
72	8	114	9	344	10	172
73	8	83	23	182	14	184
74	7	431	7	411	-	-
77	9	43	9	81	8	66

79	11	109	7	51	8	86
80	10	67	16	162	5	129
81	3	12	5	86	8	197
82	1	163	2	218	1	105
83	4	40	4	48	-	-
84	3	117	2	89	1	74
85	21	515	14	287	33	506
87	13	109	6	199	8	283
89	9	183	9	152	5	155
90	8	39	11	48	18	159
91	2	185	-	-	4	175
92	6	76	9	171	7	97
93	14	75	23	83	14	63
94	13	253	18	236	13	193
96	3	194	3	231	10	290
98	-	-	5	61	-	-
100	-	-	-	-	2	136
101	-	-	-	-	3	48
102	-	-	-	-	3	183
109	-	-	-	-	1	69
TNS	**447**	**10199**	**482**	**12790**	**508**	**10199**

Trust level benchmarking

When reflecting on any changes seen between baseline, re-audit and supplementary audit, Trusts should consider the demographic and clinical characteristics of their sample and their sample size.

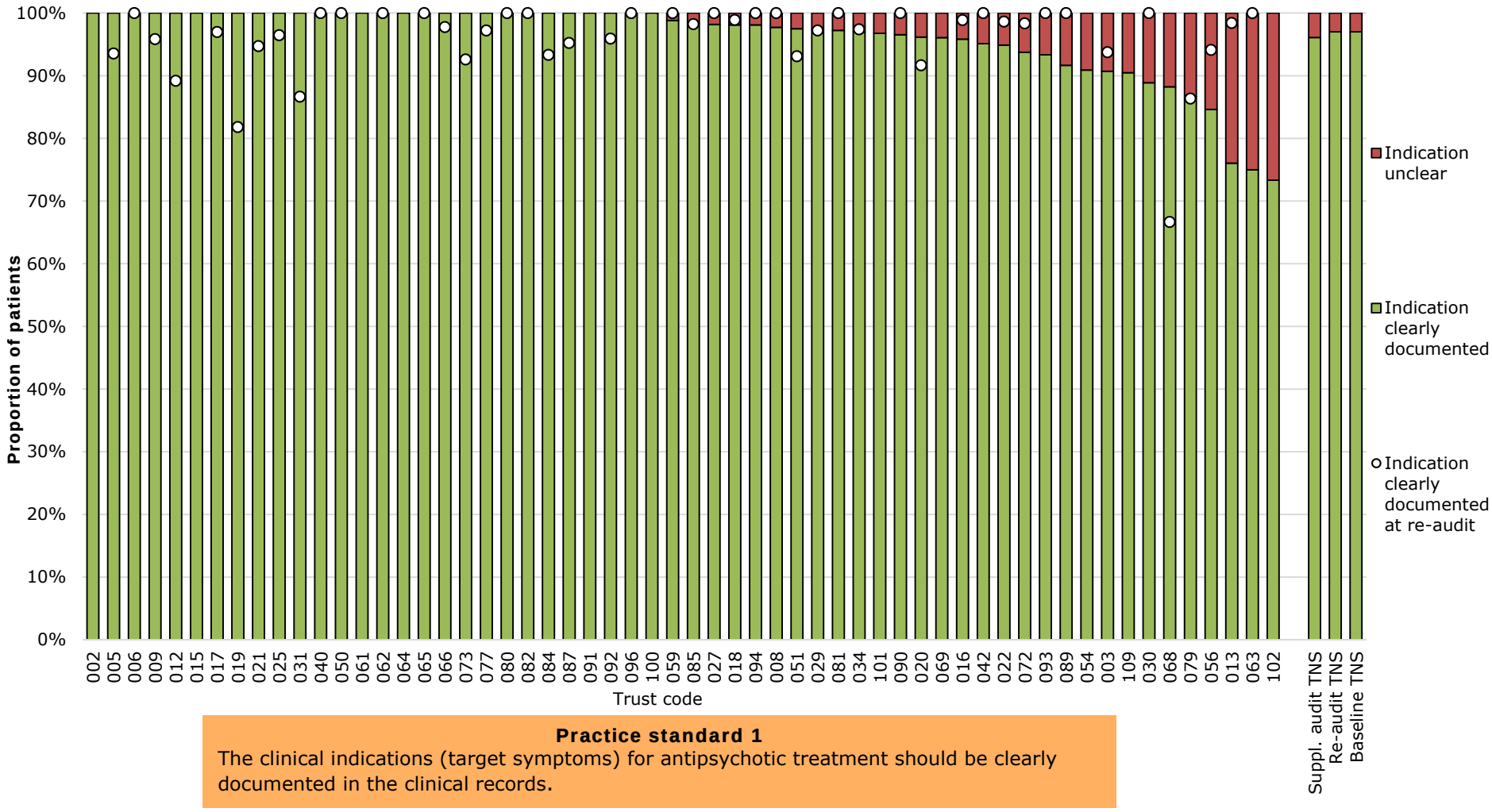
Figure 15. Antipsychotic prescribing prevalence for each Trust and the total national sample at supplementary audit (n=10199)



The Trusts with the lowest proportion of patients with dementia prescribed an antipsychotic with or without a comorbid psychotic illness are on the left-hand side of the figure and the Trusts with the highest proportion are on the right.

All patients prescribed an antipsychotic

Figure 16. Proportion of patients prescribed an antipsychotic for whom the indication for antipsychotic prescribing is clearly documented, in each Trust and the total national sample at supplementary audit (n=1794)



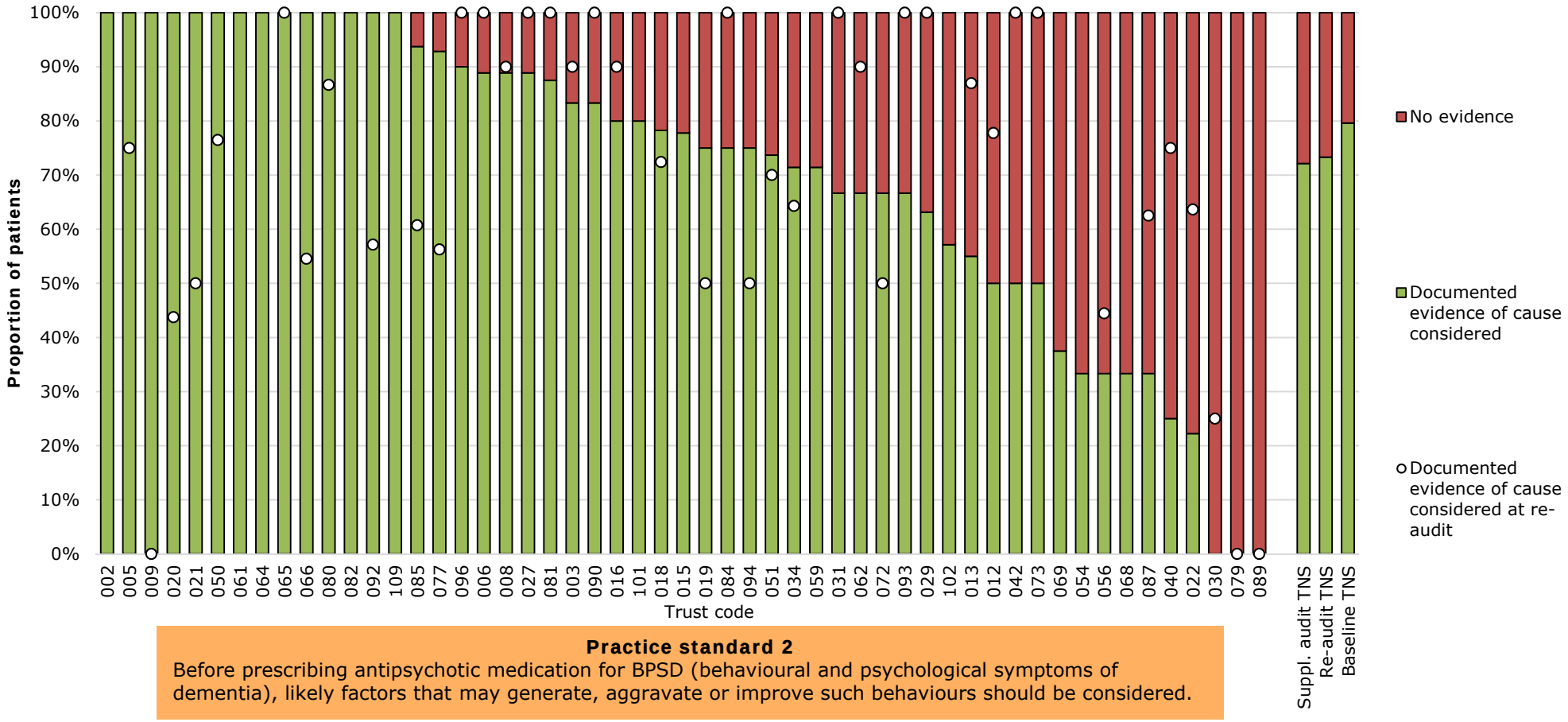
Practice standard 1
The clinical indications (target symptoms) for antipsychotic treatment should be clearly documented in the clinical records.

The Trusts with the highest proportion of patients with a clearly documented indication for antipsychotic treatment are on the left-hand side of the figure and the Trusts with the lowest proportion are on the right.

Recently initiated antipsychotic subsample

Note that for the majority of Trusts, sample sizes with respect to the subsample of patients recently initiated on antipsychotic treatment were small. The size of the local sample should be considered when interpreting performance against the standards shown in Figures 17 to 22.

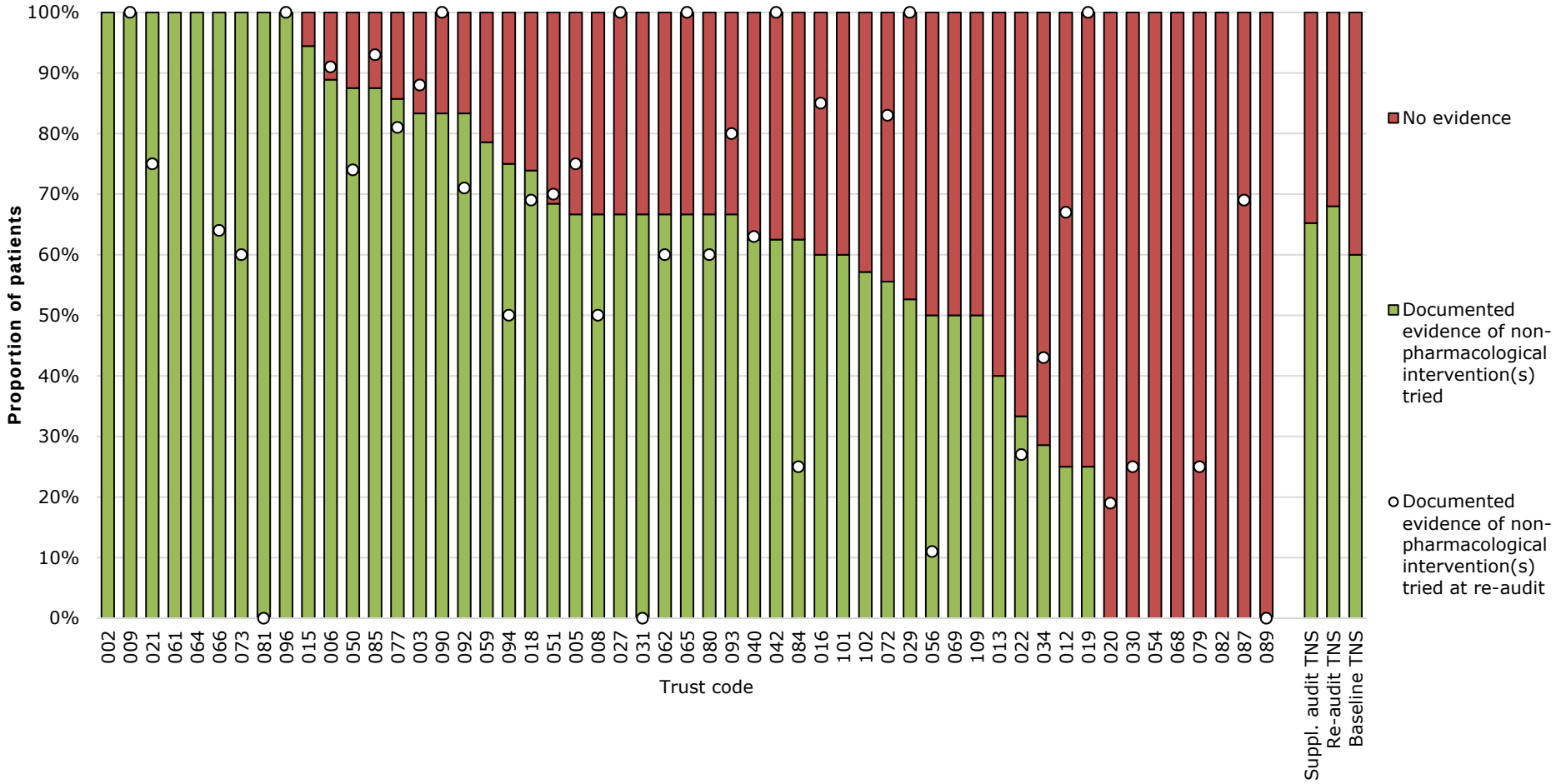
Figure 17. Proportion of patients for whom there is documented evidence that potential underlying causes of BPSD were considered prior to antipsychotic prescription, in each Trust and the total national sample at supplementary audit (n=420)



Practice standard 2
Before prescribing antipsychotic medication for BPSD (behavioural and psychological symptoms of dementia), likely factors that may generate, aggravate or improve such behaviours should be considered.

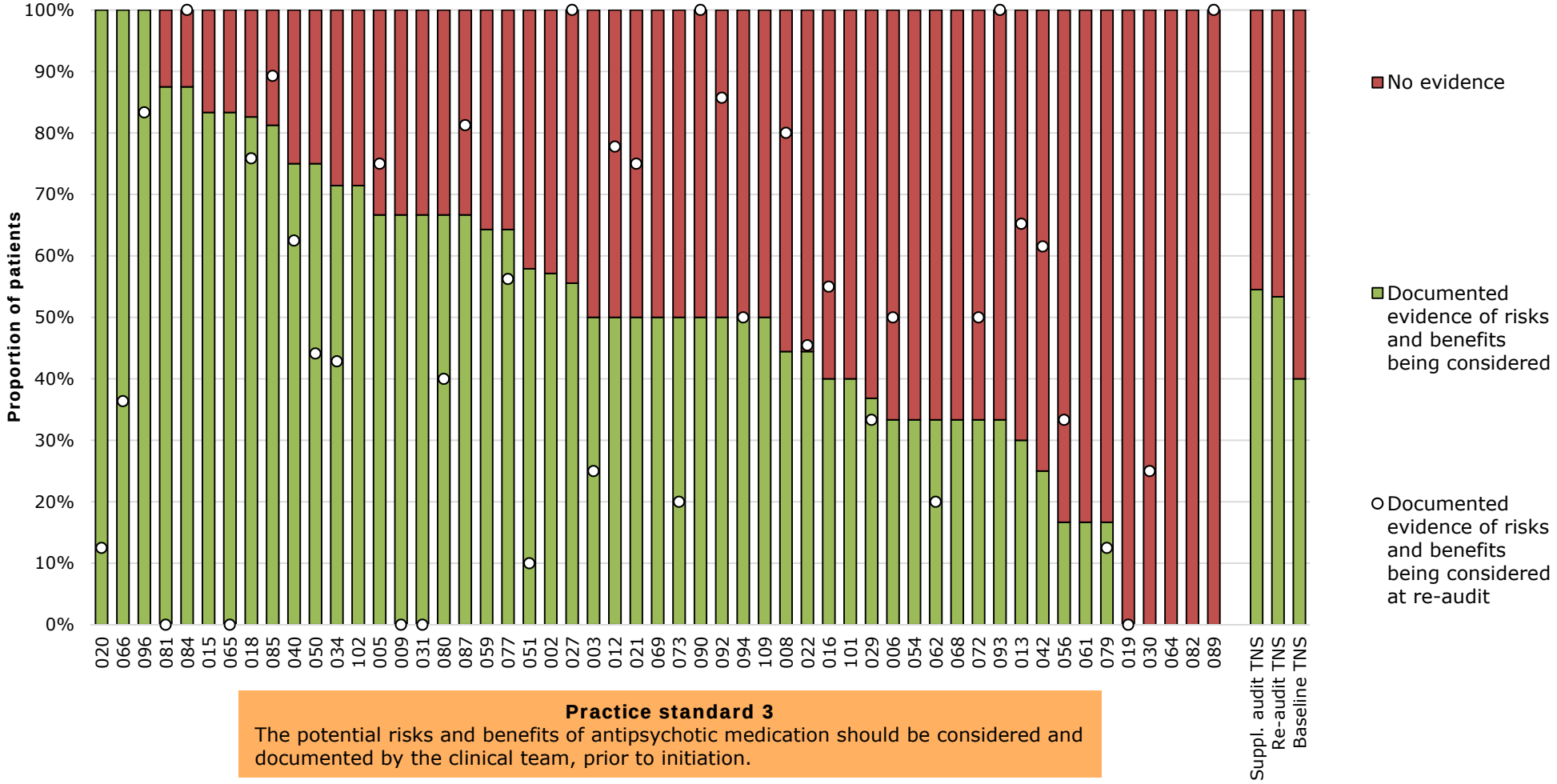
The Trusts with the highest proportion of patients in whom underlying causes of BPSD were considered are on the left-hand side of the figure and the Trusts with the lowest proportion are on the right.

Figure 18. Proportion of patients for whom there is documented evidence that non-pharmacological interventions were tried prior to antipsychotic prescription, in each Trust and the total national sample at supplementary audit (n=420)



The Trusts with the highest proportion of patients in whom non-pharmacological interventions were tried are on the left-hand side of the figure and the Trusts with the lowest proportion are on the right.

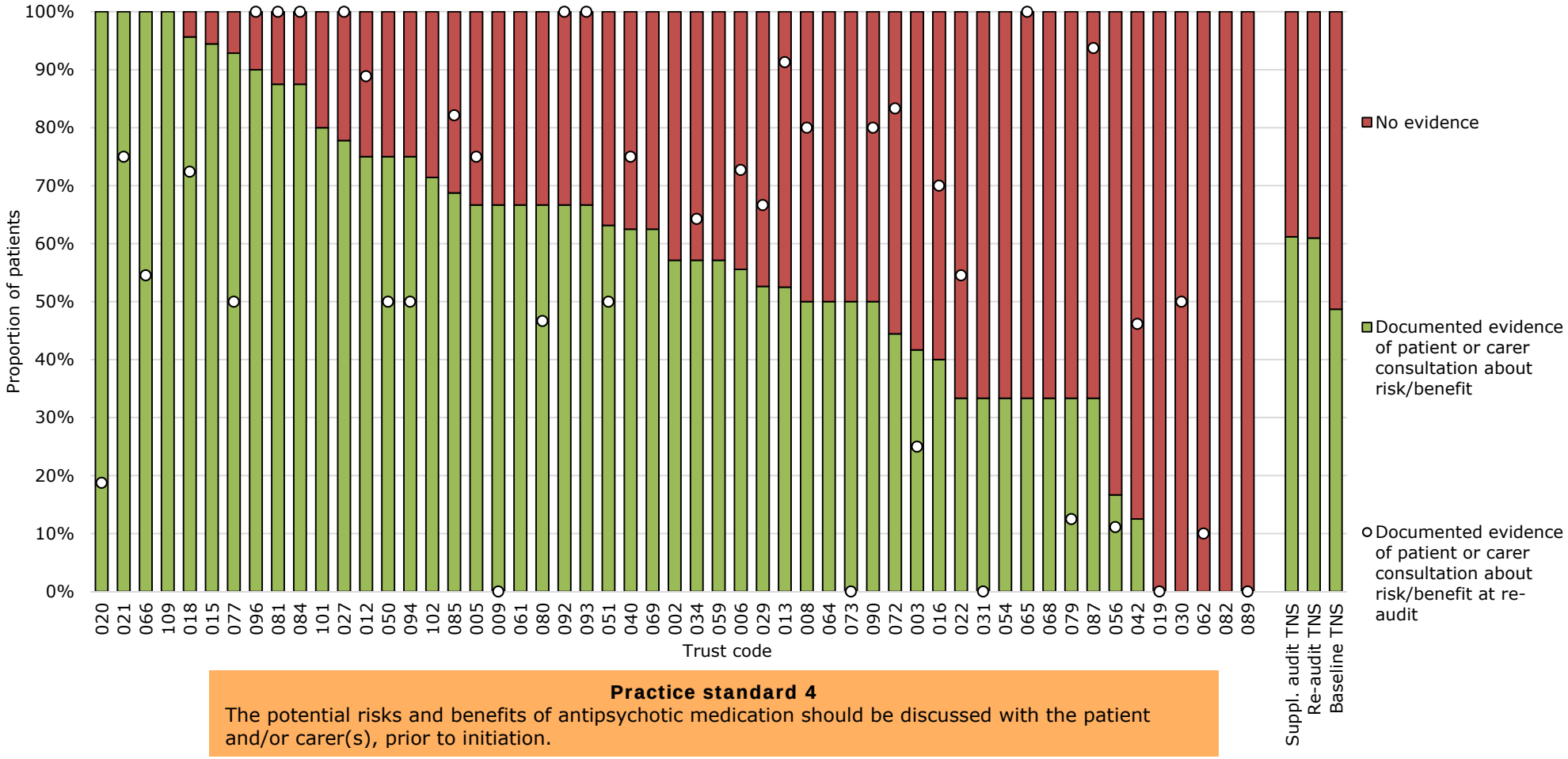
Figure 19. Proportion of patients for whom there is documented evidence that the potential risks and benefits of antipsychotic medication were considered prior to prescription, in each Trust and the total national sample at supplementary audit (n=420)



Practice standard 3
The potential risks and benefits of antipsychotic medication should be considered and documented by the clinical team, prior to initiation.

The Trusts with the highest proportion of patients for whom there is documented evidence that the potential risks and benefits of antipsychotic medication were considered prior to initiation are on the left-hand side of the figure and the Trusts with the lowest proportion are on the right.

Figure 20. Proportion of patients for whom there is documented evidence that potential risks and benefits of antipsychotic medication were discussed with the patient and/or carer prior to antipsychotic prescription, in each Trust and the total national sample at supplementary audit (n=420)

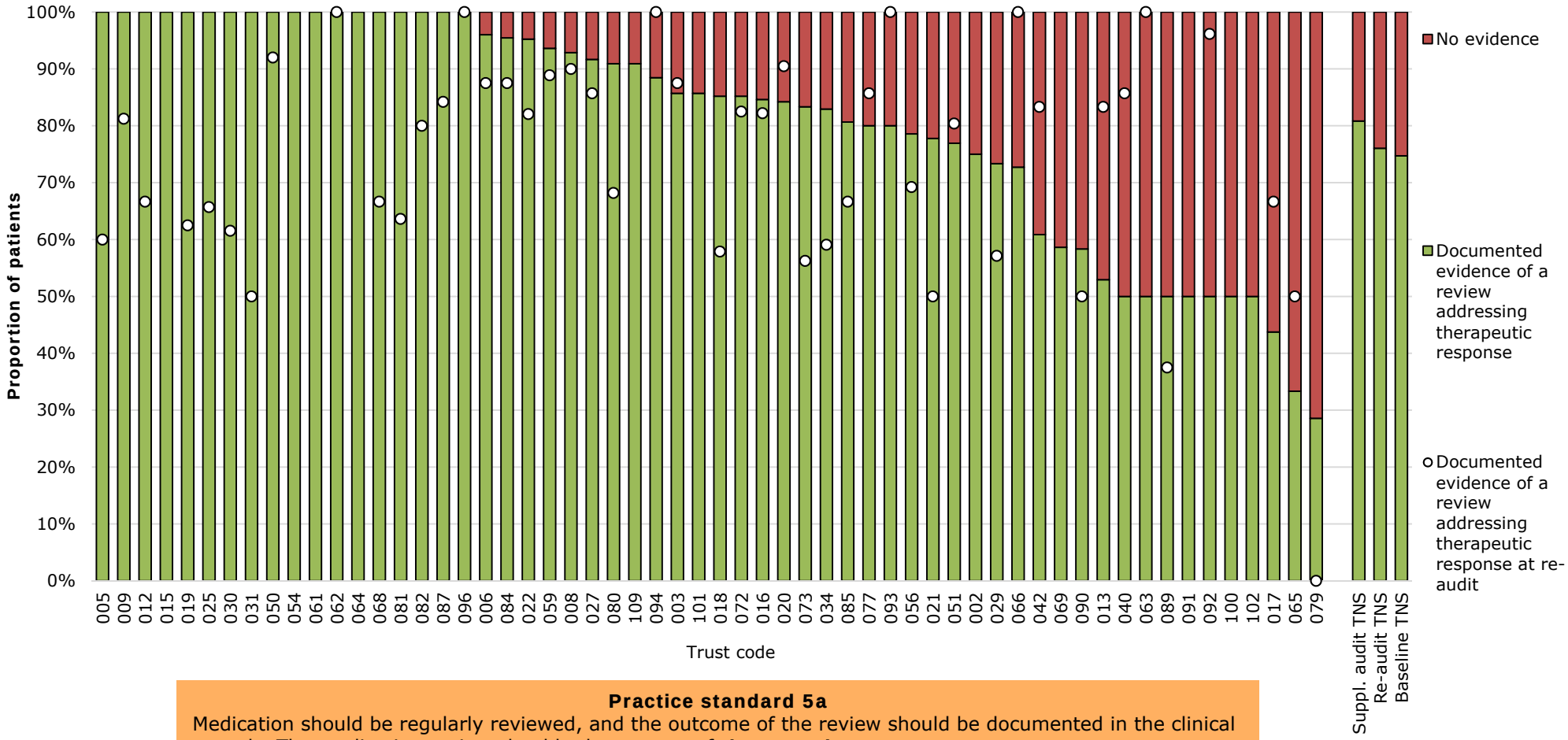


Practice standard 4
The potential risks and benefits of antipsychotic medication should be discussed with the patient and/or carer(s), prior to initiation.

The Trusts with the highest proportion of patients with documented evidence of discussion with the patient or carer about the risks/benefits of antipsychotic treatment are on the left-hand side of the figure and the Trusts with the lowest proportion are on the right.

Continuing antipsychotic treatment subsample

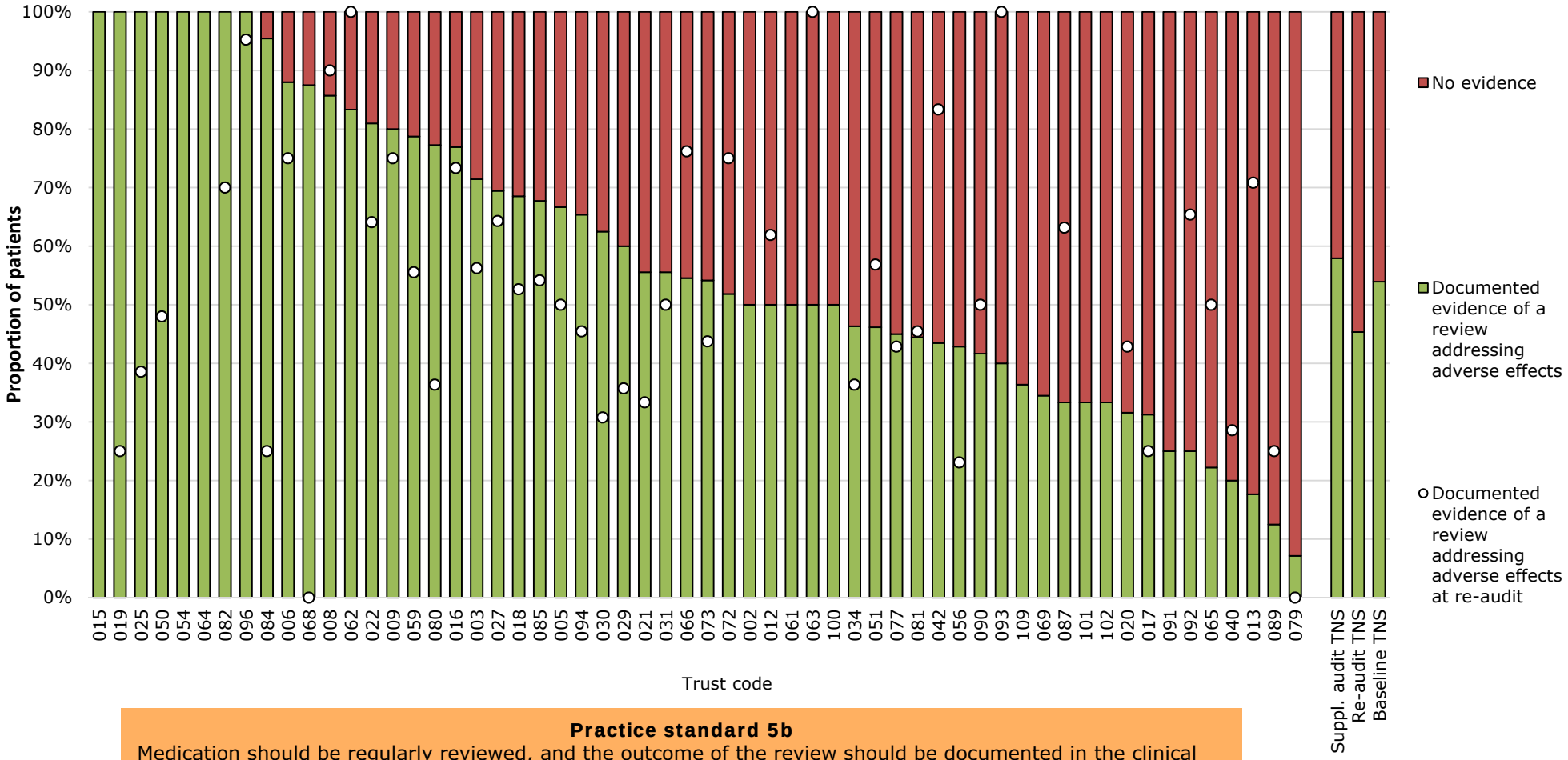
Figure 21. Proportion of patients for whom there was a documented medication review in the past six months addressing therapeutic response to the antipsychotic, in each Trust and the total national sample at supplementary audit (n=887)



Practice standard 5a
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of **therapeutic response.**

The Trusts with the highest proportion of patients with documented evidence of a review addressing therapeutic response to antipsychotic treatment are on the left hand side of the figure and the Trusts with the lowest proportion are on the right.

Figure 22. Proportion of patients for whom there is a documented medication review in the past six months addressing antipsychotic-related adverse events, in each Trust and the total national sample at supplementary audit (n=887)



Practice standard 5b

Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of **possible adverse effects.**

The Trusts with the highest proportion of patients with documented evidence of a review addressing adverse effects of antipsychotic treatment are on the left-hand side of the figure and the Trusts with the lowest proportion are on the right.

Clinical team level results

Analyses presented in this section were conducted for each clinical team from your Trust individually, for your total Trust sample and for the total national sample, to allow benchmarking.

Data from each clinical team are presented by code only.

The POMH-UK Central Project Team does not know the identity of individual clinical teams.

Only the Local POMH lead for your Trust or organisation has the key to clinical team codes. You should contact this person if you need to identify data for your own particular clinical team.

Charts in this section are ordered by frequency of key results so the position of teams in each figure will vary according to practice.

For Figures 23 to 31, the numbers on each section of the bar indicate the absolute number of patients while the height of each section of the bar indicates the proportion of patients in each category. Where the Figure shows performance against the standards, the team on the left is closest to the standards and the team on the right furthest away.

Prevalence of antipsychotic prescribing and characteristics of the audit sample

Figure 23. Distribution of dementia severity for each team, your Trust (n=185) and the total national sample at supplementary audit

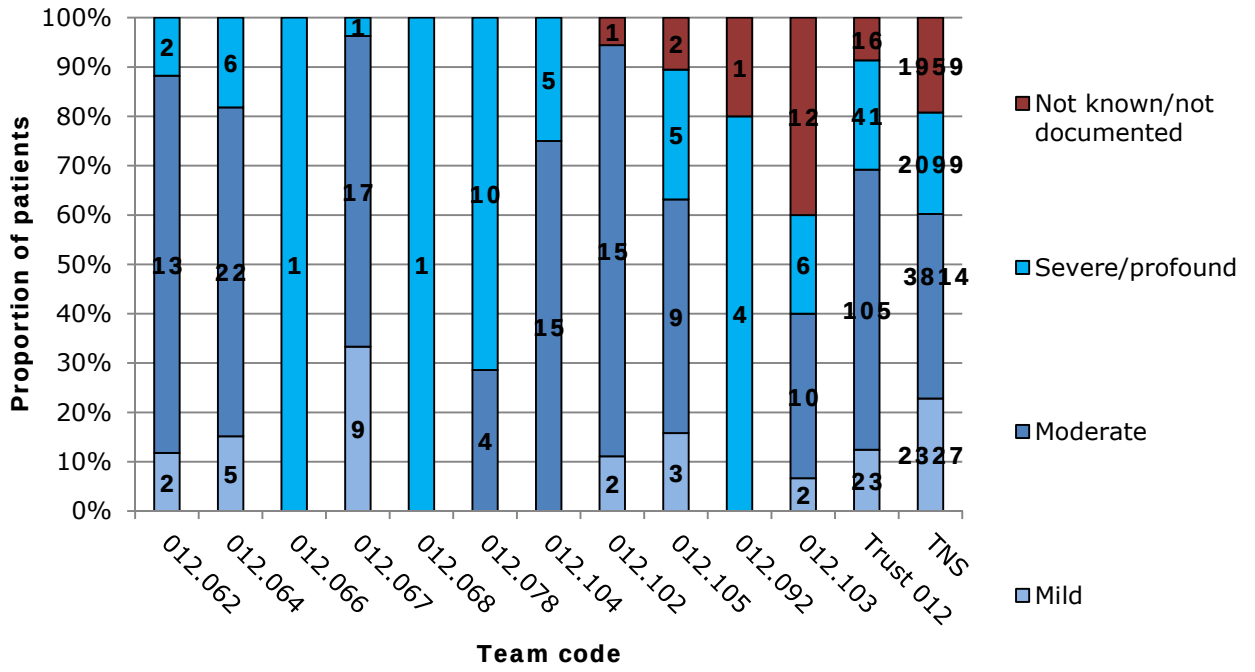
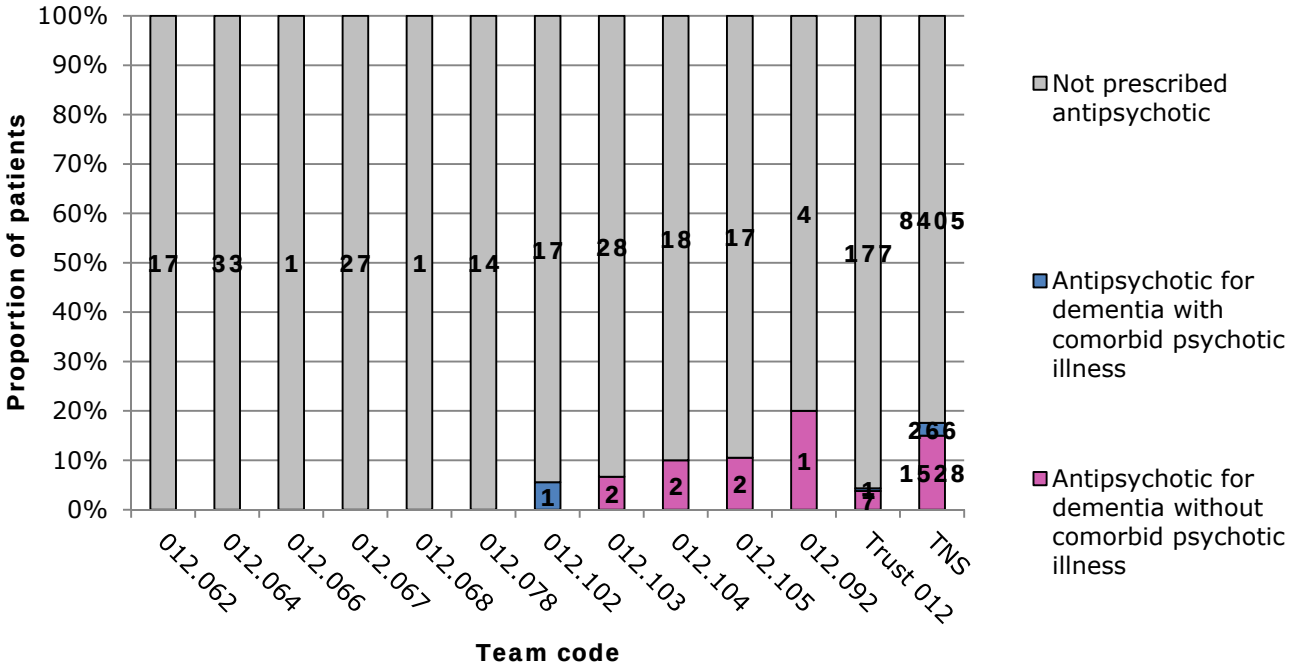


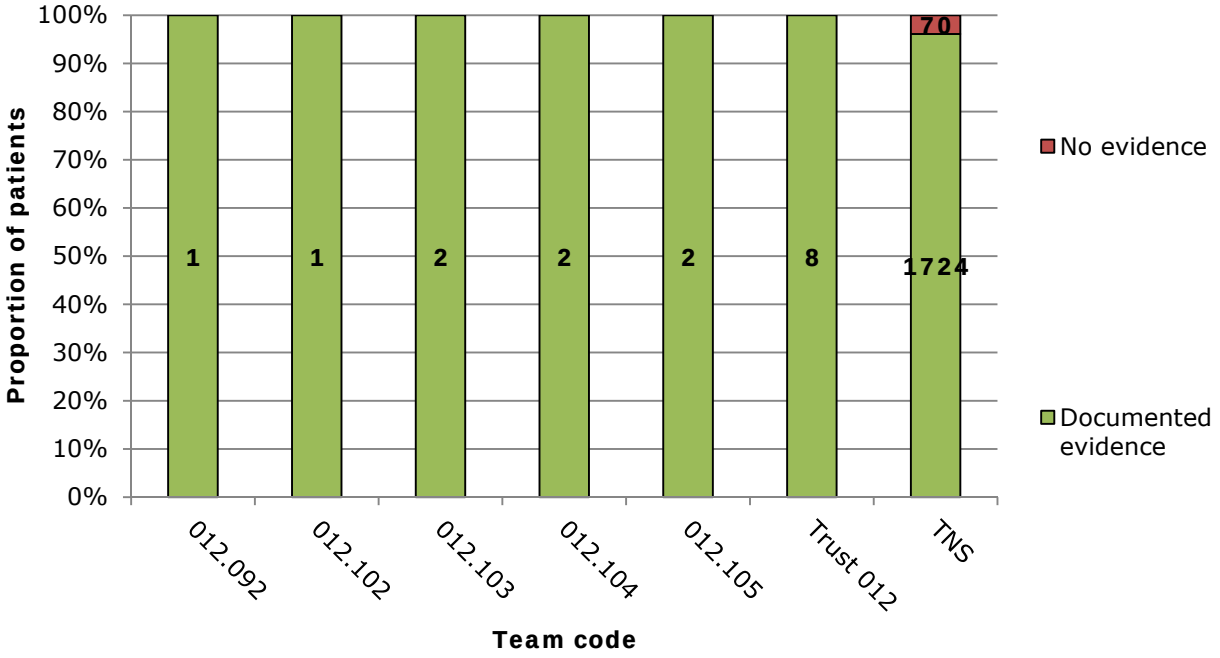
Figure 24. Antipsychotic prescribing prevalence for each team, your Trust (n=185) and the total national sample at supplementary audit



Antipsychotic prescribing practice

Practice standard 1
The clinical indications (target symptoms) for antipsychotic treatment should be clearly documented in the clinical records.

Figure 25. Proportion of patients prescribed an antipsychotic for whom the indication for antipsychotic prescribing is clearly documented, in each team, your Trust (n=8) and the total national sample at supplementary audit



Pre-treatment screening in patients recently initiated on antipsychotic medication

Underlying causes of behavioural and psychological symptoms in BPSD

Practice standard 2
Before prescribing antipsychotic medication for BPSD (behavioural and psychological symptoms of dementia), likely factors that may generate, aggravate or improve such behaviours should be considered.

Figure 26. Proportion of patients for whom there is documented evidence that potential underlying causes of BPSD were considered prior to antipsychotic prescription, in each team, your Trust (n=4) and the total national sample at supplementary audit

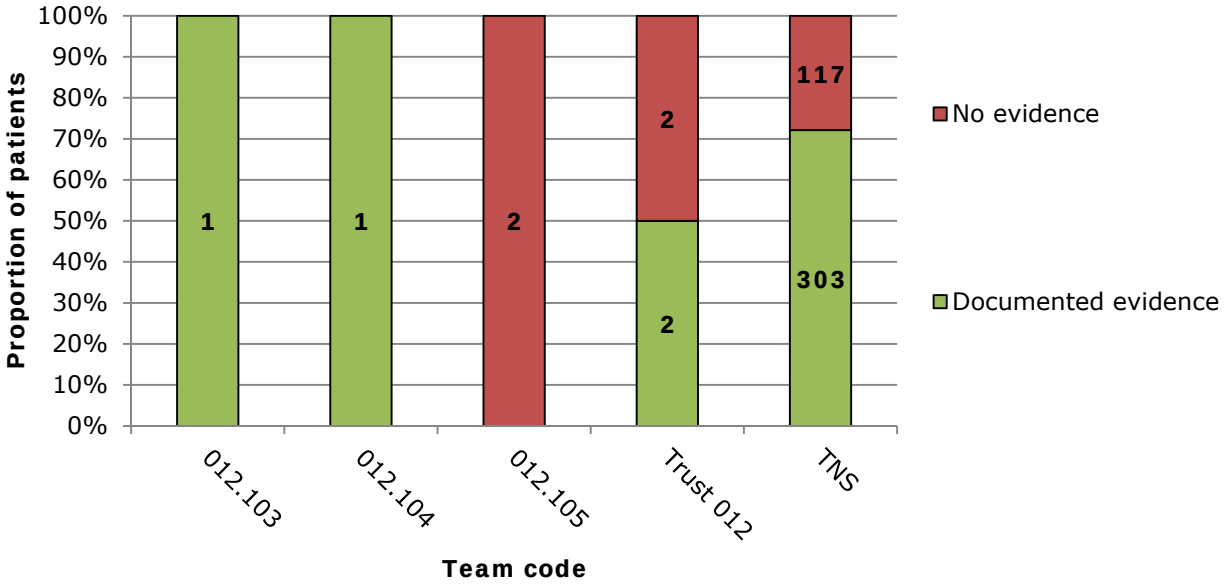
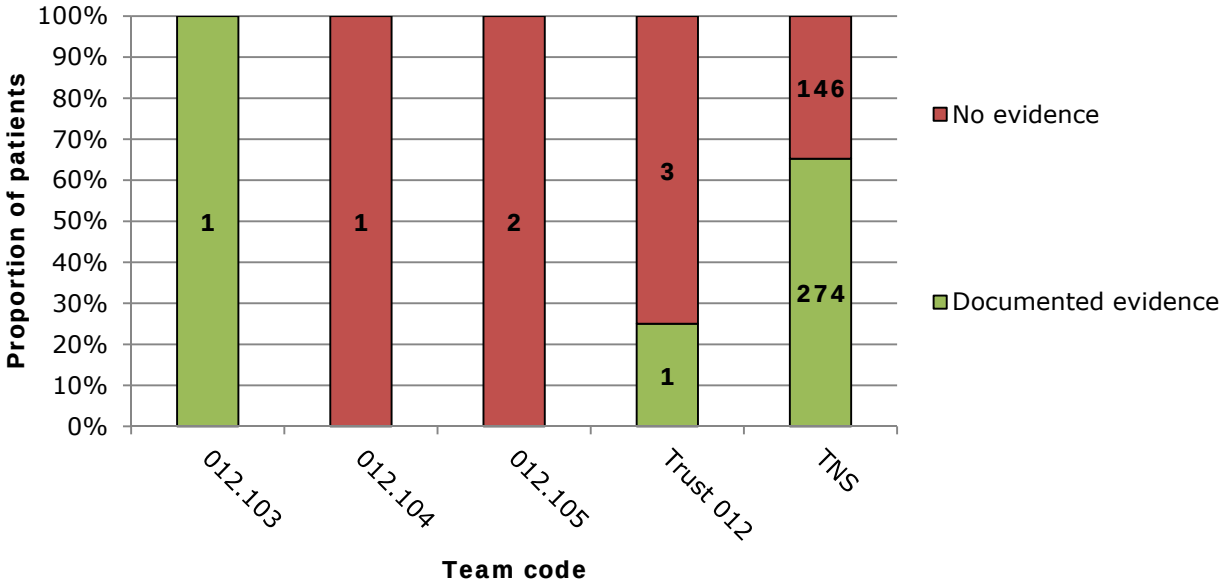
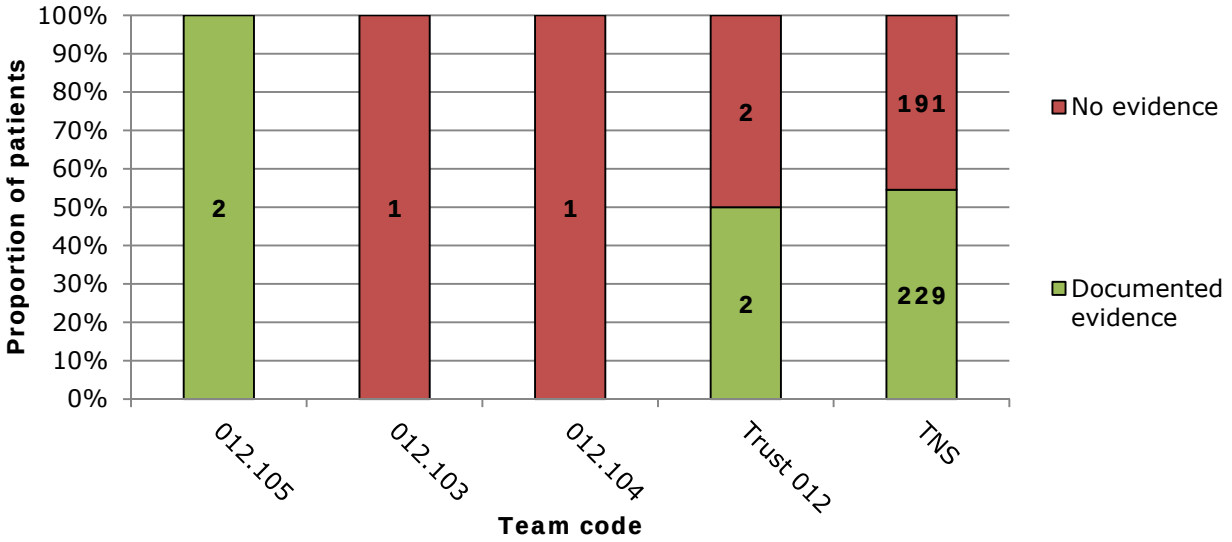


Figure 27. Proportion of patients for whom there is documented evidence that non-pharmacological interventions were tried prior to antipsychotic prescription, in each team, your Trust (n=4) and the total national sample at supplementary audit



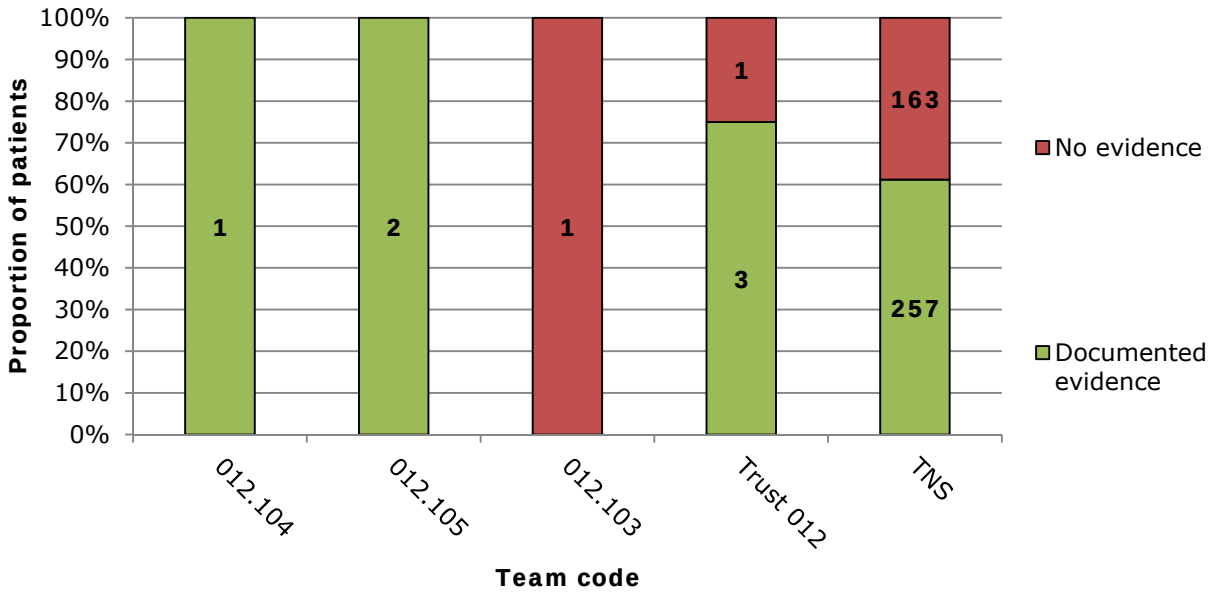
Practice standard 3
The potential risks and benefits of antipsychotic medication should be considered and documented by the clinical team, prior to initiation.

Figure 28. Proportion of patients for whom there is documented evidence that the potential risks and benefits of antipsychotic medication were considered and documented by the clinical team prior to antipsychotic prescription, in each team, your Trust (n=4) and the total national sample at supplementary audit



Practice standard 4
The potential risks and benefits of antipsychotic medication should be discussed with the patient and/or carer(s), prior to initiation.

Figure 29. Proportion of patients for whom there is documented evidence that the potential risks and benefits of antipsychotic medication were discussed with the patient and/or carer prior to antipsychotic prescription, in each time, your Trust (n=4) and the total national sample at supplementary audit

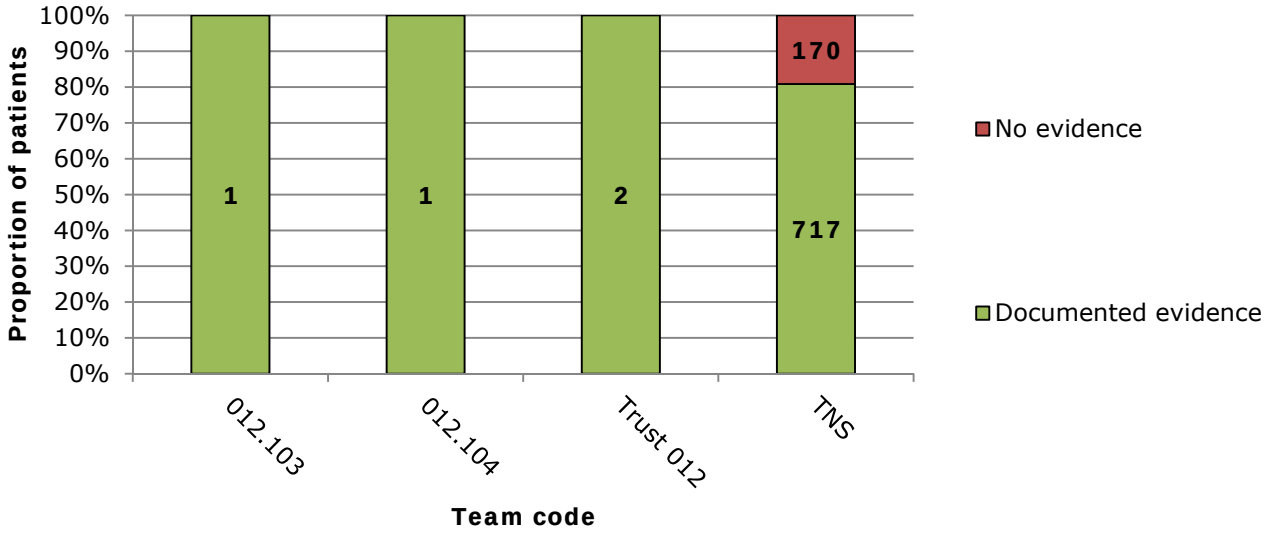


Long-term monitoring in patients on continuing antipsychotic medication

Medication review addressing therapeutic response

Practice standard 5
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of therapeutic response and possible adverse effects.

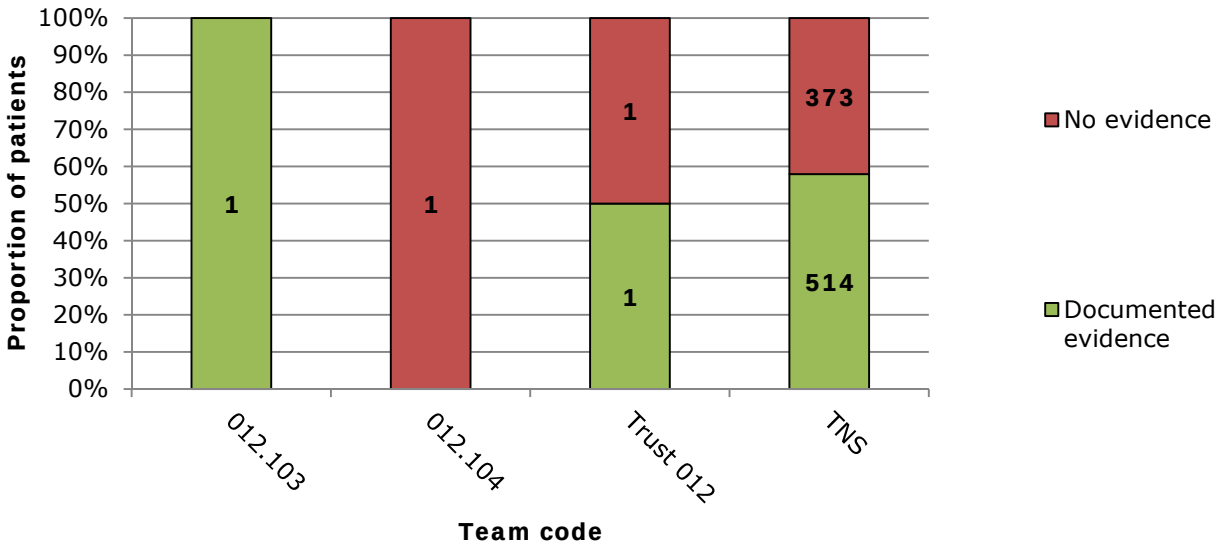
Figure 30. Proportion of patients who have had a documented medication review addressing therapeutic response in the past six months, in each team, your Trust (n=2) and the total national sample at supplementary audit



Medication review addressing adverse effects

Practice standard 5
Medication should be regularly reviewed, and the outcome of the review should be documented in the clinical records. The medication review should take account of therapeutic response and possible adverse effects.

Figure 31. Proportion of patients who have had a documented medication review addressing possible adverse effects in the past six months, in each team, your Trust (n=2) and the total national sample at supplementary audit



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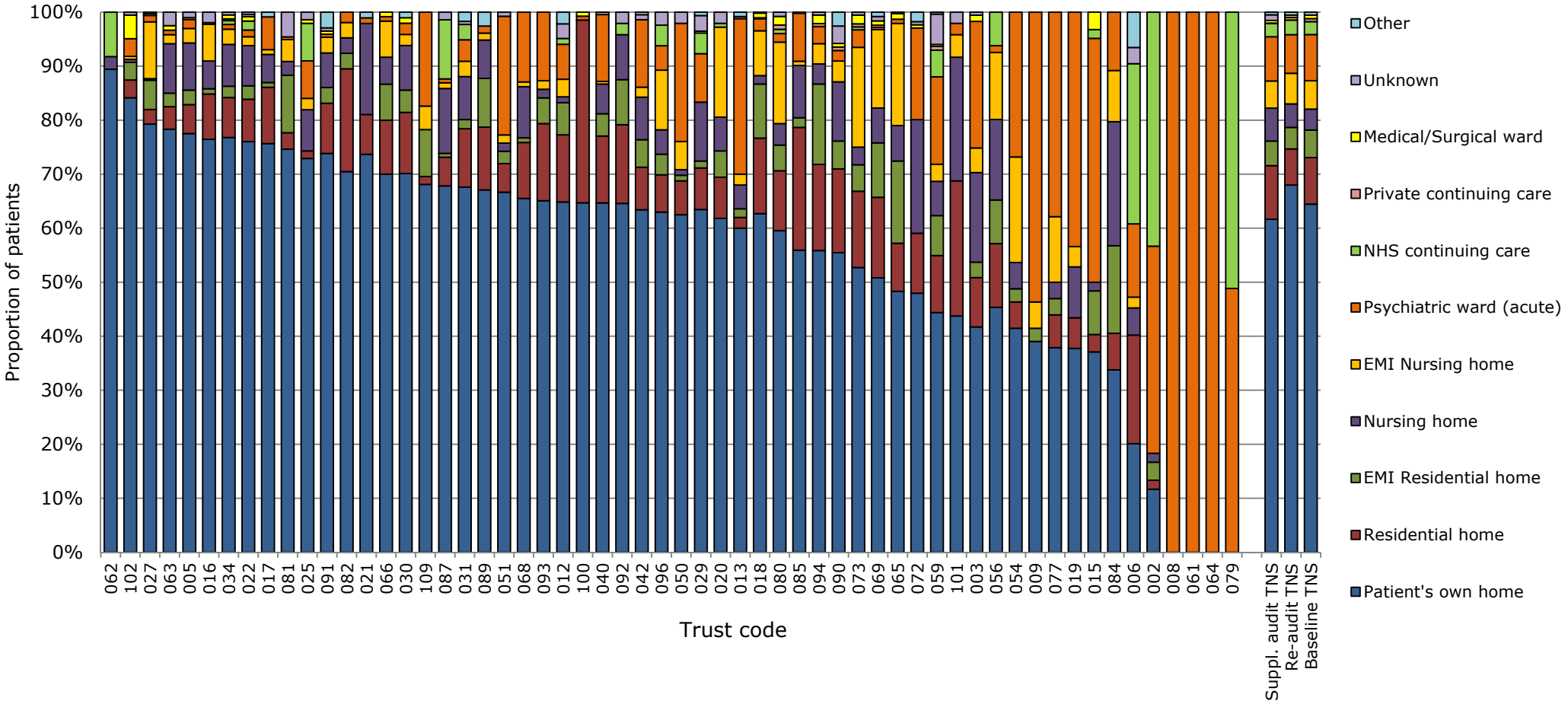
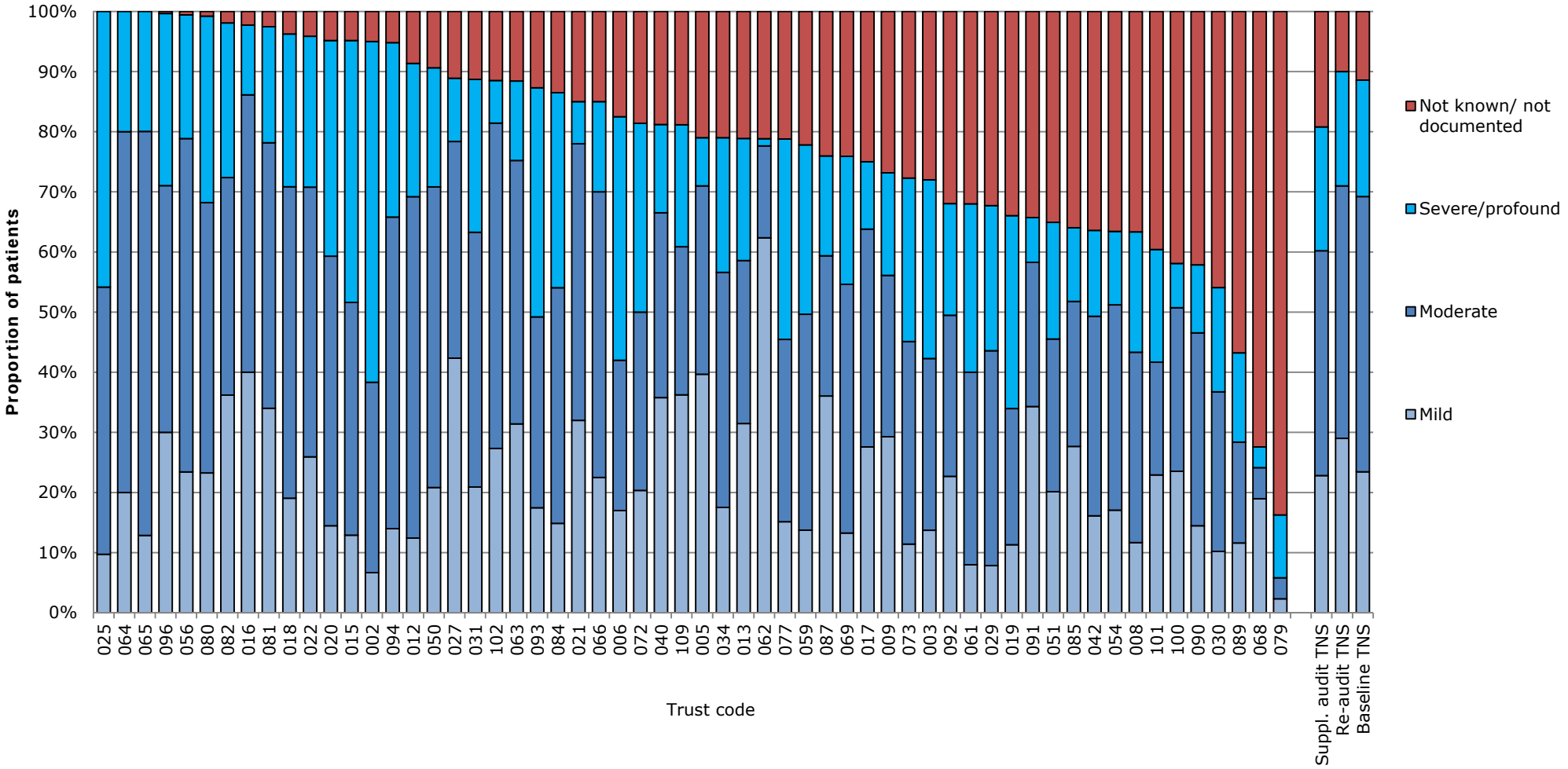
Appendix A: Patient clinical setting and dementia severity

Figure 32. Proportion of patients in each clinical setting for each Trust and the total national sample (n=10199)



The Trusts with the highest proportion of patients living in their own home are on the left-hand side of the figure and the Trust with the lowest proportion on the right.

Figure 33. Distribution of dementia severity for each Trust and the total national sample (n=10199)



The Trusts with the highest proportion of patients with a documented severity of dementia are on the left-hand side of the figure and the Trust with the lowest proportion on the right.

Appendix B: Participating Trusts

The Trusts and organisations that participated in this audit are listed below in alphabetical order.

5 Boroughs Partnership NHS Foundation Trust
Avon & Wiltshire Mental Health Partnership NHS Trust
Barnet, Enfield & Haringey MH NHS Trust
Belfast Health and Social Care Trust
Berkshire Healthcare NHS Foundation Trust
Betsi Cadwaladr University Health Board
Birmingham and Solihull Mental Health NHS Foundation Trust
Black Country Partnership NHS Foundation Trust
Bradford District Care Trust
Cambridgeshire and Peterborough NHS Foundation Trust
Camden and Islington NHS Foundation Trust
Central and North West London NHS Foundation Trust
Cheshire and Wirral Partnership NHS Foundation Trust
Cornwall Partnership NHS Foundation Trust
Coventry and Warwickshire Partnership Trust
Derbyshire Healthcare NHS Foundation Trust
Devon Partnership Trust
Dorset Healthcare University NHS Foundation Trust
East London NHS Foundation Trust
Greater Manchester West Mental Health NHS Foundation Trust
Hertfordshire Partnership University NHS Foundation Trust
Humber NHS Foundation Trust
Hywel Dda University Health Board
Isle of Wight NHS Trust
Kent and Medway NHS and Social Care Partnership Trust
Lancashire Care NHS Foundation Trust
Leeds and York Partnership NHS Foundation Trust
Leicestershire Partnership NHS Trust
Manchester Mental Health & Social Care NHS Trust
Mersey Care NHS Trust
NAViGO Health and Social Care CIC
Norfolk & Suffolk NHS Foundation Trust
North East London NHS Foundation Trust
North Essex Partnership NHS Foundation Trust
North Staffordshire Combined Healthcare NHS Trust
Northamptonshire Healthcare NHS Foundation Trust
Northumberland Tyne and Wear NHS Foundation Trust
Northumbria Healthcare NHS Foundation Trust
Nottinghamshire Healthcare NHS Trust
Oxford Health NHS Foundation Trust
Oxleas NHS Foundation Trust
Pennine Care NHS Foundation Trust
Rotherham, Doncaster and South Humber Mental Health NHS Foundation Trust
Sheffield Health & Social Care NHS Foundation Trust
Solent NHS Trust
Somerset Partnership NHS Foundation Trust
Southern Health NHS Foundation Trust
South Essex Partnership University NHS Foundation Trust
South London and Maudsley NHS Foundation Trust
South Staffordshire and Shropshire Healthcare NHS Trust
South West London and St George's Mental Health Trust
South West Yorkshire Partnership NHS Foundation Trust
St. Patrick's University Hospital
Surrey and Borders Partnership NHS Foundation Trust

Sussex Partnership NHS Foundation Trust
Tees, Esk and Wear Valleys NHS Foundation Trust
West London Mental Health NHS Trust
Worcestershire Health & Care Trust

Appendix C: Audit data collection tool

POMH-UK
PRESCRIBING OBSERVATORY FOR MENTAL HEALTH-UK
CCQI

This data collection tool relates specifically to the following quality improvement programme:

Prescribing antipsychotic medication for people with dementia
Topic 11c

ELIGIBLE PATIENTS: All patients with a diagnosis of dementia, whether or not they are prescribed antipsychotic medication.

COLLECTING DATA: To complete this audit form you should refer to the patient's clinical records. Clinical records include all electronic and paper notes, letters, and other patient information available to the clinical team.

Before collecting data, please refer to the **TOPIC GUIDANCE NOTES** at the end of this tool.

Data should be entered online at www.rcpsych.ac.uk/pomh/data. You will need to login using your POMH-UK login details to access the data entry webpage. If you do not know the log in details for your Trust, your Trust code and/or team code please contact your Trust's local POMH-UK lead in the first instance

SUBMITTING DATA: If you realise that you have made a mistake with data submission, you will be able to edit submitted data before the data entry period ends.

Please refer to the **DATA ENTRY GUIDANCE NOTES** for instructions on how to do this. You will not be able to correct your submitted data after the data entry period ends.

For further assistance, please email pomh-uk@rcpsych.ac.uk or call POMH-UK on 020 3701 2698.

Data may be collected anytime during the period: 4 April to 29 April 2016

Data should be submitted online to POMH-UK from 2 May to 27 May 2016.

This form is intended for use as part of the POMH-UK Topic 11 quality improvement programme only and may not be suitable for other purposes.

Trust and team information (complete for all patients)

Q1 Trust identifier
The Trust identifier is a 3-digit code (e.g. 044)

☐☐☐

Q2 Team identifier
(The team identifier is your 3-digit Trust code followed by 3-digit team code e.g. 044.006). Please ensure that the first 3 digits match the Trust code entered in Q1. Your team codes are known only to your Trust. The POMH-UK team cannot tell you what your team code is.

☐☐☐ . ☐☐☐

Q3 Optional additional identifier
This field gives your Trust the option of identifying data by site, lead consultant, or any other variable you wish. Your Trust can decide whether or not to use this field. Enter any numerical code you like in this field and keep a record for yourselves of what it means. If you don't want to use an additional identifier, simply leave this field blank.

☐☐☐☐☐

Q4 Initials of data collector
Enter your own initials in this field (e.g. SB). This will enable your team to identify you should we need to query something about the data that have been entered.

☐☐☐☐

Patient information (complete for all patients)

Q5 Patient identifier
Please assign a numerical code to each patient on whom data are collected, for example Joe Bloggs=1, Jane Bloggs=2. Keep a record of these codes so you can identify patients should there be data cleaning queries.

☐☐☐☐

Q6 Patient's year of birth
(YYYY e.g. 1998)

☐☐☐☐

Q7 Patient's gender (Please use patient's self-defined gender)

☐ *Male* ☐ *Female*

Q8 Patient's self-assigned ethnicity as recorded in case notes

☐ *White British/Irish or White Other* ☐ *Asian/Asian British* ☐ *Mixed* ☐ *Not stated/ refused*
☐ *Black/Black British* ☐ *Chinese* ☐ *Other ethnic group* ☐ *Not collected*

Q9 What is this patient's current clinical setting?

☐ *Patient's own home* ☐ *Residential home* ☐ *EMI Residential home*
☐ *Nursing home* ☐ *EMI Nursing home* ☐ *Psychiatric ward (acute)*
☐ *NHS continuing care* ☐ *Private continuing care* ☐ *Medical/Surgical ward*
☐ *Unknown* ☐ *Other**

** Please specify if "other" or if you are unsure which category to tick* ☐

Q10 Is the patient currently detained under the Mental Health Act?

☐ *Yes* ☐ *No*

Q11 Patient's subtype of dementia (ICD-10 category) (see guidance notes)

☐ *Dementia in Alzheimer's disease: (F00, G30)*
☐ *Dementia in Alzheimer's disease, atypical or mixed type: (F00.2, G30.8)*
☐ *Vascular dementia: (F01)*
☐ *Dementia in Parkinson's disease: (F02.3, G20)*
☐ *Dementia, other (inc frontotemporal dementia): (F02, e.g. G31.0)*
☐ *Unspecified dementia: (F03)*
☐ *Subtype not yet determined*

Q12 Severity of dementia (see guidance notes for further information)

☐ *Mild* ☐ *Moderate* ☐ *Severe/profound* ☐ *Not known/not documented*

Q13 Other psychiatric diagnoses (see guidance notes) tick all that apply

☐ *Delirium: (F05)*
☐ *Schizophrenia spectrum disorder: (F20-F29)*
☐ *Bipolar disorder: (F31)*
☐ *Depression: (F32-F39) (excluding psychotic depression, F32.3)*
☐ *Psychotic depression: (F32.3)*
☐ *Neurotic, stress-related and somatoform disorders (including anxiety disorders): (F40-F48)*
☐ *Mental retardation/ learning disability: (F70-F79)*
☐ *Other psychiatric diagnosis**
☐ *None documented*

**If ticked other above, please specify*

Q14 Please tick any of the following regular medications that the patient is currently prescribed. No dosage, administration or other information is required. (see guidance notes for further information)

	Regular prescription	*PRN prescription*
Analgesic	☐	☐
Anticholinergic (see list in guidance notes)	☐	☐
Antidepressant - SSRI	☐	☐
Antidepressant - trazodone	☐	☐
Antidepressant - other than SSRI or trazodone	☐	☐
Carbamazepine	☐	☐
Cholinesterase inhibitor (see list in guidance notes)	☐	☐
Lamotrigine	☐	☐
Lorazepam	☐	☐
Benzodiazepine - other than lorazepam	☐	☐
Melatonin	☐	☐
Memantine	☐	☐
Memory enhancing drug - other than a cholinesterase inhibitor or memantine	☐	☐
Pregabalin	☐	☐
Valproate	☐	☐
Z-hypnotics	☐	☐
Other*	☐	☐

**If ticked other above, please specify*

Q15 Is the patient currently prescribed an antipsychotic (regular and/or PRN)?

☐ *Yes* ☐ *No*

! Stop here if the patient is not prescribed an antipsychotic

Antipsychotic medication prescribed

Complete the following for all patients with dementia who are currently prescribed an antipsychotic

Provide details below for each oral or short-acting IM antipsychotic medication currently prescribed (see guidance notes for further information) **NOTE: for PRN doses enter the prescribed max mg a day that could be administered**

Example: Please enter 500 micrograms (0.5 mg) as **Risperidone** regular oral daily mg: 0.5 0

Q16 **Amisulpride:**
regular oral daily mg
PRN oral max daily mg

Q17 **Aripiprazole:**
regular oral daily mg
PRN oral max daily mg
regular IM daily mg
PRN IM max daily mg

Q18 **Asenapine:**
regular oral daily mg
PRN oral max daily mg

Q19 **Benperidol:**
regular oral daily mg
PRN oral max daily mg

Q20 **Chlorpromazine:**
regular oral daily mg
PRN oral max daily mg
regular IM daily mg
PRN IM max daily mg

Q21 **Clozapine:**
regular oral daily mg
PRN oral max daily mg

Q22 **Flupentixol:**
regular oral daily mg
PRN oral max daily mg

Q23 **Haloperidol:**
regular oral daily mg
PRN oral max daily mg
regular IM daily mg
PRN IM max daily mg

Q24 **Levomepromazine:**
regular oral daily mg
PRN oral max daily mg
regular IM daily mg
PRN IM max daily mg

Q25 **Lurasidone:**
regular oral daily mg
PRN oral max daily mg

Q26 **Olanzapine:**
regular oral daily mg
PRN oral max daily mg
regular IM daily mg
PRN IM max daily mg

Q27 **Paliperidone:**
Regular oral daily mg
PRN oral max daily mg

Q28 **Pericyazine:**
regular oral daily mg
PRN oral max daily mg

Q29 **Perphenazine:**
regular oral daily mg
PRN oral max daily mg

Q30 **Pimozide:**
regular oral daily mg
PRN oral max daily mg

Q31 **Promazine:**
regular oral daily mg
PRN oral max daily mg
regular IM daily mg
PRN IM max daily mg

Q32 **Quetiapine:**
regular oral daily mg
PRN oral max daily mg

Q33 **Risperidone:**
regular oral daily mg
PRN oral max daily mg

Q34 **Sertindole:**
regular oral daily mg
PRN oral max daily mg

Q35 **Sulpiride:**
regular oral daily mg
PRN oral max daily mg

Q36 **Trifluoperazine:**

regular oral daily mg

PRN oral max daily mg

Q37 **Zotepine:**

regular oral daily mg

PRN oral max daily mg

Q38 **Zuclopenthixol:**

regular oral daily mg

PRN oral max daily mg

None of the above oral or short-acting IM antipsychotic medications are currently prescribed (please note ticking this box will remove all values from the boxes in this question) ☐

Complete below for each depot or long-acting antipsychotic prescribed for administration within the last 4 weeks.

If the prescription has changed in the last 4 weeks, enter the most recently prescribed dose only.

Q39 **Aripiprazole:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q40 **Flupentixol decanoate:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q41 **Fluphenazine decanoate:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q42 **Haloperidol decanoate:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q43 **Olanzapine:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q44 **Paliperidone:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q45 **Risperidone:**

Single dose (mg)

Regular IM (mg)

Injection interval (weeks)

Q46 **Zuclopenthixol acetate (Clopixol Acuphase):**

Single dose (mg)

Regular IM (mg)

Injection interval (days)

Q47 **Zuclopenthixol decanoate:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

None of the above depot or long-acting antipsychotic medication in this question ☐
(please note ticking this box will remove any values from the boxes in this question)

Clinical indications and antipsychotic prescribing

Q48 Where the most recently prescribed antipsychotic medication initiated?

☐ *Primary care* ☐ *Secondary care* ☐ *Unknown/unclear*

Q49 Where is this antipsychotic medication currently prescribed?

☐ *Primary care* ☐ *Secondary care* ☐ *Unknown/unclear*

Q50 For how long has this antipsychotic medication been prescribed?

☐ *Less than 3 months* ☐ *6 months - 1 year*

☐ *3 months - less than 6 months* ☐ *Longer than 1 year*

Q51 What is the total duration of treatment with antipsychotic medication (regular and/or PRN) to date, including the one most recently prescribed
(see guidance notes for further information)?

☐ *Less than 3 months* ☐ *6 months - 1 year*

☐ *3 months - less than 6 months* ☐ *Longer than 1 year*

Q52 Documented clinical indications/target symptoms. Please record below all clinical reasons for prescribing the current antipsychotic medications (s) in this patient, as documented in the clinical records at the time of initiation or at subsequent review
(please tick all that apply)

☐ *Known psychotic illness such as schizophrenia, bipolar disorder, psychotic depression*

☐ *Evident or assumed psychotic symptoms (delusions/hallucinations/paranoia/ suspiciousness not due to known psychiatric illness as in the previous box)*

☐ *Depression/low mood*

☐ *Disturbed sleep*

☐ *Fear/anxiety*

☐ *Agitation*

☐ *Distress*

☐ *Verbal aggression*

☐ *Physical aggression*

☐ *Disinhibited behaviour (e.g. removing clothes)*

☐ *Resisting help with activities of daily living such as hygiene, eating, drinking, dressing, etc.*

☐ *Wandering*

☐ *Unclear*

☐ *Other (e.g. emotional/affective instability)**

**If other, please state*

! Stop here if the patient has a diagnosis of F20-29(schizophrenia), F31(bipolar disorder) or F32.2(psychotic depression)

Complete Q53-Q56 for all who do not have a diagnosis of F20-29 (schizophrenia), F31 (bipolar disorder) or F32.3 (psychotic depression) and whose total duration of treatment with antipsychotic medication is less than 3 months

Q53 Is there documented evidence that the following potential underlying causes of BPSD (behavioural and psychological symptoms in dementia) were considered (see guidance notes for further information).

- ☐ *Depression*
- ☐ *Anxiety*
- ☐ *Pain*
- ☐ *Side effects of medication prescribed at the time*
- ☐ *Physical illness (constipation, UTI, chest infections, heart failure, etc)*
- ☐ *Other causes(s)**
- ☐ *No documented evidence*

**If other, please state*

Q54 Is there documented evidence that any of the following non-pharmacological interventions were tried before an antipsychotic was prescribed? Please tick all that apply (see guidance notes for further information).

- ☐ *Engagement in social/personal activities*
- ☐ *Changes to staff approach (e.g. behavioural approach, distraction techniques)*
- ☐ *Changes to the environment (e.g. lighting, TV, availability of quiet areas, orientation aids)*
- ☐ *Watchful waiting/monitoring*
- ☐ *Other approaches (e.g. reminiscence therapy, aromatherapy, multi-sensory stimulation, therapeutic use of music and/or dancing, animal assisted therapy, massage, etc)*
- ☐ *No documented evidence*
- ☐ *Other causes(s)**

**If other, please state*

Q55 Is there documented evidence that risk/benefit analysis regarding antipsychotic medication was carried out (taking account of severity of BPSD, risk of side effects, risk of stroke, etc.)? (see guidance notes for further information)

- ☐ Yes
- ☐ *No*

Q56 Is there documentation that the patient and/or carer(s) were consulted about the risks and benefits, prior to antipsychotic initiation? Please tick all that apply

- ☐ *Patient consulted*
- ☐ *Care worker consulted*
- ☐ *Family carer consulted*
- ☐ *No documentation of patient/carer consultation*

Complete Q57-60 for all who do not have a diagnosis of F20-29 (schizophrenia), F31 (bipolar disorder) or F32.3 (psychotic depression) and whose total duration of treatment with antipsychotic medication is more than 3 months

Q57 Is there documented evidence in the clinical records of a medication review addressing therapeutic response in the past 6 months?
Please tick all that apply, leave blank if nothing is documented

	Oct 2015	*Nov 2015*	*Dec 2015*	*Jan 2016*	*Feb 2016*	*Mar 2016*
Medication review by *primary care* addressing therapeutic response	☐	☐	☐	☐	☐	☐
Medication review by *secondary care* addressing therapeutic response	☐	☐	☐	☐	☐	☐

Q58 Is there documented evidence in the clinical records of a medication review considering/addressing the following possible adverse events, in the past 6 months?
Please tick all that apply, leave blank if nothing is documented

	Oct 2015	*Nov 2015*	*Dec 2015*	*Jan 2016*	*Feb 2016*	*Mar 2016*
Mobility	☐	☐	☐	☐	☐	☐
Falls	☐	☐	☐	☐	☐	☐
Sedation	☐	☐	☐	☐	☐	☐
Low blood pressure	☐	☐	☐	☐	☐	☐
Chest infection	☐	☐	☐	☐	☐	☐
Anticholinergic side effects (e.g. constipation, blurred vision, urine retention, dry mouth)	☐	☐	☐	☐	☐	☐

Q59 Is there documented evidence of the patient and/or carer being involved in any of the medication reviews identified in Q57 or Q58 above?

- ☐ *Yes*
- ☐ *No*
- ☐ *Not applicable. (e.g. neither patient or carer were able to participate due to there being no carer, carer was unavailable, or patient lacked capacity)*

Q60 Is the outcome of the most recent medication review clearly documented (e.g. medication warrants continuation unchanged, change in dosage required, change of antipsychotic drug required)?

- ☐ *Yes*
- ☐ *No*
- ☐ *No documented review*

All data should be collected: 4 April to 29 April 2016
These data should be submitted online to POMH-UK: 2 May to 27 May 2016

Data should be entered online at www.rcpsych.ac.uk/pomh/data. You will need to login using your POMH-UK login details to access the data entry webpage.

If you do not know the login details for your Trust, your Trust code and/or team code, please contact your Trust's local POMH-UK lead in the first instance.

If you have made a mistake with data submission, you are able to edit submitted data before the data entry period ends. Please refer to the DATA ENTRY GUIDANCE NOTES for further details. If you cannot correct your data or have a question, please email POMH at pomh-uk@rcpsych.ac.uk.

Guidance notes

Q1: Trust code

Your code is known only to your Trust and the POMH-UK Central Project Team. It will allow you to identify your own data in national reports but remain anonymous to other members and non-members.

Q2: Team identifier

Your team identifiers are known only to your local POMH-UK project lead and yourselves, allowing you to identify individual teams from data presentations whilst they remain anonymous to others viewing the data.

Please allocate your teams a code that includes your Trust code and a three digit team code (e.g. Trust 44 might have teams 044.001, 044.002 etc). Teams which are participating for the first time should be numbered consecutively from the highest number previously used (in the previous example, this would be 044.003)

Please contact POMH-UK if you require further clarification.

Q3: Optional additional identifier

This field gives your team the option of identifying data by site, clinical team, lead consultant or any other variable you wish. You can decide as a team whether or not to use this field. Enter any numerical code you like in this field and keep a record for yourselves of what it means. Do not tell POMH-UK what this code means. If you choose to use this field we can send you your data file for further analysis by this code. If you do not want to use an additional identifier simply leave this field blank.

Q4: Initials of data collector

Enter your own initials in this field (e.g. SM). This will enable your team to idenfity you should we need to query something about the data collected.

Q5: Patient identifier

You may want to assign a numerical code to each patient on whom data is collected, for example Joe Bloggs=1, Jane Bloggs=2. Enter the relevant code in the field 'Patient identifier' on every data collection form. Keep a record of these codes so you can follow up on patients for whom outlying data is recorded. We will refer to individual patient data by code only and will not be able to identify actual patients ourselves.

Q6: Patient's year of birth

Enter as a 4 digit number e.g. 1938.

Q8: Patient's ethnicity

The options in this field map onto national census data and each category includes the following ethnic groups:

- White (White British, White Irish & other White)
- Black (Black Brtiish, Black Carribean, Black African & other Black)
- Asian (Asian British, Indian, Pakistani, Bangladeshi & other Asian)
- Chinese
- Mixed (Asian & Black / Asian & White / Black & White / other mixed)
- Other ethnic group (any other ethnic group)

Q9: Current patient setting

- 'Patient's own home' includes sheltered housing and specialised supported living
- 'Residential home' includes 24-hour care homes
- 'EMI residential home' as registered with the Care Quality Commission (CQC). If you are unsure of the EMI status, please tick 'Residential home'
-'EMI nursing home' as registered with the Care Quality Comission (CQC). If you are unsure of the EMI status, please tick 'Nursing home'
- 'NHS/Private continuing care' includes long-stay wards and is generally a more specialised level of care than EMI homes'

Q12: Severity of dementia
Please use the clinican's assessment of dementia severity where this has been recorded in the clinical records.

The MMSE score may also be used, although it is not an accurate proxy for the severity of dementia in certain cases, for example people with a learning disability or for whom English is not a first language. However if the severity is not recorded as mild/moderate/severe, please see below as an approximate guide.
- Mild: MMSE 21-30
- Moderate: MMSE 11-20
- Severe: MMSE 0-10

If neither a clinician's assessment of the severity of dementia or MMSE is documented, please select 'not known/not documented'

Q14: Cholinesterase inhibitors include donepozil, rivastigmine and galantamine. 'Anticholinergic' (antimuscarinic) medications include tolterodine, oxybutynin and procyclidine.
'Other' medication - please do not include medications for physical conditions such as insulin, statins etc

Q16-47: Each set of antipsychotics (first oral & short-acting IM, then depot & long-acting IM) is listed in alphabetical order. Complete the dosage information for each drug that is prescribed to that patient and leave others blank.
NOTE: when entering dosage information for PRN medicaion, enter the maximum mg prescribed, e.g. the amount that could be administered. For example, if a patient is prescribed chlorpromazine 50-100mg 4 hourly PRN, the maximum daily dose that could be administered is 100mg six times a day, a total of 600mg.

Q50: If the patient was prescribed one or more antipsychotics (regular and/or PRN) before the most recently prescribed antipsychotic, what is the total duration of treatment with any antipsychotic, to date?
If there is no documentation in the notes regarding the initiation of an antipsychotic by another service, this question refers to the first time your service was involved in the patient's care and knew about the antipsychotic prescription.

Q52: 'Side effects of medication prescribed at the time' - this could include initiating a prescription, altering the dose, frequency or drug, or withdrawing the prescription.
'Physical illness' - this would include documentation of a physical examination
'BPSD' - (behavioural and psychological symptoms in dementia) refers to psychological symptoms such as depression, anxiety, and delusions, and observed behaviour such as agitation, aggression, wandering, and sleep disturbance.

Q54: Risk/benefit analysis' - it is recommended that a member of staff with a clinical background assist with this question. The clinical records could include specific mention of cardiovascular risk, metabolic side effects, physical health etc. Statements may also include phrases such as 'on balance the decision to prescribe was....', ' after discussion of the risks it was decided...', or 'risks discussed with carer'

Q55 onwards: 'Carer' may refer to any professional (including care workers), friend or family member considered to be a carer for the patient, whether paid or unpaid.

Appendix D: POMH-UK Central Team

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