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PRESCRIBING OBSERVATORY FOR MENTAL HEALTH-UK

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# The use of depot/long-acting injectable (LAI) antipsychotic medication for relapse prevention

POMH-UK Quality Improvement Programme. Topic 17a: baseline

Prepared by the Prescribing Observatory for Mental Health-UK for:

**East London NHS Foundation Trust**

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# Table of contents

# 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 7. This provides an overview of national performance against the practice standards. It also provides some broader observations relating to national prescribing practice (page 12) that may usefully prompt local reflection and discussion.

## Practice standards

Page 7 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 17 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 19. 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 results

The analyses presented in this section, starting on page 34, 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 an 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.

## Clinical team level results

This section starts on page 45. 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.

# List of figures

# List of tables

# Executive summary

### Background

The Prescribing Observatory for Mental Health (POMH-UK) runs clinical 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 baseline audit for QIP 17: The use of depot/long-acting injectable (LAI) antipsychotic medication for relapse prevention.

# Practice standards

The standards are derived from NICE Guideline CG178 'Psychosis and schizophrenia in adults: prevention and management'.

The audit data presented provide evidence of compliance with these practice standards for clinical services in each Trust and in the national sample.

### PRACTICE STANDARDS FOR AUDIT

| 1 **Care plan** | |
|---|---|
| 1a | A patient's care plan should be accessible in the clinical records |
| 1b | There should be documented evidence that the patient was involved in the generation of their care plan |
| 1c | A patient's relapse 'signature' signs and symptoms should be documented in their care plan |
| 1d | The care plan should include a crisis plan |
| 1e | The care plan should include a clinical plan for response to default from treatment, i.e. if a patient fails to attend an appointment for administration of their depot injection or declines their depot injection |

| 2 **Depot/long-acting injectable antipsychotic medication: prescription and review** | |
|---|---|
| 2a | A clear rationale for initiating a depot/long-acting injectable antipsychotic medication should be documented in the clinical records |
| 2b | Review of antipsychotic medication should be conducted at least annually by the prescriber/psychiatrist in the responsible clinical team |
| 2c | Medication review should include consideration of therapeutic response, adverse effects and adherence. |

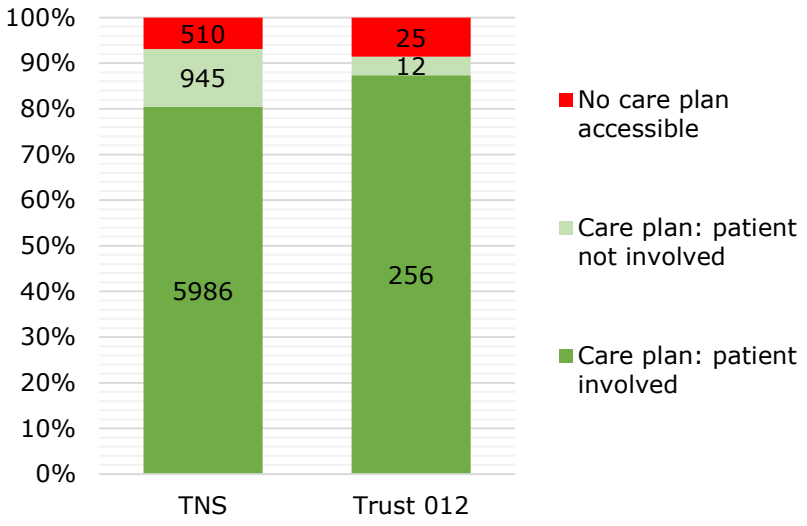
# Key national findings

## Performance against practice standard 1

| | |
|---|---|
| 1a | A patient's care plan should be accessible in the clinical records |
| 1b | There should be documented evidence that the patient was involved in the generation of their care plan |

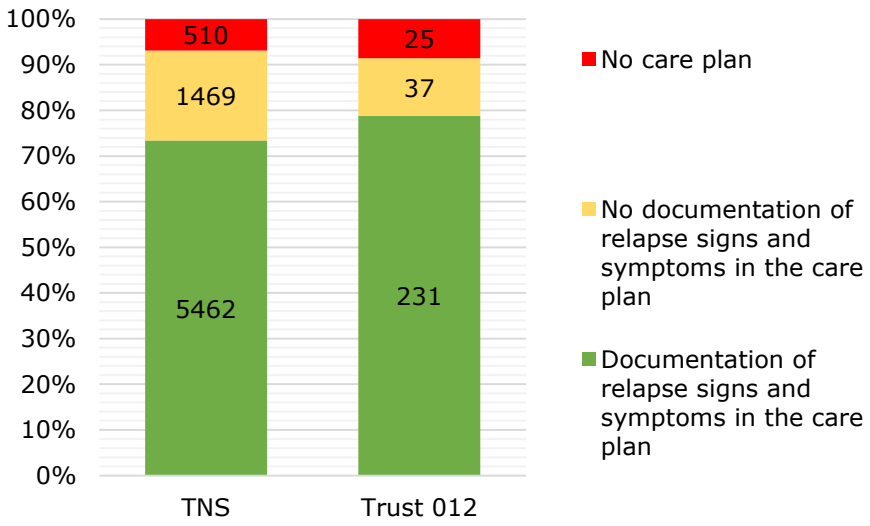
In the total national sample, four patients in every five (80%) had been involved in the development of their care plan. However, there was no accessible care plan for 7% of patients.

**Figure 1. Accessibility of care plans and patients' involvement: total national sample (n=7441) and your Trust (n=293), 2017 baseline audit**




| | |
|---|---|
| 1c | A patient's relapse 'signature' signs and symptoms should be documented in their care plan |

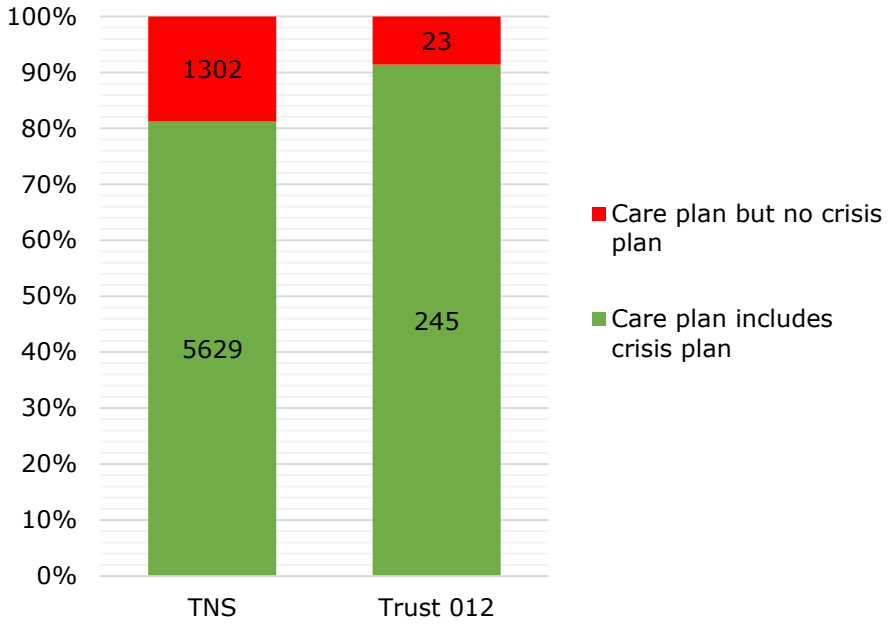
**Figure 2. Documentation of relapse signs and symptoms in patients' care plans: total national sample (n=7441) and your Trust (n=293), 2017 baseline audit**



| 1d | The care plan should include a crisis plan |
|---|---|

**Figure 3. The proportion of patients' care plans that included a crisis plan: national sub-sample (n=6931)* and your Trust (n=268), 2017 baseline audit**

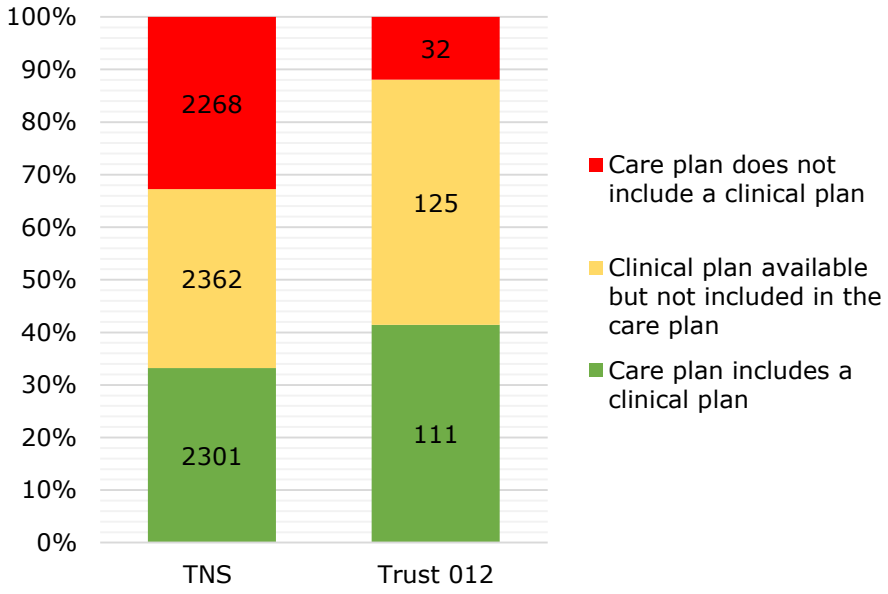
In the total national sample, 93% of patients had a care plan that was accessible in their clinical records and of these, 82% included a crisis plan.




*510 patients in the total national sample did not have a care plan

| 1e | The care plan should include a clinical plan for response to default from treatment, i.e. if a patient fails to attend an appointment for administration of their depot injection or declines their depot injection |
|---|---|

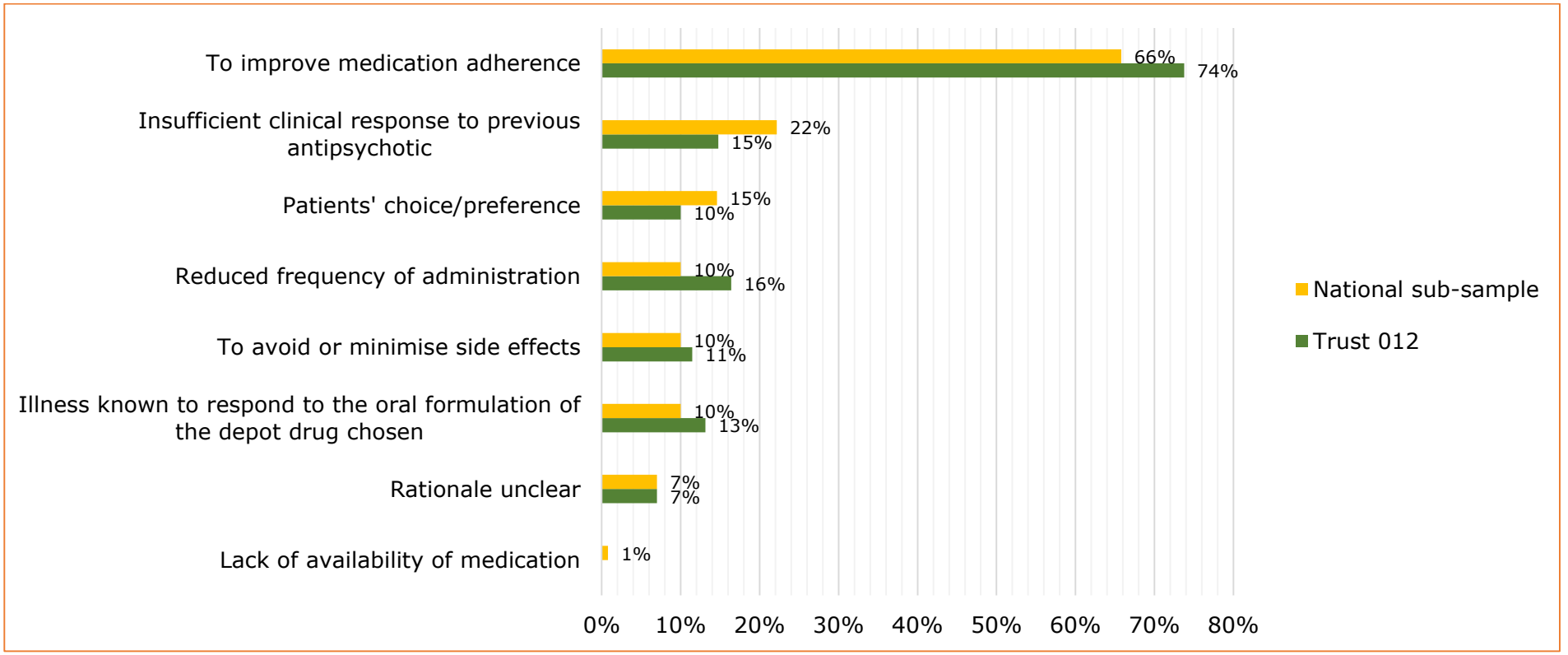
**Figure 4. The proportion of patients' care plans that included a clinical plan addressing default from treatment: national sub-sample (n=6931) and your Trust (n=268), 2017 baseline audit**



## Performance against practice standard 2

| 2a | A clear rationale for initiating a depot/long-acting injectable antipsychotic medication should be documented in the clinical records |
|---|---|

**Figure 5. Clinical rationale for initiating current depot/LAI antipsychotic medication*: national sub-sample (n=1515) and your Trust (n=61), 2017 baseline audit**




*There may be more than one clinical rationale for initiating current depot/LAI medication in some patients.

| | |
|---|---|
| 2b | Review of antipsychotic medication should be conducted at least annually by the prescriber/psychiatrist in the responsible clinical team |
| 2c | Medication review should include consideration of therapeutic response, adverse effects and adherence. |

**Figure 6. Medication reviews documented in the clinical records in the past year: national sub-sample (n=5042) and your Trust (n=200), 2017 baseline audit**

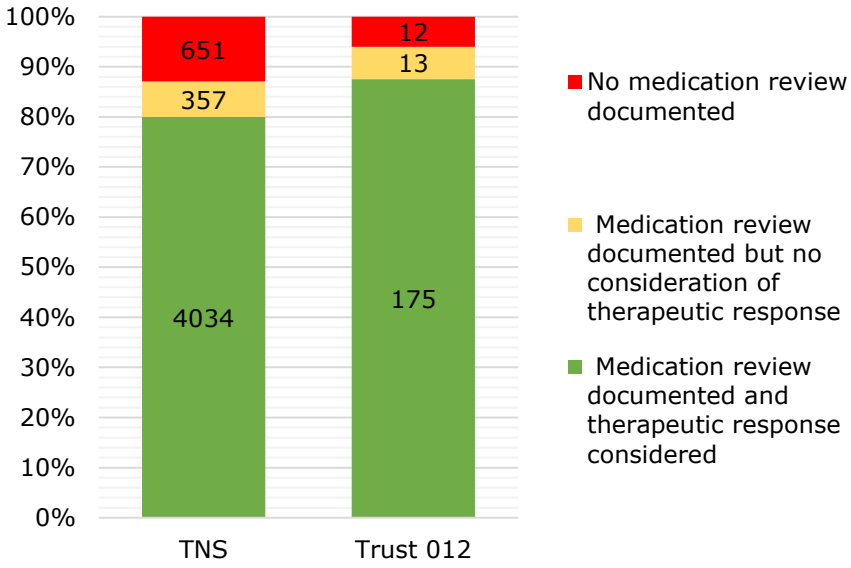
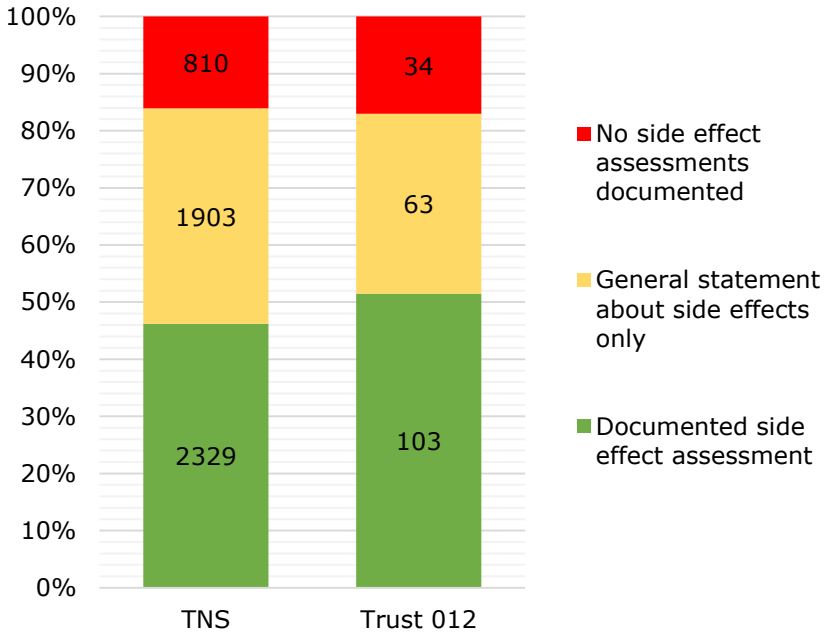



**Figure 7. Assessment of side effects in the past year: national sub-sample (n=5042) and your Trust (n=200), 2017 baseline audit**



# Summary

Performance against the clinical practice standards was generally good overall. For example, 93% of patients had an accessible care plan, and of these, 82% included a crisis plan. In the vast majority of cases, the patient had been involved in the generation of their care plan. However, there was a marked variation in such clinical practice, both between and within Trusts.

The national sample, comprising people treated with a continuing depot/LAI antipsychotic medication regimen, showed a high level of psychiatric morbidity in that:

- A quarter were detained in hospital under the Mental Health Act.
- Three-quarters of outpatients were subject to the Care Programme Approach.
- Almost 30% had been admitted to hospital and/or had contact with a crisis/home intervention team in the past year.

This has implications for the systems and resources necessary to provide skilled care and appropriate support for such patients in the long term.

One patient in 10 in the national sample did not have a clinical diagnosis of either schizophrenia or bipolar disorder and therefore the use of depot/LAI antipsychotic preparations in these patients was 'off-label'.

Although the most common clinical rationale for initiating treatment with a depot/LAI antipsychotic preparation was to improve medication adherence, the findings suggest around one patient in ten misses at least one injection in a six-month period. Further, there was no clinical plan to address default from depot/LAI antipsychotic treatment in just over a third of cases and approximately one patient in eight had not had their medication reviewed within the past year.

General risk factors for relapse were documented in the clinical records for all patients in the sample. However, patient-specific early signs and symptoms of relapse (i.e. signature prodromal symptoms) were not documented for just over 10%; for these patients, opportunities to intervene at a prodromal stage may be lost.

# 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 Prescribing Observatory for Mental Health 10-year report. Supporting rational, effective and safe prescribing in mental health services.* Available at: https://www.rcpsych.ac.uk/pdf/10-year%20report.pdf
>
> 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

## How to use this report

The audit results are divided into three sections:

- Section 1 (page 19) presents the results for the total national sample (TNS) i.e. combined data from all participating Trusts;
- Section 2 (page 34) presents each Trust's results benchmarked against other Trusts and the total national sample;
- Section 3 (page 45) presents team level data for your Trust benchmarked against other teams, your total Trust sample and the total national sample.

The results presented here allow you to compare your team's/Trust's practice against:

a. Treatment recommendations in nationally recognised guidelines, including those published by NICE (www.nice.org.uk/guidance/cg178), BAP (www.bap.org.uk/docdetails.php?docID=47) and RCPsych (www.rcpsych.ac.uk/usefulresources/publications/collegereports/cr/cr190.aspx);

b. The practice of other participating Trusts;

c. The practice of other participating teams in your Trust.

Data from each clinical team or Trust are presented by code only

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

Only the Local POMH-UK Lead for your Trust has the key to team codes for your Trust. You should contact the person if you need to identify data for your own particular team

## Further analysis of your Trust's data

Ownership of data submitted to POMH-UK is retained by the Trust that provided it. See Appendix A for further information on data ownership. An Excel file containing the data submitted by your Trust has been made available to your Local POMH-UK Lead. Please contact this person if you wish to conduct further analyses on your data.

# Clinical background

## The remitting and relapsing nature of psychosis

Epidemiological studies reported over the past three decades show a wide range of outcomes for schizophrenia and other psychoses ranging from complete recovery to continuous unremitting illness. Between these extremes, the majority of patients have a relapsing and remitting course[1]. As many as 60% will relapse within 5 years of the onset of their illness[2] and approximately 10% will eventually die from suicide[3,4]. Social functioning is also often impaired. For example, 71% of the patients in the AESOP 10-year follow-up had never been in an intimate relationship and the majority had been employed for less than 25% of the follow-up period[1]. Similarly, by the 10-year follow-up of patients in the OPUS early intervention clinical trial, approximately 60% had taken early medical retirement[5]. In short, it is not just a matter of symptomatic relapse, as successive episodes are often accompanied by persisting cognitive and conative disabilities that can have devastating consequences for social functioning and quality of life. With this in mind, preventing or minimising relapse is clearly a clinical priority and in this regard, maintenance antipsychotic medication is key. Davis et al (1980)[6] found a constant rate of relapse on placebo over a 2-year period averaging 11.5% each month. It also seems that relapse rates on discontinuing medication are similar regardless of how long the patient has been taking it[7]. Furthermore, studies have not shown that targeted dosing (i.e. flexible dosing of medication in response to some prodromal symptom or behavioural change) is effective in preventing relapse.

## Poor adherence and relapse

Partial or total non-adherence to prescribed medication is extremely common. Most intermittent non-adherence is probably down to forgetfulness and is characteristic of all long-term medicine use, but the impairments and disorganisation characteristic of severe mental illness also play a part as of course does deliberate discontinuation. A recent meta-analysis of non-adherence to antipsychotic medication[8] pooled data from 38 studies involving 51,796 patients. Non-adherence averaged 42% in patients with schizophrenia and 41% in bipolar disorder though there was a wide range reported by individual studies. The highest rates were found in younger people, those of lower socioeconomic status, the unemployed and those with a substance use or forensic history. Poor adherence was also associated with low levels of family support. Of clinical variables, the therapeutic alliance between the clinician and the patient was the most important. Patients receiving involuntary treatment and those experiencing side effects of medication were also more likely to be non-adherent. Illness related factors included the number and severity of positive symptoms, a history of frequent relapse and cognitive impairment.

Long-acting injectable antipsychotics (LAIs) were introduced in the 1960s and quickly taken up as a means of dealing with non-adherence. Given the demographic profile described above, it comes as little surprise that it is the same groups most likely to be prescribed an LAI – young men, those with a forensic or substance use history and those who had previous hospitalisations[9]. There is little doubt that LAIs enhance adherence[10]. They simplify treatment by providing a known dose of medication at regular intervals, administered by a health professional who is alert to clinical change and to non-adherence by monitoring missed or delayed appointments. When compared with equivalent oral medication, there may also be pharmacological benefits in terms of more consistent associations between dose and plasma drug levels and an improved pharmacokinetic profile that allows lower doses and hence lower risk of side effects. Adams and colleagues[11] carried out a systematic meta-review of randomised controlled trials comparing oral and LAIs for treatment of schizophrenia that showed these preparations were safe and effective, with perhaps a small benefit over oral medication in terms of global functioning but no clear superiority in terms of rates of relapse. A later update[12] echoed these results for the controlled trials but also

reported other non-randomised designs including 11 mirror image studies comparing hospitalisation outcomes over a comparable period before and after starting an LAI. These studies showed significant reductions in both number and duration of hospitalisations in the period after starting an LAI but as the authors point out, mirror image designs are notoriously susceptible to confounders such as reductions in the number and availability of hospital beds over time.

Surveys and audits across inpatient, community and forensic teams find around 30% of people prescribed an antipsychotic get this in the form of an LAI[13,14]. But clinical practice varies considerably between individual psychiatrists and the use of the LAI probably decreased with the introduction of the second generation oral antipsychotics[15].The choice is also clearly influenced by the attitudes of other health professionals (especially nurses who administer the injection) and the patients themselves. Systematic reviews of staff and patient attitudes to the use of LAIs find that for staff, attitudes are generally positive about LAIs with a high correlation between positive attitudes and knowledge about the LAI. Among patients, preference for an LAI ranges between 18 and 40%, higher among those already taking an LAI and are similar between those using an LAI or oral prescription[16-18].

As with all medication, side effects are a major reason for non-adherence[19-20]. For LAIs, these include the same range of effects as for the equivalent oral preparation, causing significant distress and functional impairment. In addition, one can add the pain of the injection, risks of local inflammation and the challenge of managing side effects that may persist longer after stopping the injection than might be the case with an oral preparation. Long-acting olanzapine carries an additional risk of a post-injection syndrome of profound sedation and other delirium-like symptoms. Side effects are particularly likely when the LAI is 'topped up' by other antipsychotic medication. The assessment and management of side effects associated with LAIs has been subject to a previous audit and report [21].

## Clinical Guidelines and practice recommendations

Clinical Guidelines[22] recommend the use of LAIs as a strategy to tackle covert non-adherence where this is thought to be a clinical priority or where the patient expresses a preference to receive their medication as an LAI. On commencing the older 'depot' LAIs a test dose is advisable to reveal any sensitivity (both to the oily base but also to EPS). For all LAIs as with other antipsychotics it is advisable to start low and go slow with dosage, adjusting this only after an adequate period of assessment. Recommendations for the recording of treatment and monitoring for side effects are essentially the same as for oral antipsychotics and follow BNF guidelines. There should always be an accessible care plan recorded in the clinical records with documented evidence that the patient was involved in drawing this up. This should include a note of any key signs and symptoms that might herald a relapse and there should be a plan to tackle these and what to do in a crisis. There should also be a plan for what to do if the patient on an LAI fails to attend an appointment for its administration and a plan for medication reviews that should include consideration of the therapeutic response, side effects and adherence. This review should be carried out at least annually by the prescriber but obviously may need to be more frequent as indicated by response and side effects.

(See Appendix E for references)

# Method

A clinical records audit was conducted for patients prescribed depot/LAI injectable antipsychotic medication for relapse prevention. A questionnaire/audit tool was sent out to all Trusts/healthcare organisations with instructions that copies should be made available to allow clinical teams to audit a sample of patients that are currently prescribed a depot/LAI antipsychotic medication (See Appendix C).

## Submission of data

Each Trust was allocated a code number that was known only to the Trust and POMH-UK. Trusts were asked to allocate codes to participating services and eligible patients and, if they wished to, individual consultants. The key to these codes is held by the Trust and is not known to POMH-UK. Data coded in this way were entered onto an internet-based form and submitted to POMH-UK via a secure website.

## Data collection

The following data were collected:

- Age, gender, ethnicity, diagnosis and care setting.
- Current depot/LAI injectable medication, regular oral antipsychotic medication, other regular psychotropic medications including dose.
- Evidence of patients having a care plan and being involved in the development of this plan.
- Evidence of patients having a crisis plan.
- Early symptoms of relapse and evidence of documentation in a patients' care plan.
- General risk factors for relapse and evidence of this being documented in a patients' care plan.
- For patients prescribed depot/LAI medication for less than six months: documented evidence of the clinical rationale behind the switch to depot/LAI medication.
- For patients prescribed depot/LAI medication for more than six months: how many injections were prescribed and administered. If not all injections were administered, evidence from clinical records suggesting a reason.
- For patients prescribed depot/LAI medication for one year or longer: evidence of medication review and assessment of side effects documented in clinical records.

All Trusts and clinical teams were self-selected in that they chose to participate. All the participating Trusts/healthcare organisations are listed alphabetically in Appendix B.

## Data cleaning

Data were collected using FORMIC (electronic survey software).

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.

## Data analysis

As in previous reports, the data were analysed at three levels:

1. **National data.** This section describes the demographic and clinical characteristics of patients in the total national sample, as well as the prescribing of high-dose and combination antipsychotics. The data were analysed in a variety of ways to facilitate understanding of the national picture and stimulate discussion in participating clinical teams.

2. **Trust level data.** The analyses conducted on the national data were repeated for each Trust. This allows Trusts to compare the demographic and clinical characteristics of their patients, and their performance against the audit standards, with the anonymised data from each of the other participating Trusts and the national data set as a whole.

3. **Service level data.** This allows Trusts and individual clinical teams to compare their practice with each other and against the national data.

All figures presented are rounded to zero decimal places for simplicity. Therefore, the total percentages for some charts or graphs add up to 99% or 101%.

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

## Demographic and clinical characteristics

Data were submitted for 7441 patients under the care of mental health services. The majority of the total national sample were outpatients under the care of community mental health teams and most of these outpatients were subject to the care programme approach (CPA). While the vast majority of patients had a diagnosis of a schizophrenia spectrum disorder or bipolar disorder, for approximately one in ten the depot antipsychotic medication was prescribed for another indication, principally personality disorder (F60-69) and substance use (F10-19).

**Table 1. Demographic characteristics of the total national sample (n=7441), 2017 baseline audit**

| Key demographic variables for total national sample | | | Baseline 2017 n=7441 |
|---|---|---|---|
| | | | n (%) |
| **Gender** | Male | | 4829 (65) |
| | Female | | 2612 (35) |
| **Ethnicity** | White/White British | | 5156 (69) |
| | Black/Black British | | 971 (13) |
| | Asian/Asian British | | 609 (8) |
| | Mixed or other | | 398 (6) |
| | Chinese | | 18 (<1) |
| | Not collected/stated/refused | | 289 (4) |
| **Age** | Mean age in years (±SD) | | 46 (±14) |
| | Median age in years | | 47 |
| | **Age bands** | 15-18 years | 9 (<1) |
| | | 19-25 years | 447 (6) |
| | | 26-35 years | 1389 (18) |
| | | 36-45 years | 1663 (22) |
| | | 46-55 years | 1962 (26) |
| | | 56-65 years | 1323 (18) |
| | | 65 years and over | 648 (9) |

**Table 2. Clinical characteristics of the total national sample (n=7441), 2017 baseline audit**

| Key clinical characteristics for total national sample | | | Baseline 2017 n=7441 |
|---|---|---|---|
| | | | n (%) |
| **ICD-10 diagnosis*** | F00-F09: Organic disorder | | 67 (<1) |
| | F10-F19: Disorder due to psychoactive substance use | | 838 (11) |
| | F20-F29: Schizophrenia spectrum disorder | | 6118 (82) |
| | F30-39 (mood disorder) | Bipolar disorder | 681 (9) |
| | | Other affective disorder | 224 (3) |
| | F40-F48: Neurotic, stress-related and somatoform disorders | | 142 (2) |
| | F50-F59: Behavioural syndromes associated with physiological disturbances and physical factors | | 24 (<1) |
| | F60-F69: Personality disorder | Borderline personality disorder | 355 (5) |
| | | Antisocial personality disorder | 165 (2) |
| | | Other personality disorder | 44 (<1) |
| | F70-F79: Learning disability | | 74 (1) |
| | F80-F89: Disorder of psychological development | | 66 (1) |
| | F90-F98: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence | | 21 (<1) |
| | F99: Unspecified disorder | | 10 (<1) |
| | Not known | | 92 (1) |
| **Patient status** | Inpatients detained under the mental health act | | 1893 (25) |
| | Inpatients, informal status | | 197 (3) |
| | Outpatients | | 5351 (72) |
| **Clinical service** | Community mental health team | | 4810 (64) |
| | Forensic ward team | | 822 (11) |
| | Acute adult inpatient team | | 776 (10) |
| | Early intervention service | | 350 (5) |
| | Inpatient rehabilitation service | | 325 (4) |
| | Forensic community team | | 158 (2) |
| | PICU ward team | | 116 (2) |
| | Home treatment/crisis team | | 54 (1) |
| | Prison service team | | 17 (<1) |
| | Other | | 13 (1) |
| **Responsible for depot/LAI antipsychotic medication** | Mental health services | | 7328 (98) |
| | Primary care | | 106 (1) |
| | Other | | 7 (<1) |

*Patients may have more than one psychiatric diagnosis.

**Table 3. Framework of care for outpatients prescribed depot/LAI medication (n=5351), 2017 baseline audit**

The number of community-based patients subject to the care programme approach (CPA) was 4046 (54%).

| Outpatients | | n (%) |
|---|---|---|
| Subject to care programme approach (CPA) (n=4046) | Subject to community treatment order (CTO) | 568 (14) |
| | Assigned a care coordinator (CCO) | 3969 (98) |
| Not subject to care programme approach (CPA) (n=1305) | Assigned a named professional | 1174 (90) |

**Table 4. Episodes of contact with crisis/home treatment teams and hospital admissions for outpatients (n=5351), 2017 baseline audit**

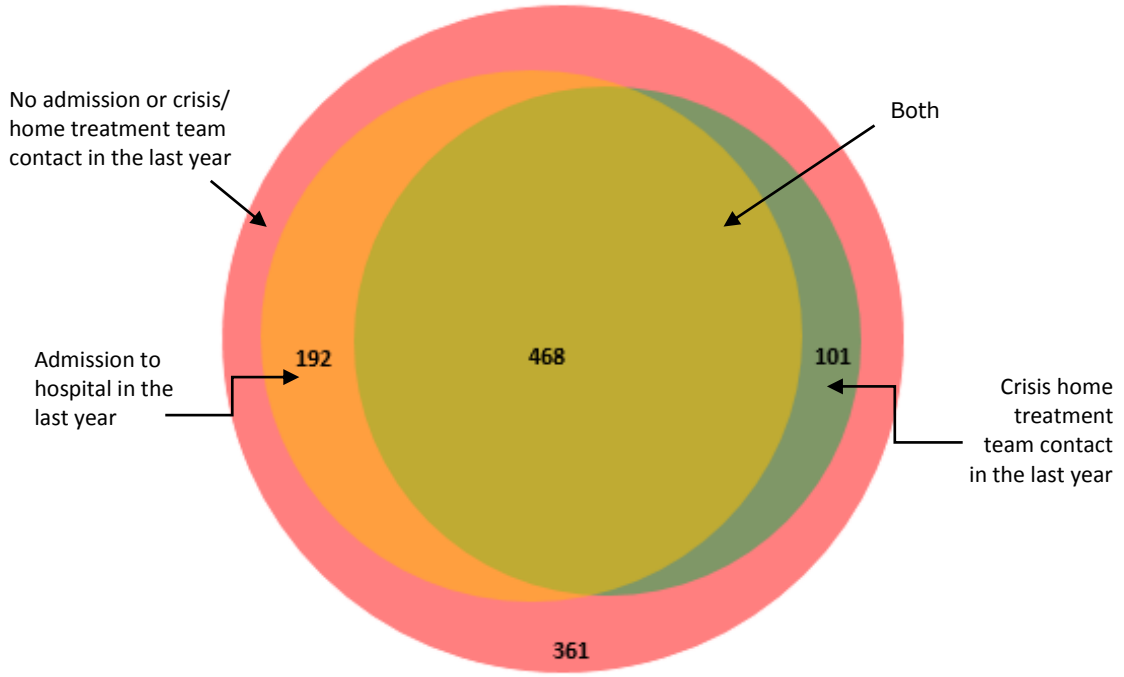
Of those patients under the care of a community mental health team, almost 30% had been admitted to a psychiatric ward and/or had contact with a crisis/home treatment team over the past year.

| Outpatients (n=5351) | | n (%) |
|---|---|---|
| Admission to a psychiatric ward in the previous year | One admission | 899 (17) |
| | More than one admission | 250 (5) |
| | No admission | 4202 (78) |
| Episodes of contact with crisis/home treatment team in the previous year | One episode | 742 (14) |
| | More than one episode | 471 (9) |
| | No episodes of contact | 4138 (77) |

**Figure 8. Episodes of contact with crisis/home treatment teams and hospital admissions for outpatients (n=5351), 2017 baseline audit**

Comparison of figures 8a and 8b below suggests that depot medication starts during a period of clinical instability (requiring hospital admission or home treatment support), and that patients receiving such medication for more than a year are much more clinically stable.

**8a. Outpatients treated with depot/LAI antipsychotic medication for less than a year (n=1122)**




**8b. Outpatients with depot/LAI antipsychotic medication treated for a year or more (n=4229)**

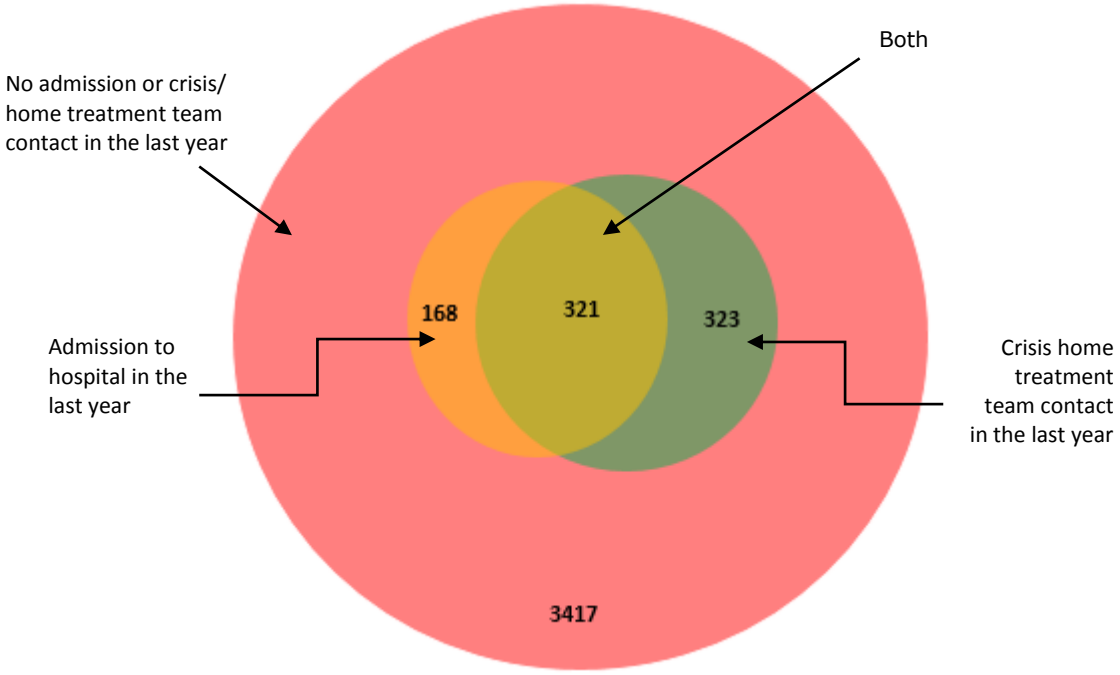


**Table 5. Regular IM depot/LAI antipsychotic medication currently prescribed in total national sample (n=7284)*, 2017 baseline audit**

For each of the antipsychotic depot/LAI prescriptions, the doses and the injection intervals prescribed are consistent with the recommendation in the Summary of Product Characteristics (SmPC). For example, aripiprazole was almost always prescribed at a dose of 400mg, to be administrated monthly.

| Depot/LAI antipsychotic medication | Number of patients prescribed each medication | Median dose (mg) | Inter-quartile range (mg) | Regular IM injection intervals (weekly) (%) | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 12 | Other/ Unknown |
| Zuclopenthixol decanoate | 1902 | 350 | 200-500 | 26 | 53 | 9 | 12 | - | <1 |
| Flupentixol decanoate | 1579 | 80 | 40-140 | 9 | 61 | 11 | 18 | - | 1 |
| Paliperidone | 1145 | 100 | 100-150 | 1 | 1 | 1 | 93 | 4 | <1 |
| Risperidone | 883 | 37.5 | 25-50 | <1 | 98 | <1 | 1 | - | - |
| Aripiprazole | 697 | 400 | 400-400 | 1 | 1 | <1 | 98 | - | - |
| Haloperidol decanoate | 495 | 100 | 75-150 | 1 | 35 | 6 | 56 | - | 2 |
| Fluphenazine decanoate | 412 | 50 | 37.5-100 | 3 | 60 | 14 | 21 | - | 2 |
| Olanzapine | 169 | 300 | 300-405 | 1 | 72 | - | 27 | - | - |
| Pipothiazine | 28 | 100 | 50-100 | - | 19 | 4 | 78 | - | - |

*91 patients were prescribed a single/test dose only, 13 patients had more than one depot/LAI antipsychotic medication and dosage data were incomplete for a small number of patients.

**Table 6. Regular oral antipsychotic medication currently prescribed in addition to depot/LAI medication (n=7441)*, 2017 baseline audit**

In the total national sample, at least one patient in five was prescribed an oral antipsychotic in addition to their depot/LAI antipsychotic medication.

In more than one in ten patients it was unknown whether the patient was prescribed oral antipsychotic medication. This may partly reflect limited communication between those prescribing for a given patient in secondary mental health services and primary care.

| Medication | Number of patients | Median daily dose | Interquartile range |
|---|---|---|---|
| | n (%) | (mg) | (mg) |
| Olanzapine | 410 (6) | 10 | 7.5-20 |
| Aripiprazole | 266 (4) | 10 | 5-15 |
| Risperidone | 245 (3) | 3 | 2-4 |
| Quetiapine | 214 (3) | 300 | 100-400 |
| Haloperidol | 128 (2) | 5 | 5-10 |
| Amisulpride | 77 (1) | 400 | 200-600 |
| Zuclopenthixol | 70 (1) | 25 | 20-40 |
| Chlorpromazine | 49 (1) | 100 | 50-300 |
| Flupentixol | 47 (1) | 4 | 3-6 |
| Clozapine | 25 (<1) | 150 | 25-400 |
| Other | 51 (1) | | |
| None | 5075 (68) | | |
| Unknown | 825 (11) | | |

*More than one regular oral antipsychotic medication was prescribed in a few cases.

25 patients in the total national sample were prescribed clozapine in addition to depot/LAI antipsychotic medication. Should clozapine-induced bone marrow suppression evolve in such patients, the depot/LAI antipsychotic may complicate recovery.

**Table 7. Other regular psychotropic medication prescribed in addition to depot/LAI medication (n=7441), 2017 baseline audit**

Half the patients with a diagnosis of schizophrenia were prescribed one or more psychotropic medications in addition to a depot/LAI antipsychotic. As might be expected, valproate and lithium were more often used in those with a diagnosis of bipolar disorder. The use of anticholinergic medication varied between the individual depot/LAI antipsychotic medications, but the extent to which this reflects different expectations of extrapyramidal side effects as opposed to actual treatment-emergent side effects is uncertain.

| Medication | Schizophrenia (n=5134) n (%) | Bipolar disorder (n=555) n (%) | All other diagnosis (n=1657) n (%) |
|---|---|---|---|
| Anticholinergic/antimuscarinic | 1113 (22) | 101 (18) | 395 (24) |
| Antidepressant | 1010 (20) | 88 (16) | 517 (31) |
| Benzodiazepine | 656 (13) | 80 (14) | 313 (19) |
| Valproate | 538 (10) | 210 (38) | 227 (14) |
| Z-hypnotics | 231 (4) | 40 (7) | 119 (7) |
| Lithium | 114 (2) | 86 (16) | 42 (3) |
| Pregabalin | 71 (1) | 16 (3) | 58 (4) |
| Lamotrigine | 59 (1) | 36 (7) | 45 (3) |
| Carbamazepine | 45 (<1) | 9 (2) | 33 (2) |
| Methadone | 23 (<1) | 0 (0) | 26 (2) |
| Buprenorphine | 4 (<1) | 0 (0) | 12 (<1) |
| Methylphenidate | 1 (<1) | 1 (<1) | 2 (<1) |
| Dexamfetamine/lisdexamfetamine | 0 (0) | 2 (<1) | 1 (<1) |
| None of the above | 2329 (45) | 146 (26) | 526(32) |
| Not known/ information not available | 221 (4) | 10 (2) | 64 (4) |

## Performance against practice standard 1

| | |
|---|---|
| 1a | A patient's care plan should be accessible in the clinical records |
| 1b | There should be documented evidence that the patient was involved in the generation of their care plan |

**Figure 9. Accessibility of care plans and patients' involvement: total national sample (n=7441), 2017 baseline audit**

In the total national sample, four patients in every five had a care plan in which they had been involved.

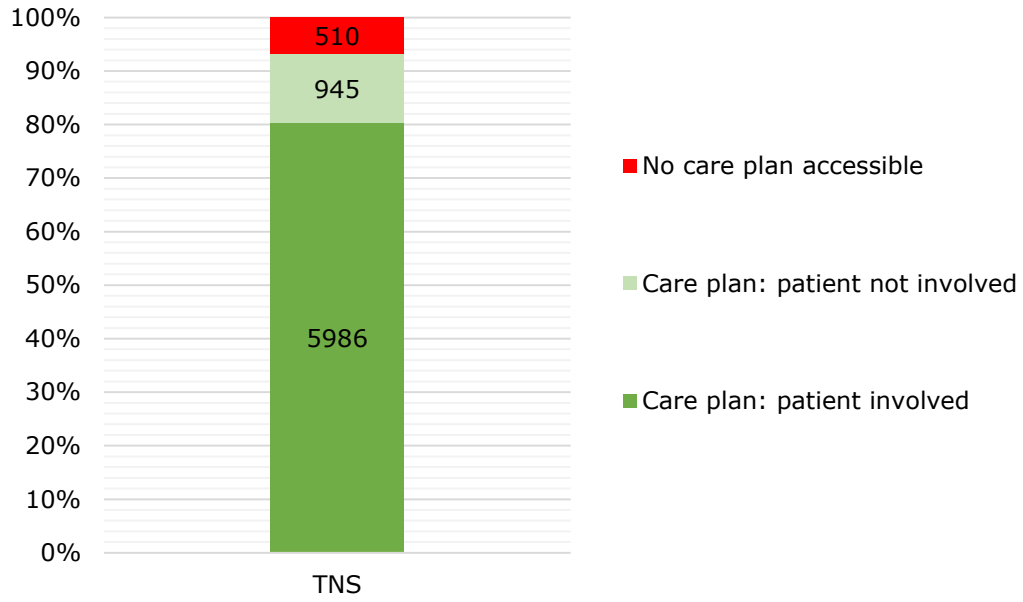



**Table 8. General risk factors for relapse documented in patients' clinical records: total national sample (n=7441)*, 2017 baseline audit**

Risk factors for relapse were documented in the clinical records for 100% of the total national sample. Poor adherence to medication was the most common risk factor identified, highlighting the importance of care planning to mitigate this risk.

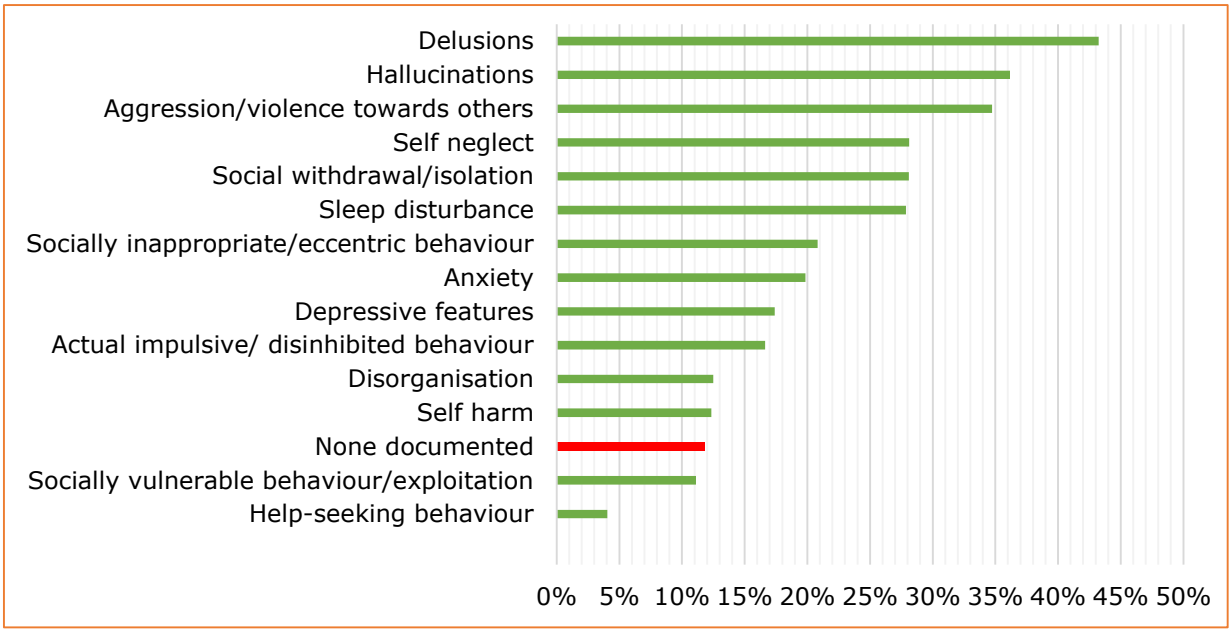
| Risk factors for relapse | Number of patients in TNS (%) |
|---|---|
| Poor adherence to medication | 4504 (61) |
| Substance/alcohol use | 2821 (38) |
| Psychosocial stressors/life events | 2578 (35) |
| Lack of social support | 1116 (15) |
| Other | 1058 (14) |

*Patients may have more than one risk factor recorded in their clinical record.

## 1c A patient's relapse 'signature' signs and symptoms should be documented in their care plan

**Figure 10. Early signs and symptoms of relapse documented in clinical records for patients with a care plan: national sub-sample (n=6931)*, 2017 baseline audit**

In over a quarter of the sample, self-neglect and social withdrawal/isolation were noted to be early signs of relapse. Such behaviours are less likely to be brought to the attention of services, highlighting the importance of planned and systematic follow-up. There were no documented early signs and symptoms of relapse for almost one patient in eight.

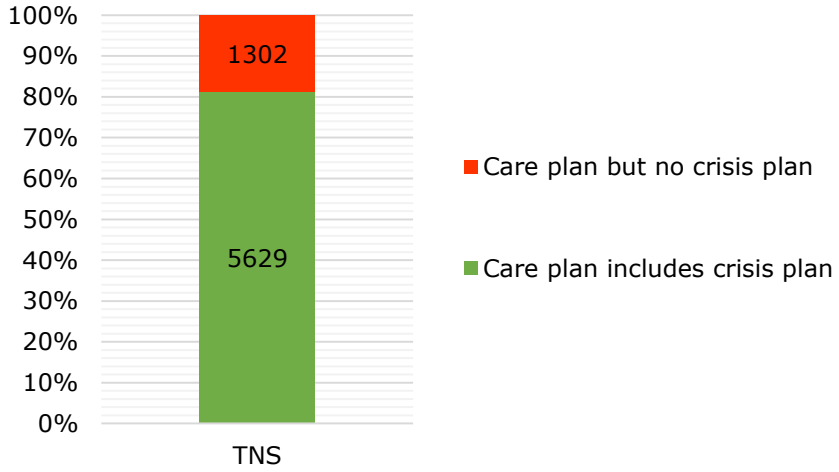



*Patients can have more than one sign or symptom documented

## 1d The care plan should include a crisis plan

**Figure 11. The proportion of patients' care plans that included a crisis plan: national sub-sample (n=6931)*, 2017 baseline audit**

In the total national sample, 93% of patients had a care plan (Fig 2) of which, 82% included a crisis plan.



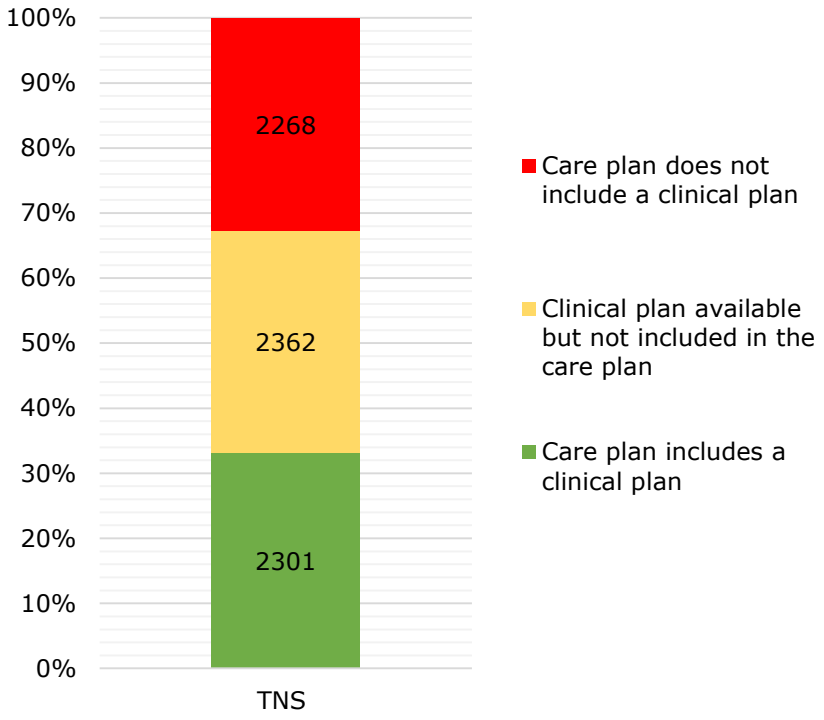

*510 patients in the total national sample did not have a care plan

| 1e | The care plan should include a clinical plan for response to default from treatment, i.e. if a patient fails to attend an appointment for administration of their depot injection or declines their depot injection |
|---|---|

**Figure 12. The proportion of patients' care plans that included a clinical plan addressing default from treatment: national sub-sample (n=6931), 2017 baseline audit**

In a third of the total national sample, there was no documented clinical plan addressing default from antipsychotic depot/LAI treatment, either in the care plan, elsewhere in the clinical records, or held as a 'depot clinic' protocol.

Given that poor adherence to medication was perceived as a risk factor for relapse in 61% of cases, and was by far the most common reason for prescribing depot/LAI antipsychotic medication, the lack of a clinical plan to address poor adherence is a gap between best practice and actual practice.



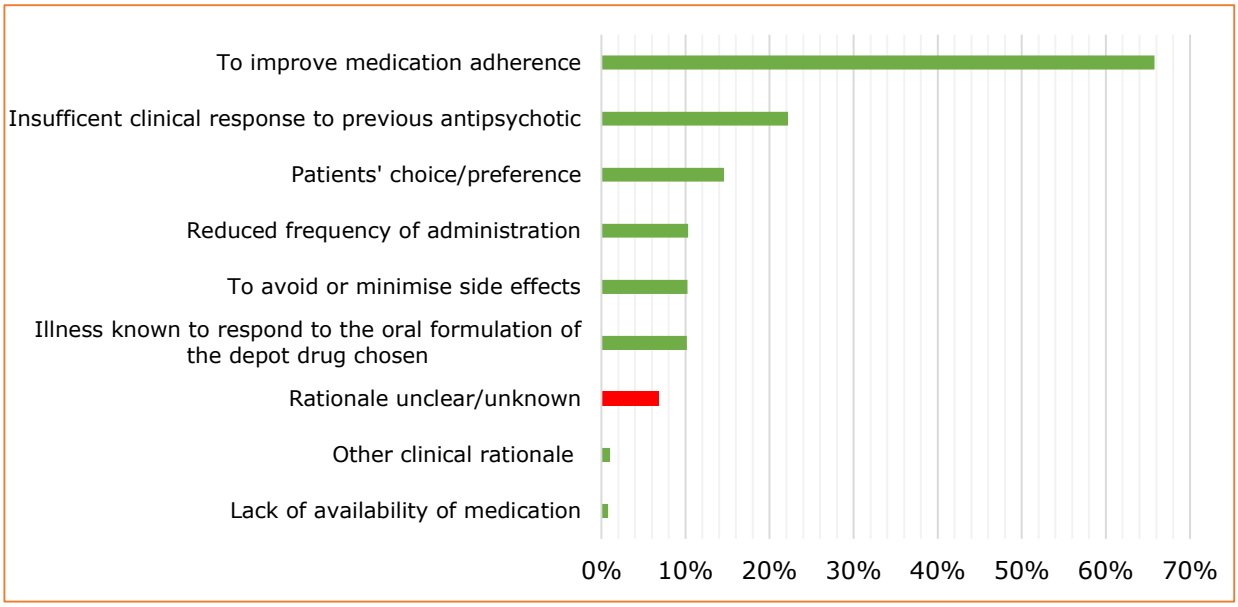
## Performance against practice standard 2

| Patients prescribed current depot/LAI antipsychotic medication for less than 6 months | |
|---|---|
| 2a | A clear rationale for initiating a depot/ long-acting injectable antipsychotic medication should be documented in the clinical records |

In the total national sample, 1515 patients had started treatment with a depot/LAI antipsychotic in the previous 6 months.

**Figure 13. Clinical rationale for initiating the current depot/LAI antipsychotic medication: national sub-sample (n=1515)*, 2017 baseline audit**

The most common clinical rationale for initiating a depot/LAI antipsychotic was to improve medication adherence.




*There may be more than one clinical rationale for initiating depot/LAI antipsychotic medication in some patients.

**Table 9. Relevant previous side effects where the clinical rationale for using depot/LAI medication was to minimise side effects: sub-sample (n=155)*, 2017 baseline audit**

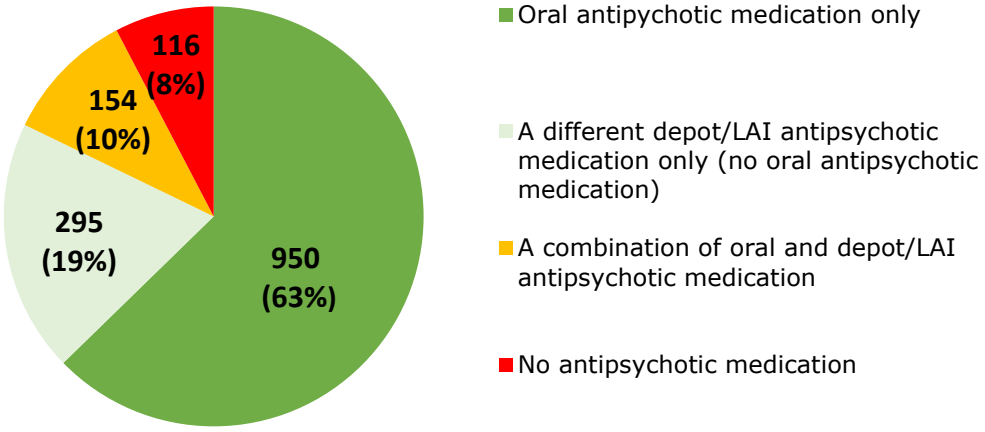
For one patient in ten, antipsychotic depot/LAI medication was initiated to reduce side effects associated with the previous treatment: Where EPS had been problematic patients were switched to aripiprazole (n=21), flupentixol (n=10), paliperidone (n=10), zuclopenthixol (n=7), risperidone (n=5), haloperidol (n=3), fluphenazine (n=1), or pipothiazine (n=1). Where weight gain was problematic the depot/LAI's of choice were aripiprazole (n=15), flupentixol (n=7), paliperidone (n=6), haloperidol (n=4) or zuclopenthixol (n=2). Not all of these choices seem logical given the known side-effect profiles of the various depot/LAI antipsychotic medications.

| Using depot/LAI injections to avoid/minimise side effects n=155 | |
|---|---|
| **Side effects** | **Number of patients n (%)** |
| Extrapyramidal side effects | 58 (37) |
| Weight gain | 34 (22) |
| Sedation | 26 (17) |
| Prolactin-related side effects | 24 (15) |
| Sexual side effects | 23 (15) |
| Anticholinergic side effects | 22 (14) |
| Other | 18 (12) |
| Metabolic side effects | 15 (10) |
| Dysphoric or discomfiting subjective experience | 14 (9) |
| Injection site reactions | 7 (5) |

*Patients may have had more than one side effect

**Figure 14. Antipsychotic medication formulation prescribed prior to the current depot/LAI antipsychotic medication: national sub-sample (n=1515), 2017 baseline audit**

In this national sub-sample, two-thirds of those currently prescribed a depot/LAI antipsychotic had been switched from oral treatment. This is consistent with the most common clinical rationale for initiating antipsychotic depot/LAI treatment which is poor medication adherence.



## Patients prescribed current depot/LAI antipsychotic medication for between 6 months and one year

In the total national sample, 884 patients had been prescribed antipsychotic depot/LAI medication for between 6 months and 1 year

**Table 10. Depot/LAI antipsychotic medication prescribed and administered in the previous 6 months: national sub-sample (n=884), 2017 baseline audit**

One patient in five within this sub-sample had either missed one or more doses in the previous 6 months or administration records were not available to the clinical team. For the one patient in twelve where depot administration records were not available, the clinical team may miss opportunities to prevent relapse.

| Depot/LAI prescribed and administered | n (%) |
|---|---|
| Number of patients for whom all prescribed doses had been administered | 695 (79) |
| Number of patients for whom one or more prescribed doses had been missed | 117 (13) |
| Number of patients for whom information was not available | 72 (8) |

**Table 11. Reasons documented in the clinical records for missed depot/LAI antipsychotic injections: sub-sample (n=117)*, 2017 baseline audit**

The most common clinical reasons for not administering prescribed doses of antipsychotic depot/LAI medication were related to patients defaulting from treatment, either intentionally or unintentionally.

| Reasons documented | n (%) |
|---|---|
| The patient did not attend on the day of the appointment to receive their depot/LAI medication | 53 (45) |
| No mention in the clinical records that an injection(s) has been delayed or missed | 22 (19) |
| Patient was available but declined to have the injection for any reason | 19 (16) |
| Patient was not available when visited for administration of the injection | 18 (15) |
| Organisational problems within the clinical team responsible for administrating the depot injection | 7 (6) |
| Decision by clinical staff not to give the injection (for any reason) | 3 (3) |
| Lack of availability of prescribed depot/LAI | 3 (3) |
| Other | 4 (3) |
| No reason documented | 10 (9) |

*More than one reason could be selected for each patient

For a third of the cases, where depot/LAI antipsychotic medications had been missed, there was no documentation/clinical plan addressing default from treatment.

| Patients prescribed depot/LAI antipsychotic medication for at least one year | |
|---|---|
| 2b | Review of antipsychotic medication should be conducted at least annually by the prescriber/psychiatrist in the responsible clinical team |
| 2c | Medication review should include consideration of therapeutic response, adverse effects and adherence. |

In the total national sample, 5042 patients had been prescribed a depot/LAI antipsychotic for more than one year. For one patient in eight, there was no documented review of this prescription in the last year.

**Figure 15. Medication reviews documented in the clinical records: national sub-sample (n=5042), 2017 baseline audit**

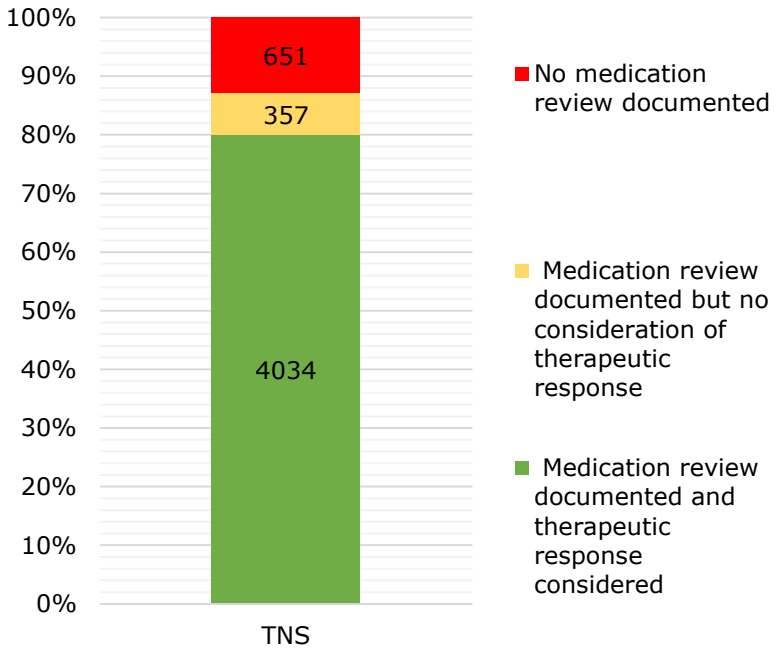



**Table 12. Documented outcome of medication review in the past year for patients prescribed depot/LAI antipsychotic medication: national sub-sample (n=4391)*, 2017 baseline audit**

In the majority of cases, antipsychotic depot/LAI medication was continued unchanged. This is consistent with such treatment being long term.

| Documented outcomes | n (%) |
|---|---|
| Depot/LAI dose changed: increased or decreased | 895 (20) |
| Dosage interval between depot/LAI injections changed | 215 (5) |
| Any change in other psychotropic medication prescribed | 423 (10) |
| No change | 3027 (69) |

*150 patients had more than one documented outcome in their clinical records and 651 patients had no medication review.

**Figure 16. Assessment of side effects in the past year: national sub-sample (n=5042), 2017 baseline audit**

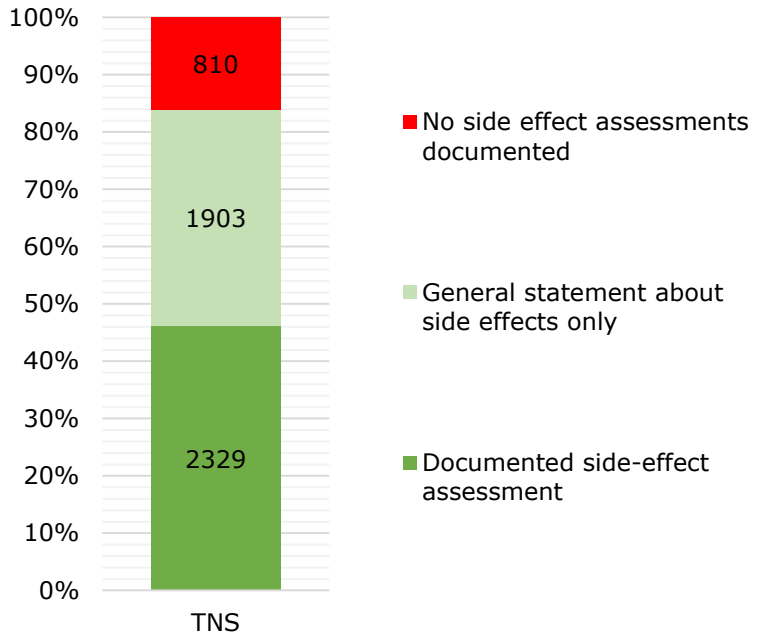



**Table 13. Assessment of side effects documented within clinical records in the past year for patients prescribed depot/LAI antipsychotic medication: national sub-sample (n=2329)*, 2017 baseline audit**

Side-effect assessments were most likely to address movement disorders and weight gain. Sexual and other prolactin-related side effects were not addressed for two patients out of every three.

| Side effects | Presence documented n (%) | Absence documented n (%) | No record of assessment n (%) |
|---|---|---|---|
| Extrapyramidal side effects | 895 (38) | 708 (30) | 726 (31) |
| Weight gain | 659 (28) | 717 (31) | 953 (41) |
| Sedation | 640 (28) | 617 (27) | 1072 (46) |
| Metabolic side effects (raised plasma glucose; dyslipidaemia) | 369 (16) | 724 (31) | 1236 (53) |
| Anticholinergic side effects | 500 (22) | 589 (25) | 1240 (53) |
| Prolactin related side effects (other than sexual side effects) | 226 (10) | 637 (27) | 1466 (63) |
| Sexual side effects | 256 (11) | 600 (26) | 1473 (63) |
| Injection site reaction | 202 (9) | 644 (27) | 1483 (64) |
| Dysphoric or discomfiting subjective experience | 250 (11) | 564 (24) | 1515 (65) |

*Includes cardiac and cognitive adverse effects

# Trust Level Results

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

**Data from each Trust are presented by code.**

**Your Trust code is: 012**

**Charts in this section are ordered by performance against the practice standards so the position of your Trust will vary in each figure relative to other Trusts.**

## Summary of national participation levels

**Table 14. Number of clinical teams and cases submitted by each of the 59 participating Trusts, 2017 baseline audit**

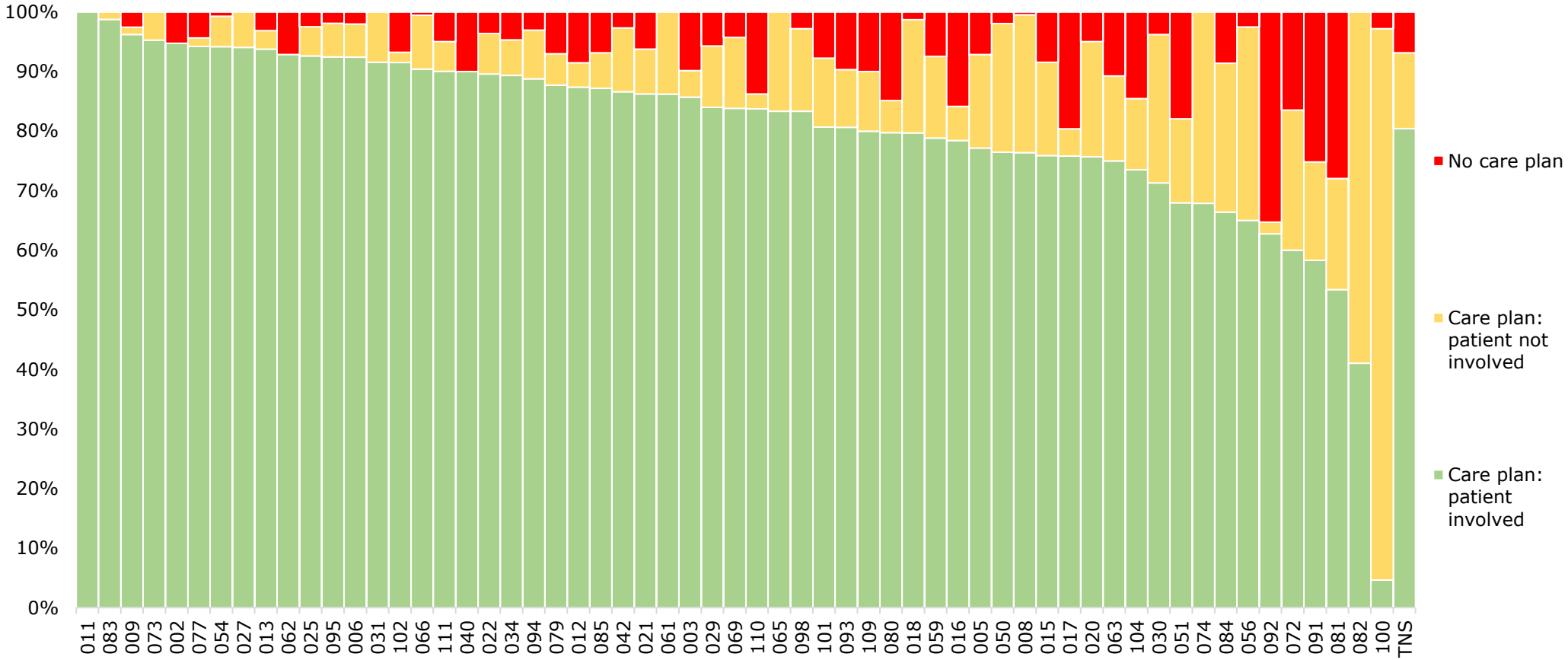
| Trust Code | Number of participating teams | Number of cases |
|---|---|---|
| 002 | 1 | 19 |
| 003 | 20 | 203 |
| 005 | 8 | 70 |
| 006 | 9 | 198 |
| 008 | 18 | 220 |
| 009 | 10 | 79 |
| 011 | 2 | 31 |
| 012 | 34 | 293 |
| 013 | 5 | 32 |
| 015 | 8 | 83 |
| 016 | 5 | 139 |
| 017 | 15 | 153 |
| 018 | 22 | 310 |
| 020 | 25 | 181 |
| 021 | 21 | 80 |
| 022 | 40 | 250 |
| 025 | 27 | 122 |
| 027 | 15 | 151 |
| 029 | 19 | 175 |
| 030 | 59 | 317 |
| 031 | 10 | 71 |
| 034 | 13 | 235 |
| 040 | 4 | 30 |
| 042 | 16 | 112 |
| 050 | 43 | 208 |
| 051 | 23 | 78 |
| 054 | 32 | 137 |
| 056 | 6 | 40 |
| 059 | 49 | 241 |
| 061 | 8 | 29 |
| 062 | 5 | 56 |
| 063 | 16 | 140 |
| 065 | 1 | 24 |

| | | |
|---|---|---|
| 066 | 7 | 177 |
| 069 | 43 | 235 |
| 072 | 5 | 170 |
| 073 | 5 | 148 |
| 074 | 4 | 28 |
| 077 | 5 | 69 |
| 079 | 24 | 114 |
| 080 | 20 | 74 |
| 081 | 8 | 118 |
| 082 | 5 | 78 |
| 083 | 2 | 80 |
| 084 | 3 | 116 |
| 085 | 30 | 234 |
| 091 | 17 | 151 |
| 092 | 7 | 102 |
| 093 | 9 | 31 |
| 094 | 11 | 98 |
| 095 | 3 | 53 |
| 098 | 2 | 36 |
| 100 | 3 | 108 |
| 101 | 10 | 207 |
| 102 | 2 | 59 |
| 104 | 3 | 117 |
| 109 | 2 | 10 |
| 110 | 30 | 80 |
| 111 | 28 | 241 |
| **Total** | **877** | **7441** |

## Performance against practice standard 1

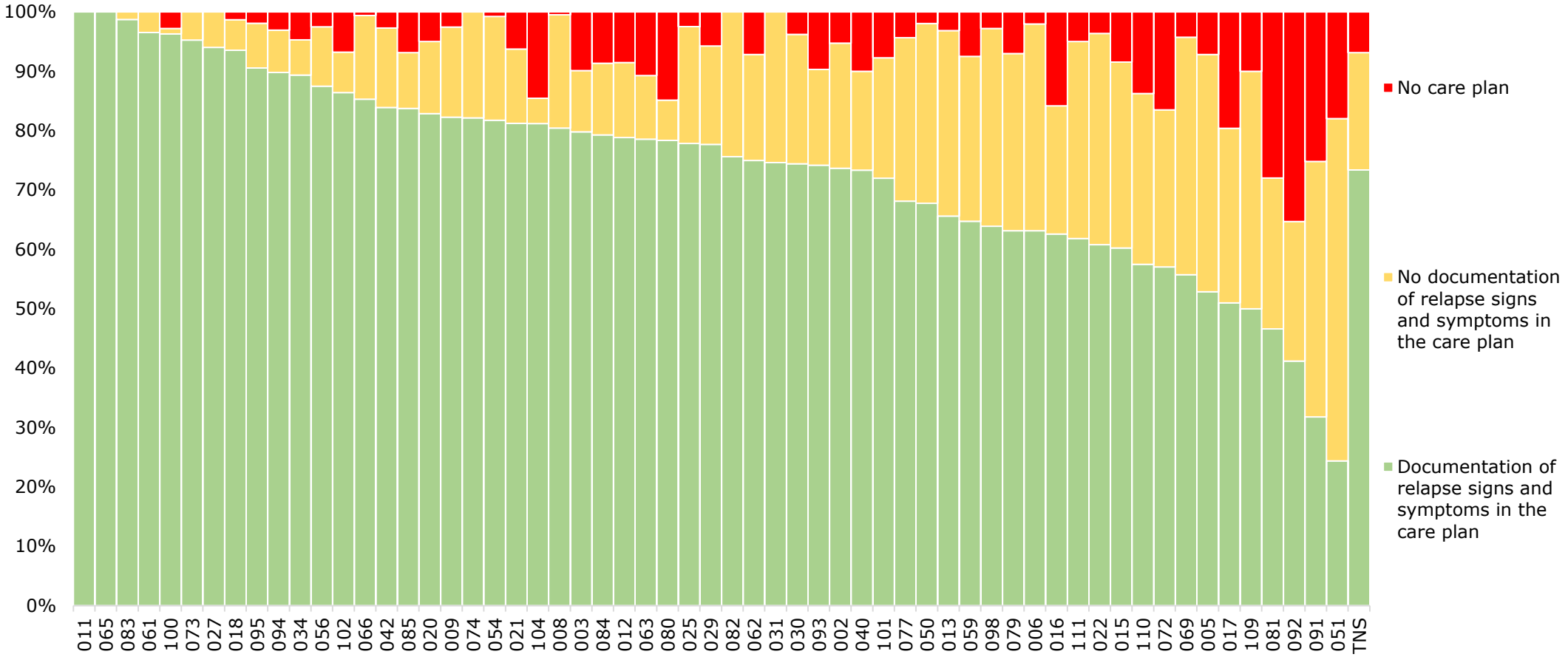
| | |
|---|---|
| 1a | A patient's care plan should be accessible in the clinical records |
| 1b | There should be documented evidence that the patient was involved in the generation of their care plan |

**Figure 17. Accessibility of care plan and patients' involvement: total national sample (n=7441) and each Trust, 2017 baseline audit**



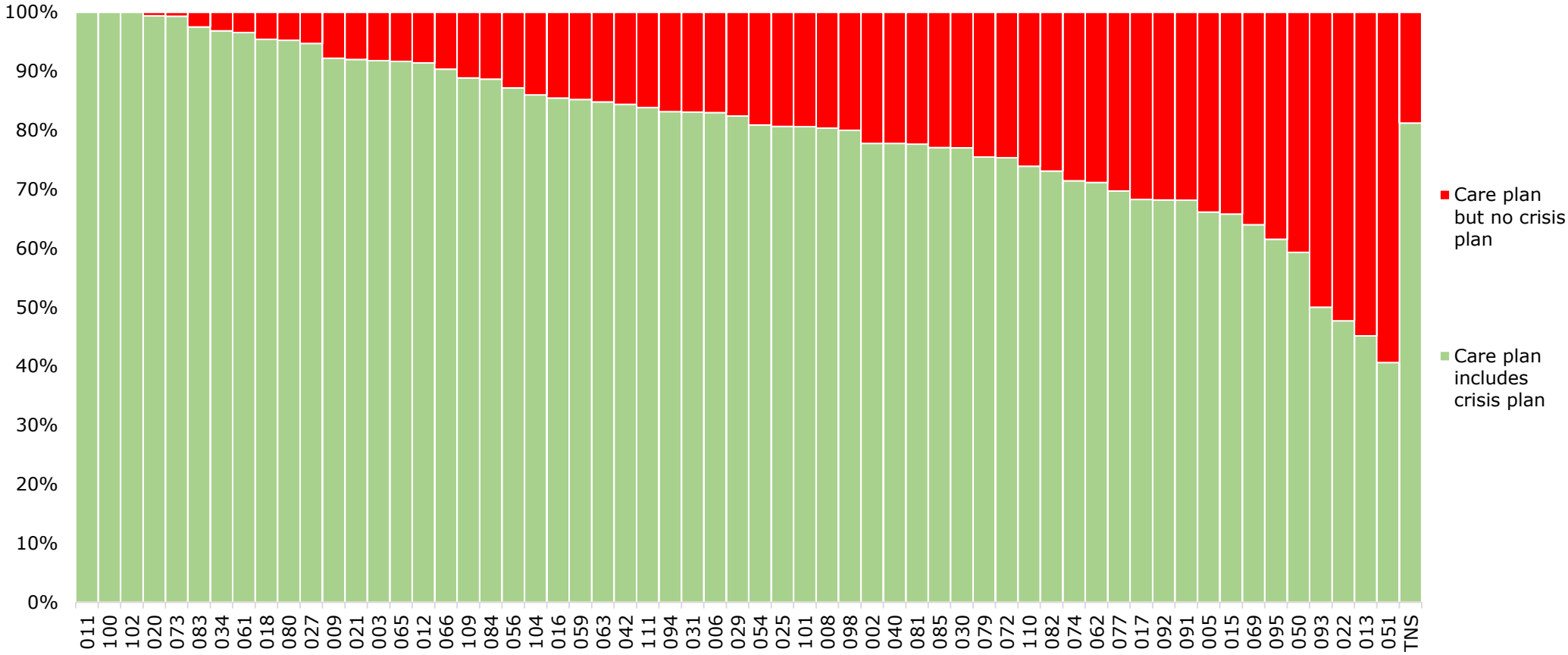
| 1c | A patient's relapse 'signature' signs and symptoms should be documented in their care plan |
|---|---|

**Figure 18. Documentation of relapse signs and symptoms in patients' care plans: total national sample (n=7441) and each Trust, 2017 baseline audit**



| 1d | The care plan should include a crisis plan |
|---|---|

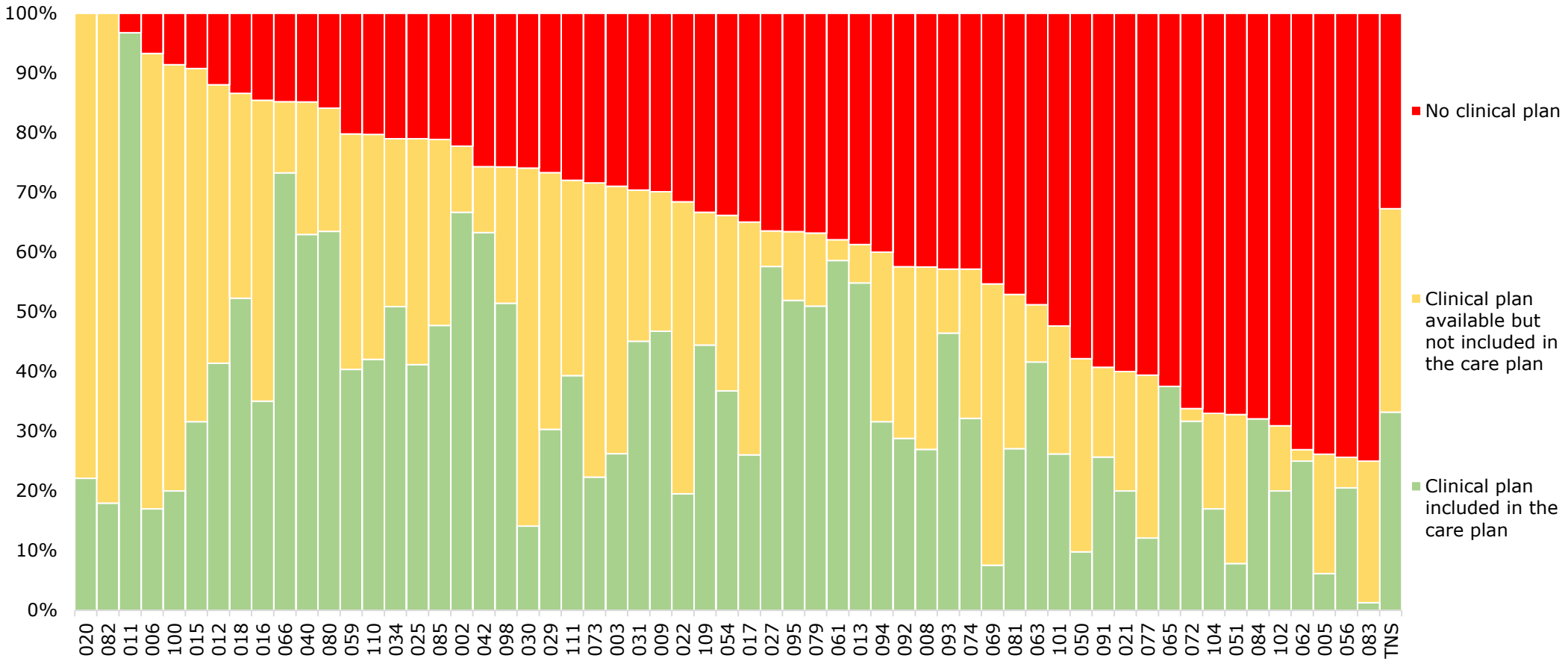
**Figure 19. The proportion of patients' care plans that included a crisis plan: national sub-sample (n=6931)* and each Trust, 2017 baseline audit**




*510 patients in the total national sample did not have a care plan

| 1e | The care plan should include a clinical plan for response to default from treatment, i.e. if a patient fails to attend an appointment for administration of their depot injection or declines their depot injection. |
|---|---|

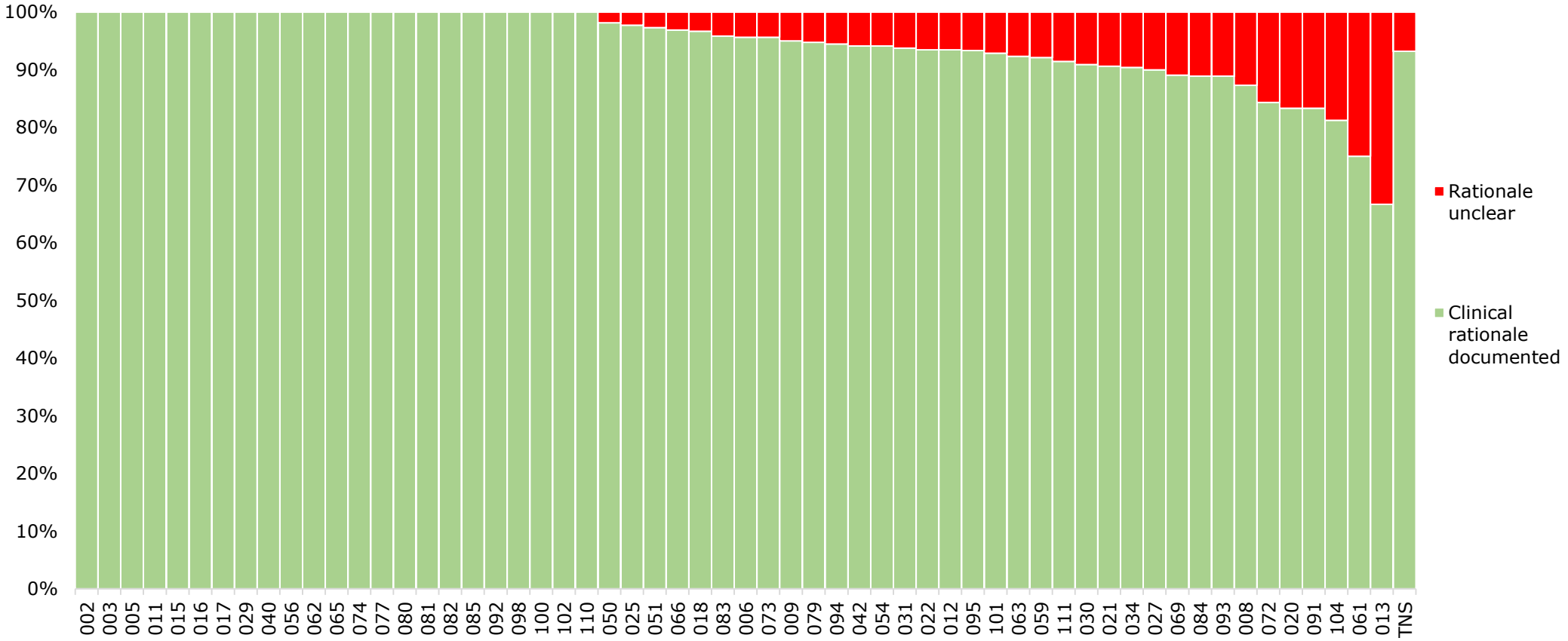
**Figure 20. The proportion of patients' care plans that included a clinical plan addressing default from treatment: national sub-sample (n=6931) and each Trust, 2017 baseline audit**



## Performance against practice standard 2

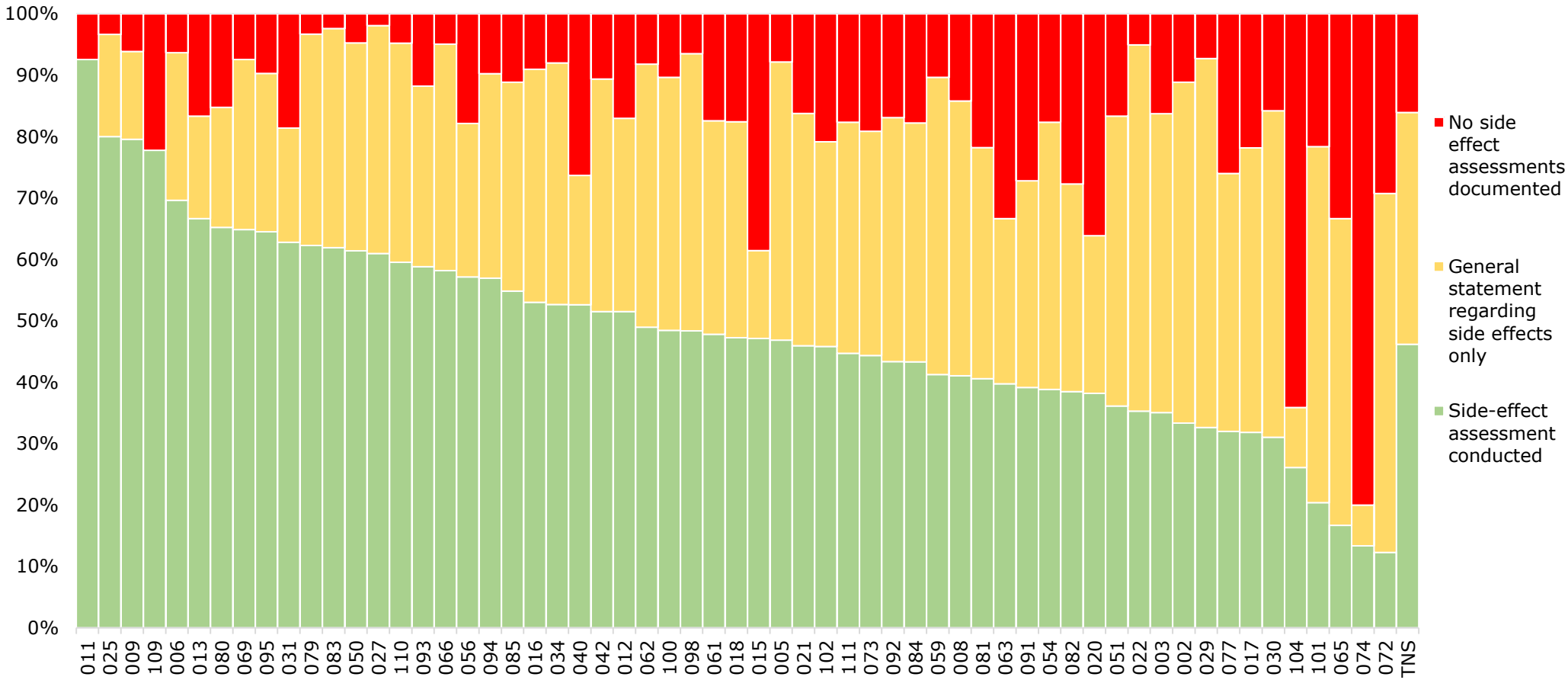
| | |
|---|---|
| 2a | A clear rationale for initiating a depot/ long-acting injectable antipsychotic medication should be documented in the clinical records |

**Figure 21. Clinical rationale for initiating current depot/LAI antipsychotic medication: national sub-sample (n=1515) and each Trust, 2017 baseline audit**



| 2b | Review of antipsychotic medication should be conducted at least annually by the prescriber/psychiatrist in the responsible clinical team. |
|---|---|

**Figure 22. Assessment of side effects in the past year: national sub-sample (n=5042) and each Trust, 2017 baseline audit**



| 2c | Medication review should include consideration of therapeutic response, adverse effects and adherence. |
|---|---|

**Figure 23. Medication reviews documented in patients' clinical records in the past year: national sub-sample (n=5042) and each Trust, 2017 baseline audit**

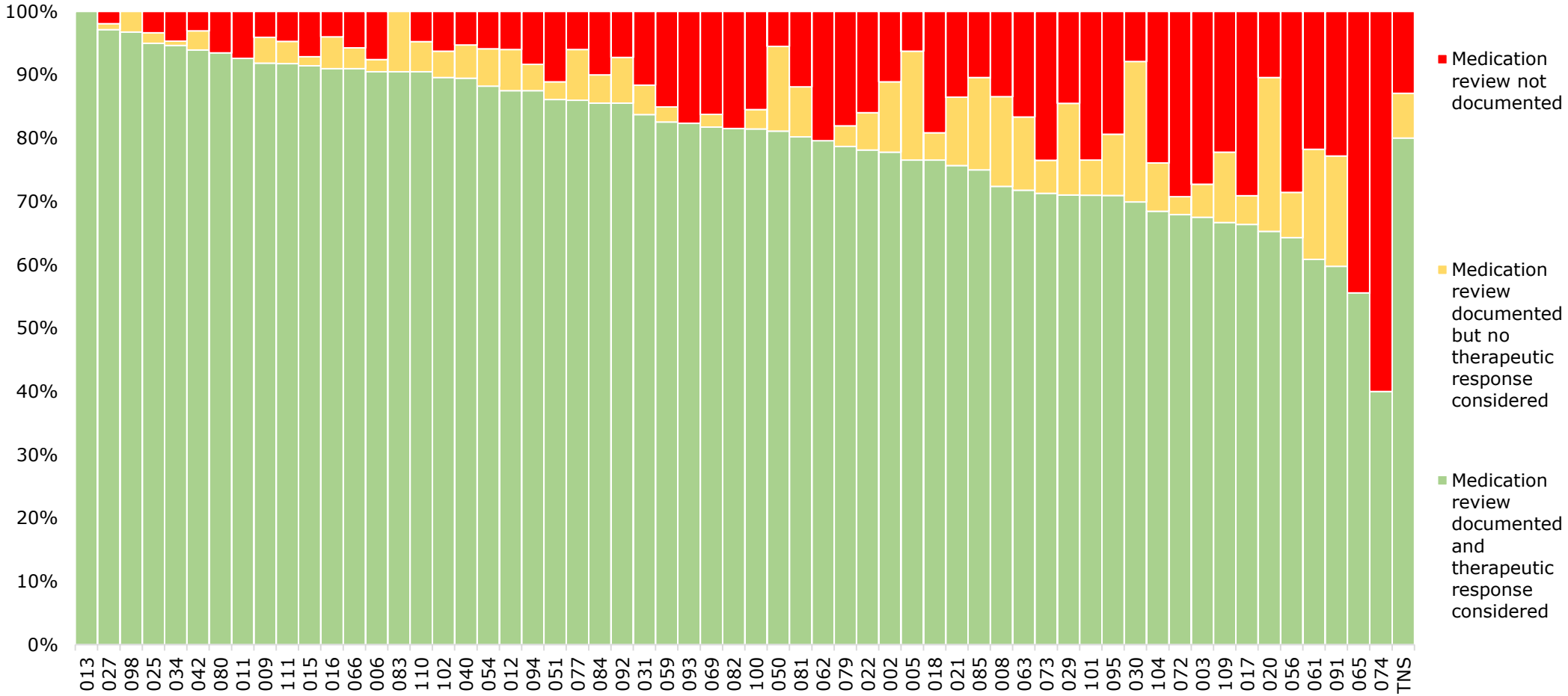
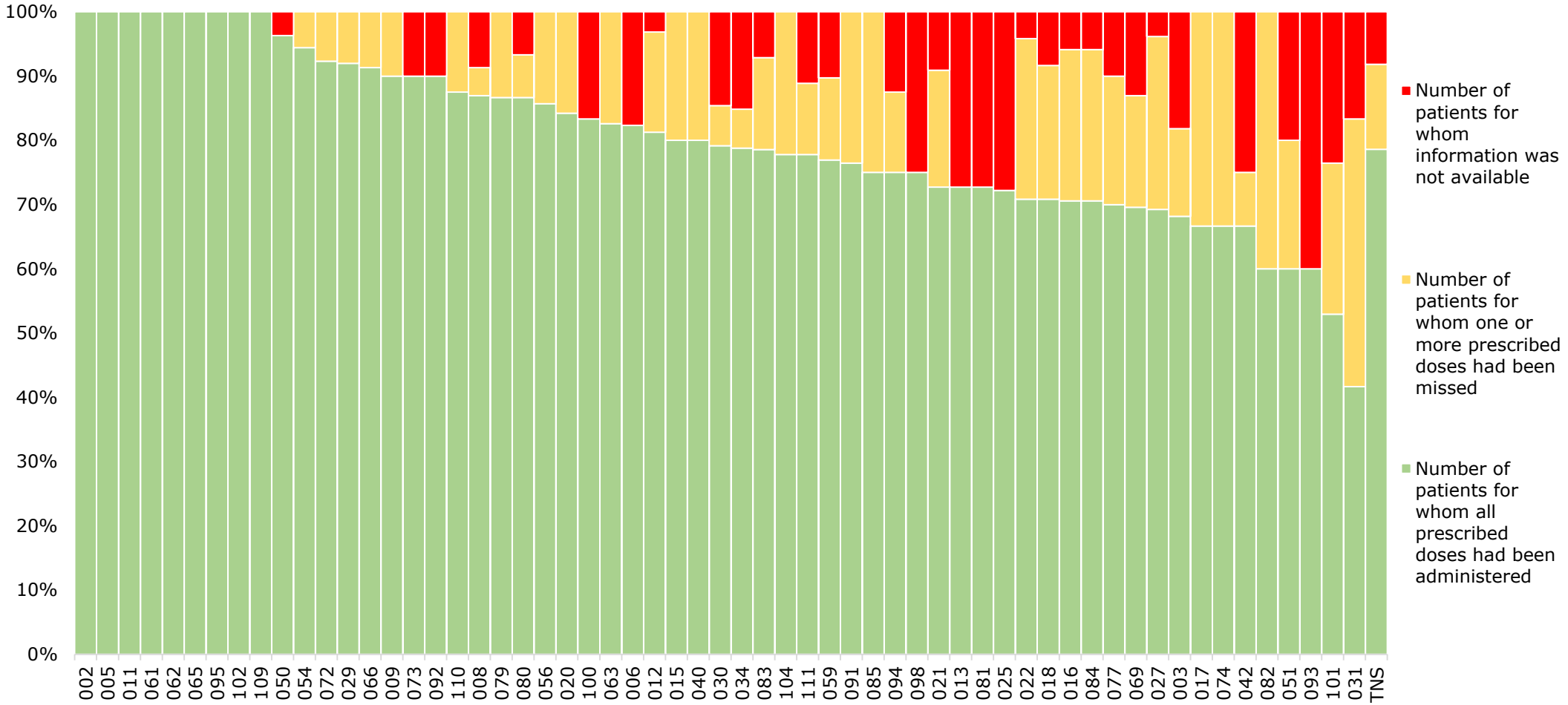


**Figure 24. Adherence to depot/LAI antipsychotic medication: national sub-sample (n=884) and each Trust, 2017 baseline audit**



# 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 Trust clinical team are presented by code only.**

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

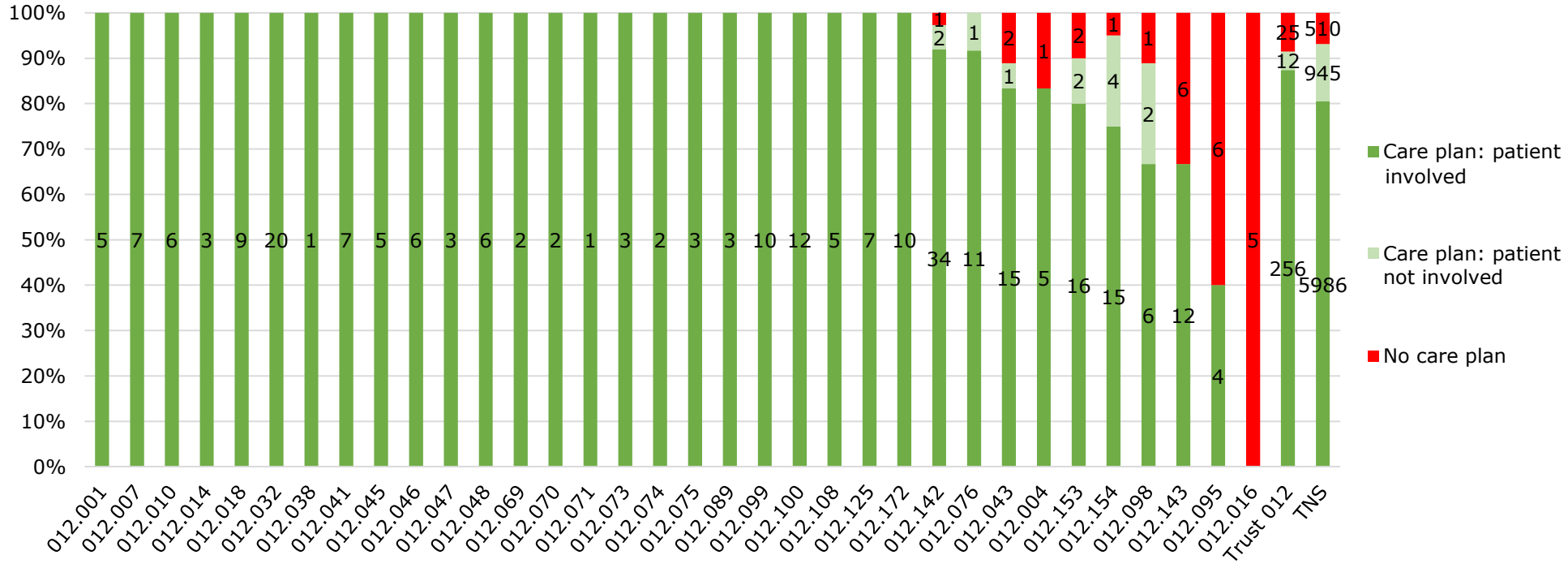
**Only the Local POMH lead for your Trust or organisation has the key to clinical team codes. You should contact this person if you need to identify data for your own clinical team.**

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

## Performance against practice standard 1

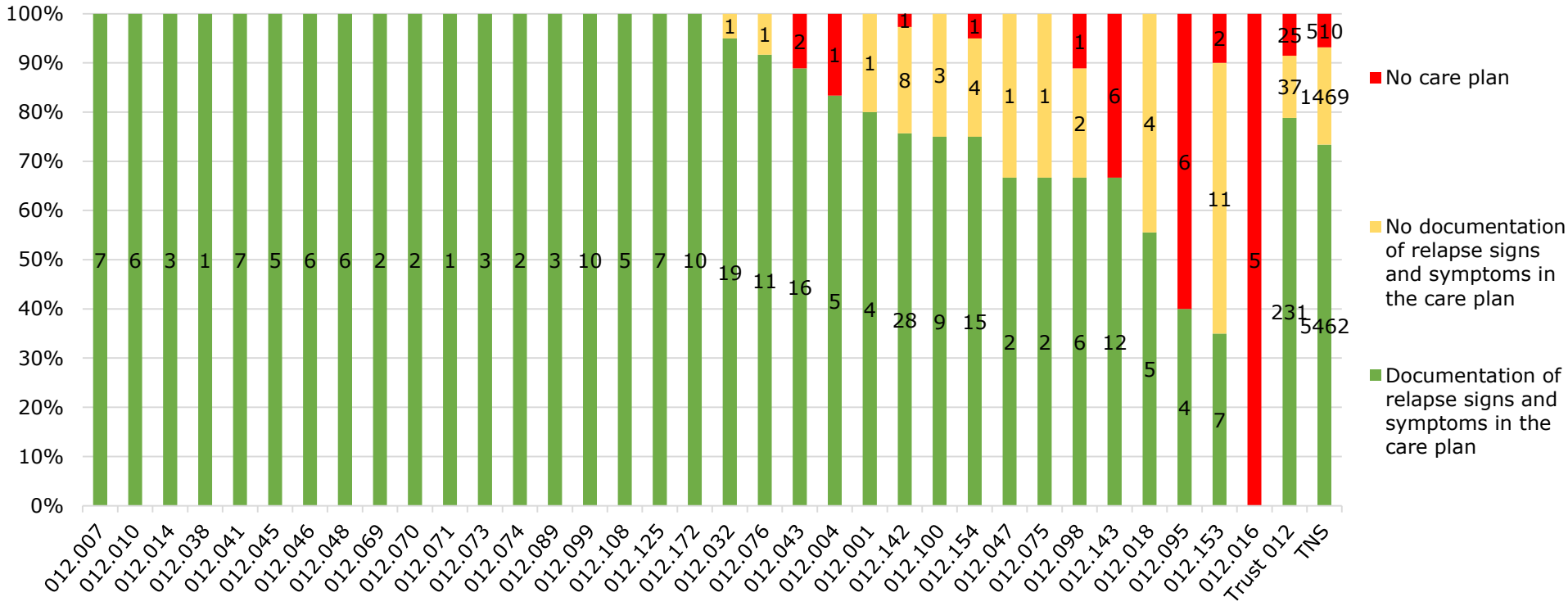
| | |
|---|---|
| 1a | A patient's care plan should be accessible in the clinical records |
| 1b | There should be documented evidence that the patient was involved in the generation of their care plan |

**Figure 25. Accessibility of care plan and patients' involvement: total national sample (n=7441), your Trust and clinical teams (n=293), 2017 baseline audit**



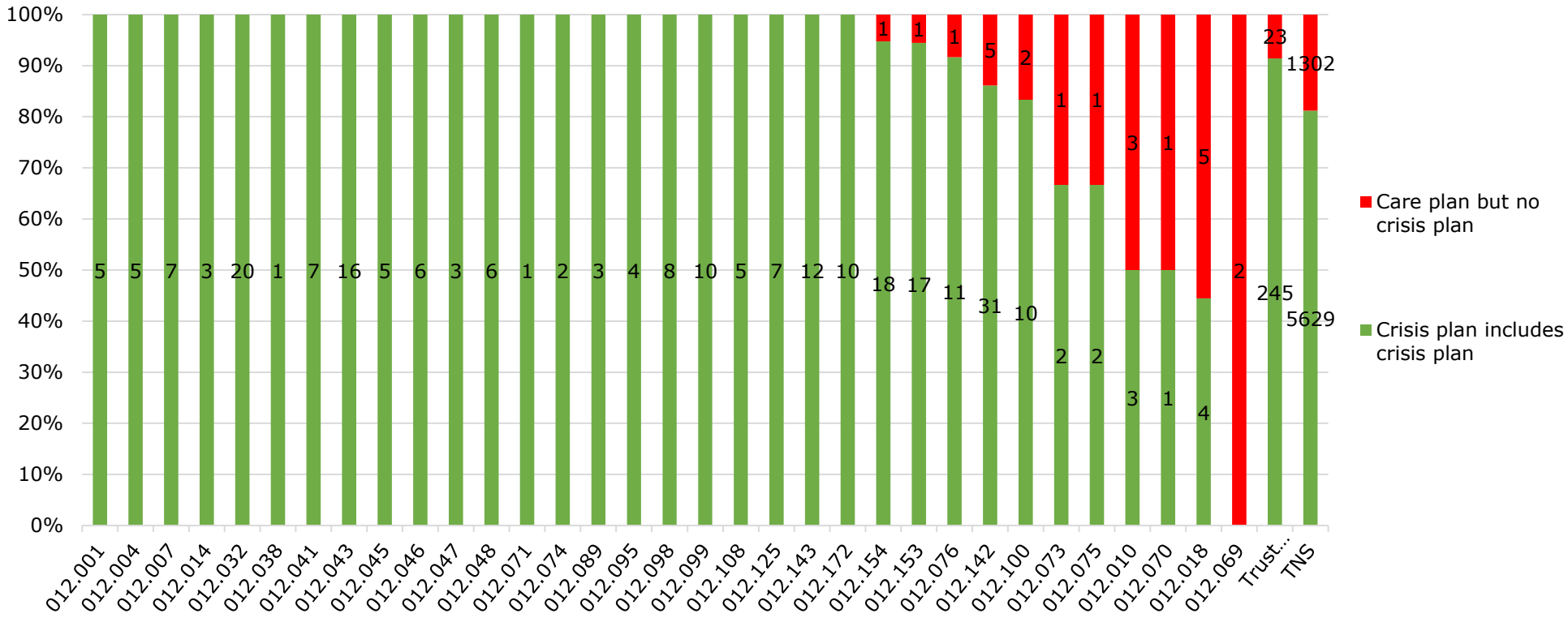
| 1c | A patient's relapse 'signature' signs and symptoms should be documented in their care plan |
|---|---|

**Figure 26. Documentation of relapse signs and symptoms in patients' care plans: total national sample (n=7441) and your Trust and clinical teams (n=293), 2017 baseline audit**



## 1d The care plan should include a crisis plan

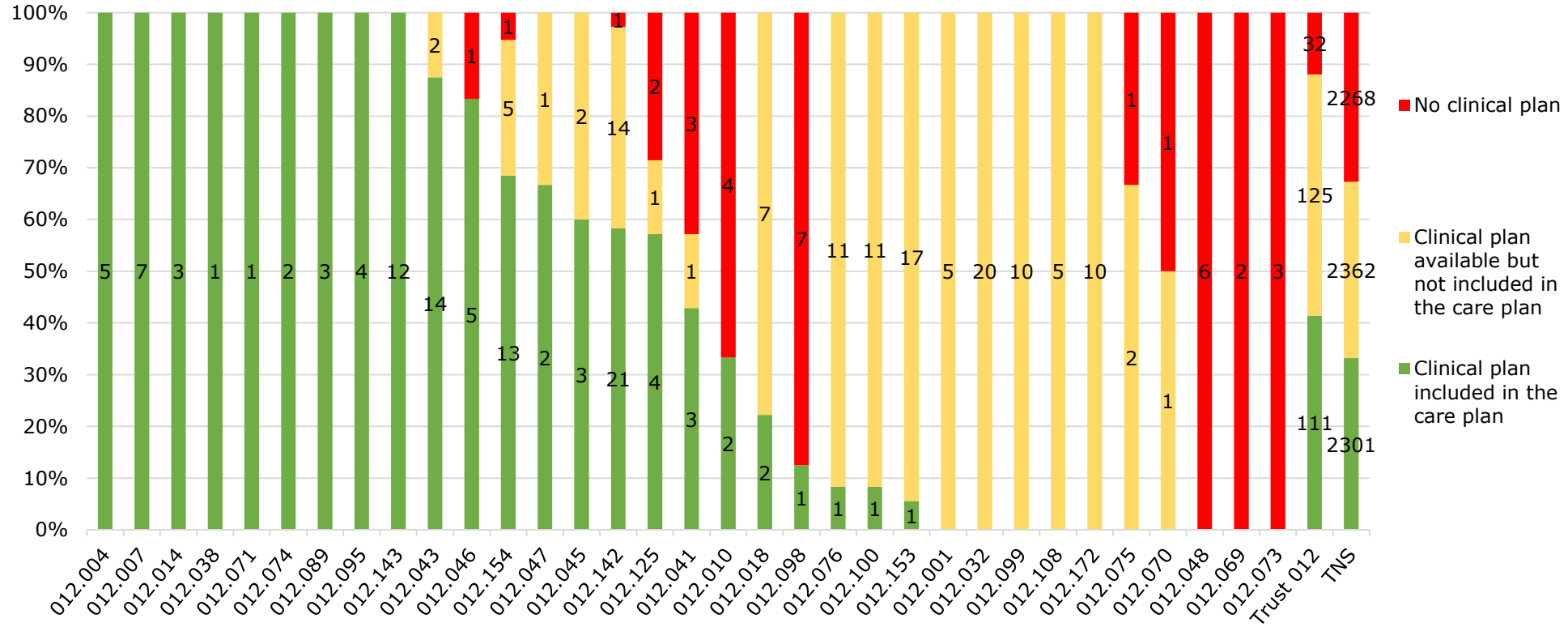
**Figure 27. The proportion of patients' care plans that included a crisis plan: national sub-sample (n=6931)*, your Trust and clinical teams (n=268), 2017 baseline audit**




*510 patients in the TNS did not have a care plan

| 1e | The care plan should include a clinical plan for response to default from treatment, i.e. if a patient fails to attend an appointment for administration of their depot injection or declines their depot injection. |
|---|---|

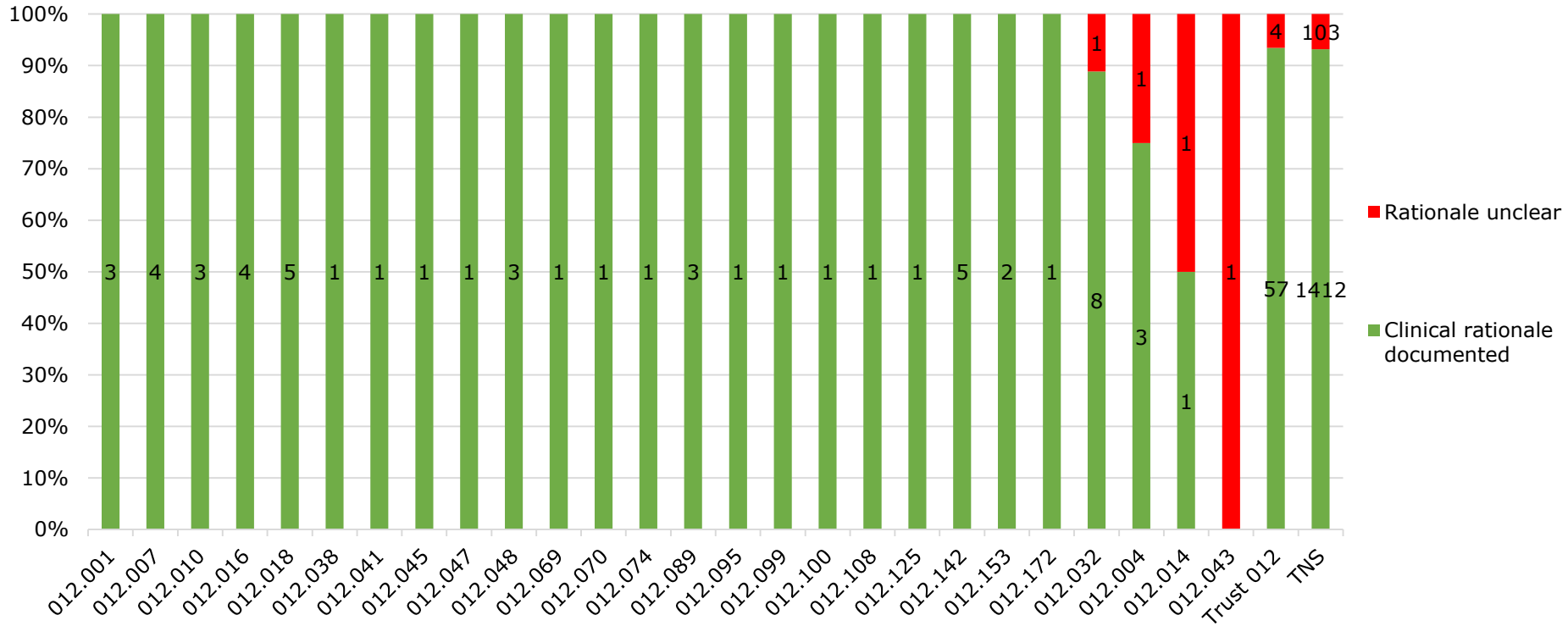
**Figure 28. The proportion of patients' care plans that included a clinical plan addressing default for treatment: national sub-sample (n=6931), your Trust and clinical teams (n=268), 2017 baseline audit**



## Performance against practice standard 2

| 2a | A clear rationale for initiating a depot/long-acting injectable antipsychotic medication should be documented in the clinical records |
|---|---|

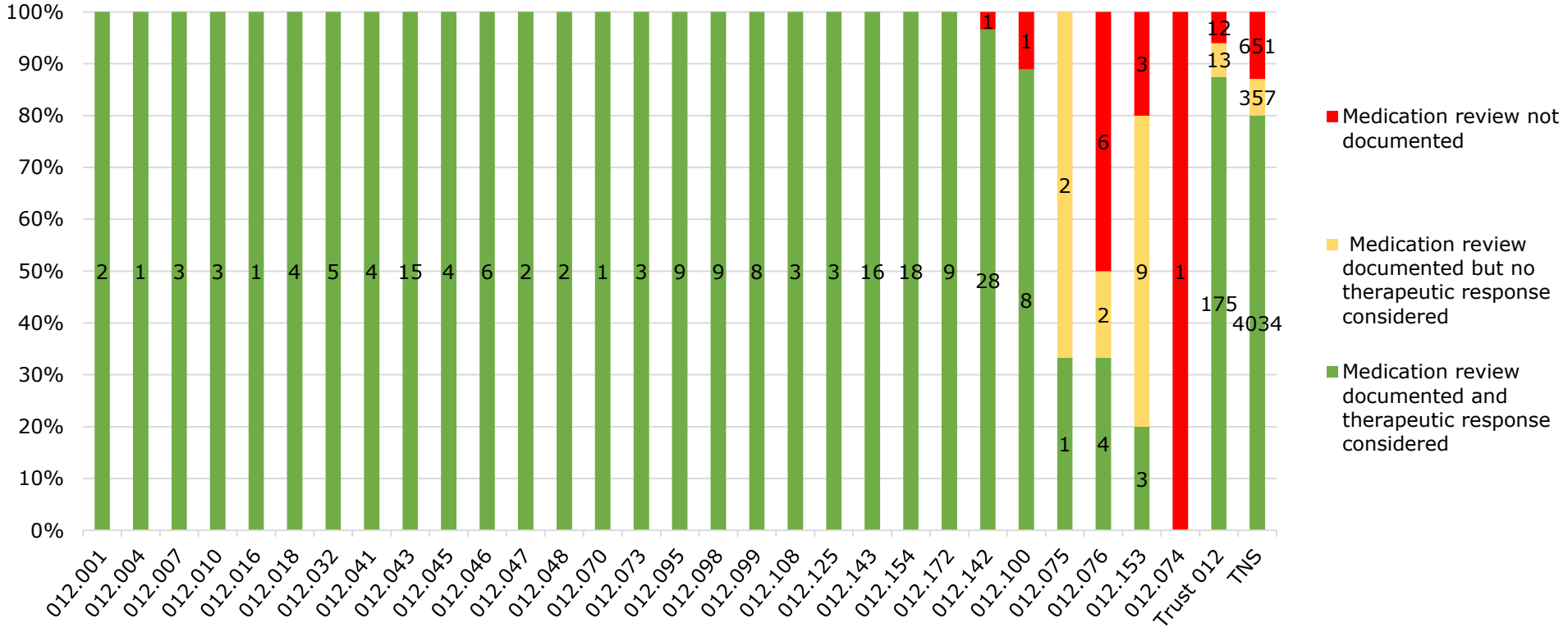
**Figure 29. Clinical rationale for initiating depot/LAI antipsychotic medication*: national sub-sample (n=1515), your Trust and clinical teams (n=61), 2017 baseline audit**




* There may be more than one clinical rationale for initiating depot/LAI antipsychotic medication in some patients.

| | |
|---|---|
| 2b | Review of antipsychotic medication should be conducted at least annually by the prescriber/psychiatrist in the responsible clinical team. |
| 2c | Medication review should include consideration of therapeutic response, adverse effects and adherence. |

**Figure 30. Medication reviews documented in the clinical records in the past year: national sub-sample (n=5042), your Trust and clinical teams (n= 200), 2017 baseline audit**



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# Appendix A: Data Ownership

Data control statement for POMH-UK quality improvement programme 17a: The use of depot/ long acting injectable (LAI) antipsychotic medication for relapse prevention

**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, except for 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 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.

# Appendix B: Participating Trusts

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

5 Boroughs Partnership NHS Foundation Trust
Abertawe Bro Morgannwg University Health Board
Avon & Wiltshire Mental Health Partnership NHS Trust
Barnet, Enfield & Haringey Mental Health 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
Cornwall Partnership NHS Foundation Trust
Coventry and Warwickshire Partnership Trust
Cumbria Partnership NHS Foundation Trust
Derbyshire Healthcare NHS Foundation Trust
Dorset Healthcare University NHS Foundation Trust
Dudley and Walsall Mental Health Partnership Trust
East London NHS Foundation Trust
Elysium Healthcare
Essex Partnership University NHS Foundation Trust
Forensic Network (Scotland)
Greater Manchester West Mental Health NHS Foundation Trust
Hertfordshire Partnership University NHS Foundation
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
Lincolnshire Partnership NHS Foundation Trust
Mersey Care NHS Trust
NAViGO Health and Social Care CIC
Norfolk & Suffolk NHS Foundation Trust
North East London NHS Foundation Trust
North Staffordshire Combined Healthcare NHS Trust
Northamptonshire Healthcare NHS Foundation Trust
Northumberland Tyne and Wear 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
South London and Maudsley NHS Foundation Trust
South Staffordshire and Shropshire Healthcare NHS Foundation Trust
South West London and St George's Mental Health Trust
South West Yorkshire Partnership NHS Foundation Trust
Southern Health NHS Foundation Trust
St Andrew's Healthcare
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 NHS Trust

# Appendix C: Audit data collection tool

POMH-UK
PRESCRIBING OBSERVATORY FOR MENTAL HEALTH-UK

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

**The use of depot/long-acting injectable (LAI) antipsychotic medication for relapse prevention**
Topic 17a

**ELIGIBLE PATIENTS**

Patients under the care of adult mental health services (with no age restrictions) including forensic services, who are prescribed depot/long-acting injectable antipsychotic medication. Patients under the care of other services, such as CAMHS, learning disability and older people's services, should not be included.

**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. Given the nature of the information to be collected, it may be an advantage for this form to be complated at least partly by a clinician.

Please answer all questions. All questions are mandatory unless otherwise stated.
Before collecting data, please refer to the **GUIDANCE NOTES** at the end of this tool.

Data should be entered online at www.rcpsych.ac.uk/pomh/data. You will need to log in 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.

**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. However, in order to do this you will need to have made a note of the receipt number displayed when the data were submitted. Please refer to the **DATA ENTRY GUIDANCE NOTES** (provided on a separate document) for instructions on how to do this. You will not be able to correct your submitted data after the data entry period ends.
Please note however that you will not be able to use this receipt number to identify cases during the data cleaning process which is carried out after data entry ends. You may therefore also wish to make a note of the patient ID on the front page of each paper form, for easier identification of cases at that time.

For further assistance, please email pomh-uk@rcpsych.ac.uk or call POMH-UK on 020 3701 2687.

**Data may be collected anytime during the period 1 May 2017 to 31 May 2017.**

**Data should be submitted online to POMH-UK from 1 June 2017 until 4pm on 30 June 2017.**

**This form is intended for use as part of the POMH-UK Topic 17a 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 team code e.g. 006). Your team codes are known only to your Trust. The POMH-UK team does not know your team code.

**Q3. Optional additional identifier:**
This field gives your Trust the option of identifying data by site, directorate, lead consultant, or any other relevant 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. AB). 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 the clinical records:**

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

**Q9. Patient's current clinical psychiatric diagnoses *(ICD-10 categories):***
*(please tick all that apply; see guidance notes)*

☐ *F00-F09* ☐ *F40-F48* ☐ *F80-F89*
☐ *F10-F19* ☐ *F50-F59* ☐ *F90-F98*
☐ *F20-F29* ☐ *F60-F69** (answer Q10b and c)* ☐ *F99*
☐ *F30-F39* (answer Q10a)* ☐ *F70-F79* ☐ *Not known*

*If the patient has no F30-39 or F60-69 diagnosis, please go directly to Q11.*

**Q10a. *Diagnosis of affective disorder: if you have ticked F30-F39 above, please indicate whether the patient has a current diagnosis of bipolar disorder (F31):**

☐ *Yes* ☐ *No*

**Q10b. *Diagnosis of personality disorder: if you have ticked F60-F69 above, please indicate whether the patient has a current diagnosis of emotionally unstable (or 'borderline') personality disorder (F60.3):**

☐ *Yes* ☐ *No*

**Q10c. *Diagnosis of personality disorder: if you have ticked F60-F69 above, please indicate whether the patient has a current diagnosis of dissocial (or 'antisocial') personality disorder (F60.2):**

☐ *Yes* ☐ *No*

**Q11. Which service/clinical team is currently responsible for this patient's care?**

☐ *Community mental health team (including assertive outreach/community rehab/step-up)*
☐ *Home treatment/crisis team*
☐ *Early intervention service*
☐ *Acute adult inpatient team*
☐ *PICU ward team*
☐ *Inpatient rehabilitation service*
☐ *Forensic community team*
☐ *Forensic ward team*
☐ *Prison service team*
☐ *Other service**

**please specify the nature of this service*

**Q12. Is this patient detained in hospital under the Mental Health Act (MHA) or equivalent outside England?**

☐ *Yes, the patient is detained in hospital under the MHA (go to Q18)*

☐ *The patient is currently in hospital but is not detained under the MHA (go to Q18)*

☐ *The patient is not currently classified as an inpatient (go to Q13)*

## Framework of care for community-based patients

**Q13. Is this patient subject to a Community Treatment Order (CTO)?**

☐ *Yes* ☐ *No*

**Q14. Is the patient currently subject to the Care Programme Approach (CPA) or equivalent outside England?**
*(see guidance notes)*

☐ *Yes (go to Q15a)* ☐ *No (go to Q15b)*

**Q15a. If yes to Q14 above, has the patient been assigned a care-coordinator or equivalent outside England?**

☐ *Assigned a care-coordinator* ☐ *Not assigned a care-coordinator*

**Q15b. If no to Q14 above, has the patient been assigned a lead professional/named professional/key professional/key worker?**
*(see guidance notes for further information)*

☐ *Assigned* ☐ *Not assigned*

## Episodes of crisis team contact/hospital admission for community-based patients

**Q16. Over the previous year, has this patient had any episodes* of contact with the crisis/home treatment team:** *(*an episode may cover one or more consecutive appointments or visits - see guidance notes for further information)*

☐ *Yes, one episode* ☐ *Yes, more than one episode* ☐ *No*

**Q17. Over the previous year, has this patient had any admissions to a psychiatric ward?**

☐ *Yes, one admission* ☐ *Yes, more than one admission* ☐ *No*

## Depot/LAI antipsychotic medication currently prescribed

**Q18. Please specify the depot/LAI antipsychotic medication regimen currently prescribed.**

**Please note that the audit form will later ask how long the patient has been on their current depot/LAI antipsychotic medication (Q28), and so you may wish to collect this information at this point** *(see guidance notes)*.

**Aripiprazole:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)*
**please count 'monthly' as every 4 weeks*

**Flupentixol decanoate:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

**Fluphenazine decanoate:**

Single or test dose (mg) . 

Regular IM (mg) . 

Injection interval (weeks)

**Haloperidol decanoate:**

Single or test dose (mg) . 

Regular IM (mg) . 

Injection interval (weeks)

**Olanzapine:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

**Paliperidone:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)*
**please count 'monthly' as every 4 weeks*

**Risperidone:**

Single or test dose (mg) . 

Regular IM (mg) . 

Injection interval (weeks)

**Zuclopenthixol decanoate:**

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)





**Other depot/LAI antipsychotic**

Name:

Single or test dose (mg)

Regular IM (mg)

Injection interval (weeks)

**Q18b. Please indicate the clinical service currently responsible for administering this patient's depot/LAI antipsychotic medication:**

☐ *Primary care* ☐ *Mental health services* ☐ *Other**

**please specify*

**Please tick this box if the patient is not currently prescribed depot/LAI antipsychotic medication** (Please note that ticking this box will clear any dosages entered in the previous question):

**If the patient is not prescribed depot/LAI antipsychotic medication, the form ends here as they are not eligible for this audit.**

## Regular oral antipsychotic medication currently prescribed

**Q19. In addition to depot medication, is the patient currently being prescribed regular oral antipsychotic medication? If so, please provide details below (do not include PRN medication).**

**Complete the form below for each regular oral antipsychotic medication currently prescribed.**
**Complete the dosage information for each drug that is currently prescribed (please leave others blank).**

**Antipsychotic medication is listed in alphabetical order.**

**Amisulpride:**
regular oral daily mg

**Aripiprazole:**
regular oral daily mg

**Asenapine:**
regular oral daily mg

**Benperidol:**
regular oral daily mg

**Chlorpromazine:**
regular oral daily mg

**Clozapine:**
regular oral daily mg

**Levomepromazine:**
regular oral daily mg

**Lurasidone:**
regular oral daily mg

**Olanzapine:**
regular oral daily mg

**Paliperidone:**
regular oral daily mg

**Pericyazine:**
regular oral daily mg

**Perphenazine:**
regular oral daily mg

**Promazine:**
regular oral daily mg

**Quetiapine:**
regular oral daily mg

**Risperidone:**
regular oral daily mg

**Sulpiride:**
regular oral daily mg

**Trifluoperazine:**
regular oral daily mg

**Zuclopenthixol:**
regular oral daily mg

**Flupentixol:**
regular oral daily mg

**Haloperidol:**
regular oral daily mg

**Other oral antipsychotic**
Name:

regular oral max daily mg

**Pimozide:**
regular oral daily mg

**Prochlorperazine:**
Regular oral daily mg

**Please tick this box if no oral antipsychotic medication is currently regularly prescribed:** ☐
(Please note that ticking this box will remove all previous data from this question)

Please tick this box if information on this patient's current regular oral antipsychotic medication is not available: ☐

**Q20. Please identify any other regular psychotropic medications that the patient is currently prescribe**
*(i.e. other than those already identified previously; please tick all that apply. No dosage or other information is required - see guidance notes)*

- ☐ *A benzodiazepine*
- ☐ *An anticholinergic/antimuscarinic*
- ☐ *Carbamazepine*
- ☐ *Lamotrigine*
- ☐ *Methadone*
- ☐ *Pregabalin*
- ☐ *Z-hypnotics*
- ☐ *Not known/information not available*
- ☐ *An antidepresseant*
- ☐ *Buprenorphine*
- ☐ *Dexafetamine/lisdexafetamine*
- ☐ *Lithium*
- ☐ *Methylphenidate*
- ☐ *Valproate*
- ☐ *None of the above*

## Care plan

**Q21. Is the patient's current care plan accessible in the clinical records?**
*(see guidance notes)*

☐ *Yes (go to Q22)* ☐ *No (go to Q26)*

**Q22. Is there anything written in the care plan that shows that the patient was involved in the generation of their care plan?**
*(see guidance notes)*

☐ *The wording of the care plan indicates that efforts were made to engage the patient in development of thier care plan*

☐ *No documented evidence of involvement*

**Q23. Does the care plan include a crisis plan?**

☐ *Yes* ☐ *No/unclear*

**Q24. Does the care plan or crisis plan include the follow-up actions to be taken if a patient fails to attend an appointment for administration of their depot injection or declines an injection?**
*(see guidance notes)*

☐ *Yes*

☐ *Not included in care plan or crisis plan but is included in other documents such as local service/team protocol*

☐ *No/unclear*



**Q25. Are the patient's early signs and symptoms of relapse documented in the care plan or crisis plan?**

☐ *Yes* ☐ *No/unclear*

**Q26. Please indicate below any early signs and symptoms of relapse which are documented in the care plan or crisis plan or anywhere else in the clinical records for this patient. These could be an onset or increase in any of the following:**
*(please tick all that apply)*

☐ *Hallucinations*
☐ *Delusions*
☐ *Anxiety*
☐ *Depressive features*
☐ *Disorganisation*
☐ *Sleep disturbance*
☐ *Risk of or actual socially vulnerable behaviour/exploitation*
☐ *Other**

☐ *Socially inapproprpriate/eccentric behaviour*
☐ *Risk of or actual aggression/ violence towards others*
☐ *Risk of or actual self-neglect*
☐ *Social withdrawal/isolation*
☐ *Risk of or actual impulsive/disinhibited behaviour*
☐ *Help-seeking behaviour*
☐ *Risk of or actual deliberate self-harm*
☐ *None documented*

**please specify*

**Q27. Please indicate below whether any of the following general risk factors for relapse are documented in this patient's clinical records:**
*(please tick all that apply)*

☐ Poor adherence to medication
☐ Substance/alcohol use
☐ Psychosocial stressors/life events
☐ Lack of social support
☐ Other*

**please specify*

**Q28. How long has the patient been prescribed their current depot/LAI antipsychotic medication?**

☐ *Less than 6 months (complete Q29 and Q30 then finish and submit the form)*
☐ *6 months to one year (complete Q31, Q32 and Q33 then finish and submit the form)*
☐ *More than one year (go to Q31 and continue to the end of the form)*

**Please complete Q29 and Q30 only if the patient started the currently prescribed depot/LAI antipsychotic medication in the last 6 months.**

**Q29. Immediately prior to prescription of the current depot/LAI medication, please indicate the antipsychotic medication the patient was prescribed:**

- ☐ *Oral antipsychotic medication only*
- ☐ *A different depot/LAI antipsychotic medication only (no oral antipsychotic medication)*
- ☐ *A combination of oral and depot/LAI antipsychotic medication*
- ☐ *No antipsychotic medication*

**Q30. Please indicate the clinical rationale/prompts for the switch to the current depot/LAI antipsych medication (you may need to ask the clinical team if this is not clear from the clinical records):**
*(please tick all that apply)*

- ☐ *Rationale unclear/unknown*
- ☐ *To improve medication adherence*
- ☐ *Reduced frequency of administration*
- ☐ *Illness known to respond to the oral formulation of the depot drug chosen*
- ☐ *Patient's choice/preference*
- ☐ *Lack of availability of medication (e.g. discontinuation by manufacturer or formulary decision not to stock)*
- ☐ *Insufficient clinical response to previous antipsychotic/perceived better therapeutic efficacy for depot/LAI*
- ☐ *To avoid or minimise any of the following side effects (please tick all that apply):*
  - ☐ *Anticholinergic side effects*
  - ☐ *Dysphoric or discomforting subjective experience*
  - ☐ *Extrapyramidal side effects*
  - ☐ *Injection side reactions*
  - ☐ *Weight gain*
  - ☐ *Metabolic side effects (raised plasma glucose, dyslipidaemia)*
  - ☐ *Sexual side effects*
  - ☐ *Prolactin related side effects (except sexual side effects)*
  - ☐ *Sedation*
  - ☐ *Other**

**please specify*

- ☐ *Other clinical rationale**

**please specify*



**Please complete Questions 31, 32 and 33 only if the patient has been prescribed their current depot/LAI antipsychotic medication for at least 6 months.**

**Q31. How many depot/LAI medication injections were prescribed to be administered over the last 6 months?**
*(see guidance notes)*

| N | N |
|---|---|

**Q32. How many of the prescribed depot/LAI medication injections were documented as actually administered over the same 6-month period?**
*(see guidance notes)*

| N | N |
|---|---|

Please tick this box if this information is not available: ☐

*If there is no discrepancy between the response to this question and the previous one and the patient has been receiving their current deopt/LAI antipsychotic medication for more than one year, please go directly to Q34. Otherwise, please go to the end of the form and submit.*

**Q33. If not all of the injections were actually administered over the 6 month period, what reason(s) is documented in the clinical records** *(please tick all that apply)*:

- ☐ *The patient did not attend on the day of the appointment to receive their depot/LAI medication*
- ☐ *Patient was not available when visited for administration of the injection*
- ☐ *Patient was available but declined to have the injection for any reason*
- ☐ *Decision by clinical staff not to give the injection (for any reason)*
- ☐ *Lack of availability of prescribed depot/LAI*
- ☐ *Organisational problems within the clinical team responsible for administering the depot injection*
- ☐ *No mention in the clinical records that an injection(s) has been delayed or missed*
- ☐ *Other**

**please specify*

*If the patient has been prescribed their current depot/LAI antipsychotic medication for less than a year, the form ends here. Please go to the end of the form and submit.*

**Please complete questions 34, 35, and 36 only if the patient has been receiving their current depot/LAI antipsychotic medication for at least one year**

**Q34. Has a medication review been documented in the clinical records in the past year?**

☐ *Yes, and there is documented evidence that therapeutic response was considered (go to Q35)*

☐ *Yes, but there is no documented evidence that therapeutic response was considered (go to Q35)*

☐ *No (go to Q36)*

**Q35. Please indicate the documented outcome of the medication review** *(please tick all that apply)*:

☐ *Depot/LAI dose changed: increased or decreased*

☐ *dosage interval between depot/LAI injections changed*

☐ *Any change in other psychotropic medication prescribed*

☐ *No change*

**Q36a. In the last year, were side effects assessed?**
*(see guidance notes)*

☐ *Yes (go to Q36b)*

☐ *General statement only regarding side effects (finish and submit form)*

☐ *No side effect assessments documented (finish and submit form)*

**Q36b. In the last year, were assessments for any of the following side effects documented in the clinical records?**
*(please tick all that apply; see guidance notes)*

| | *Presence documented* | *Absence documented* | *No record* |
|---|---|---|---|
| *Anticholinergic side effects* | ☐ | ☐ | ☐ |
| *Dysphoric or discomforting subjective experience* | ☐ | ☐ | ☐ |
| *Extrapyramidal side effects* | ☐ | ☐ | ☐ |
| *Injection site reactions* | ☐ | ☐ | ☐ |
| *Weight gain* | ☐ | ☐ | ☐ |
| *Metabolic side effects (raised plasma glucose; dyslipidaemia)* | ☐ | ☐ | ☐ |
| *Sexual side effects* | ☐ | ☐ | ☐ |
| *Prolactin-related side effects (other than sexual side effects)* | ☐ | ☐ | ☐ |
| *Sedation* | ☐ | ☐ | ☐ |
| *Other side effect(s)** | ☐ | ☐ | |

**please specify*

## Guidance notes

**Q9. ICD-10 Psychiatric diagnosis codes are as follows:**
F00-F09 organic, including symptomatic, mental disorders e.g. dementia
F10-F19 mental and behavioural disorders due to psychoactive substance use
F20-F29 schizophrenia, schizotypal & delusional disorders
F30-F39 mood (affective) disorders e.g. bipolar affective disorder, recurrent depressive disorder
F40-F48 neurotic, stress-related & somatoform disorders e.g. agoraphobia, panic disorder
F50-F59 behavioural syndrome associated with physiological disturbance & physical factors e.g. anorexia
F60-F69 disorders of adult personality & behaviour e.g. paranoid personality disorder
F70-F79 mental retardation
F80-F89 disorders of psychological development
F90-F98 behavioural & emotional disorders with onset during occurring in childhood & adolescence
F99 unspecified mental disorder

**Q11. Service/clinical team**
This should be the service/clinical team that is responsible for care on the day the audit data are collected. For example, if a patient under the care of a community team has been admitted to a PICU, select PICU.

**Q14 Care Programme Approach**
The Care Programme Approach (CPA) is a way that services are assessed, planned, co-ordinated and reviewed for someone with mental health problems or a range of related complex needs. The CPA framework is for people who have more complex needs, are at most risk or have mental health problems compounded by disadvantage, and need support from multiple agencies.
Wales has the Mental Health Measure as an equivalent, so 'yes' should be the response selected if this is in place. Northern Ireland does not have CPA or an equivalent so please select 'no' for these patients.

**Q16. Episodes of contact with crisis/home treatment team and hospital admissions**
Some clinical record systems contain a section that gives historical information relating to referrals, changes of clinical team and hospital admissions.

**Q18. Current depot/LAI antipsychotic medication prescribed**
If an injection is prescribed to be administered 'monthly', please enter 4 weeks. Similarly, if the prescription requires administration every 3 months, please enter 12 weeks.

**Q20. Other regular medications**
It may be helpful to ask a pharmacist or doctor to answer this question.

**Q21. Care plan**
Patients who are not subject to CPA may not have a separate care plan; this may be recorded solely within a letter to the GP. If this is so, select 'yes' if a recent GP letter contains this information.

**Q22. Care plan**
Evidence that efforts have been made to engage a patient in the development of the care plan might be comments such as: 'John has agreed to go shopping once each week with the community OT".

**Q24. Follow-up actions in care/crisis plan**
Answer yes if it is clear to a member of the clinical staff who does not know the patient what action they should take if the patient does not attend an appointment to have their depot/LAI antipsychotic administered. Examples would include telephoning/e-mailing/writing to the patient or arranging a home visit.

**Q31. Depot/LAI medication injections prescribed to be administered**

| Frequency of administration as indicated on the prescription | Number of doses that should have been administered in the last 6 months |
|---|---|
| Weekly | 26 |
| 2-weekly | 13 |
| 3-weekly | 8 |
| 4-weekly | 6 |
| Monthly | 6 |
| 3-monthly | 2 |

**Q32. Depot/LAI medication injections actually administered**
This information can usually be found in the patient's prescription chart/administration record.

**Q36. Side effects**
Extrapyramidal side effects include dystonia (muscle spasms and muscle contractions), akathisia (motor restlessness and sense of inner restlessness), parkinsonism (characteristic symptoms such as rigidity, bradykinesia [slowness of movement], and tremor) and tardive dyskinesia (irregular, jerky movements).
It may be helpful to ask a pharmacist or doctor to answer this question.

**These data should be submitted online to POMH-UK by: 30 June 2017**

If you realise that you have made a mistake submitting the data on this form online, you are able to edit submitted data before the data entry period ends. Keep a note of the receipt number shown after submission. You will need this to access this submitted form to correct any data entry errors.

You will not be able to correct your submitted data after the data entry period ends.

For further information please contact **POMH-UK@rcpsych.ac.uk**

**PRACTICE STANDARDS FOR AUDIT** (derived from NICE CG178: Psychosis and schizophrenia in adults: prevention and management)

**1. Care Plan**

a) A patient's care plan should be accessible in the clinical records
b) There should be documented evidence that the patient was involved in the generation of their care plan
c) A patient's relapse 'signature' signs and symptoms should be documented in their care plan
d) The care plan should include a crisis plan
e) The care plan should include a clinical plan for response to default from treatment, i.e. if a patient fails to attend an appointment for administration of their depot injection or declines their depot injection.

**2. Depot/long-acting injectable antipsychotic medication: Prescription and review**

a) A clear rationale for initiating a depot/ long-acting injectable antipsychotic medication should be documented in the clinical records
b) Review of antipsychotic medication should be conducted at least annually by the prescriber/psychiatrist in the responsible clinical team
c) Medication review should include consideration of therapeutic response, adverse effects and adherence.

# Appendix D: POMH-UK Central Team

Professor Thomas Barnes: Joint-Head POMH-UK

Carol Paton: Joint-Head POMH-UK

Professor Thomas Craig: Expert Advisor

Gavin Herrington: Programme Manager

Kanza Raza: Deputy Programme Manager

Jenny Bari: Project Worker

Emily Maynard: Project Worker

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