



Quality of English inpatient mental health services for people with anxiety or depressive disorders: Findings and recommendations from the core audit of the National Clinical Audit of Anxiety and Depression

D.S. Baldwin^{a,j,n,*}, M. Dang^b, L. Farquharson^{c,k}, N. Fitzpatrick^d, N. Lindsay^d, A. Quirk^e, E. Rhodes^f, P. Shah^g, R. Williams^{h,l}, M.J. Crawford^{i,m}

^a NCAAD Clinical Lead, Royal College of Psychiatrists, United Kingdom

^b NCAAD Programme Manager, Royal College of Psychiatrists, United Kingdom

^c Clinical Advisor to the Spotlight Audits, Royal College of Psychiatrists, United Kingdom

^d NCAAD Project Officer, Royal College of Psychiatrists, United Kingdom

^e CCQJ Head of Clinical Audit and Research, Royal College of Psychiatrists, United Kingdom

^f NCAAD Deputy Programme Manager, Royal College of Psychiatrists, United Kingdom

^g NCAAD Service User Advisor, Royal College of Psychiatrists, United Kingdom

^h CCQJ Clinical Fellow, Royal College of Psychiatrists, United Kingdom

ⁱ College Centre for Quality Improvement, Royal College of Psychiatrists, United Kingdom

^j Psychiatry, Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, United Kingdom

^k Clinical Psychology, University of East London, United Kingdom

^l Department of Brain Sciences, Imperial College London, United Kingdom

^m Mental Health Research, Faculty of Medicine, Imperial College London, United Kingdom

ⁿ University Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa

ARTICLE INFO

Available online xxxx

Keywords:

Clinical audit

Quality improvement

Anxiety

Depression

ABSTRACT

Background: Clinical audit is a sustained cyclical quality improvement process seeking to improve patient care and outcomes by evaluating services against explicit standards and implementing necessary changes. National audits aim to improve population-level clinical care by identifying unwarranted variations and making recommendations for clinicians, managers and service commissioners. The National Clinical Audit of Anxiety and Depression aimed to improve clinical care for people admitted to English hospitals for treatment of anxiety and depression, to provide comparative data on quality of care, and to support local quality improvement initiatives by identifying and sharing examples of best practice.

Procedures: Thirteen standards were developed based on NICE guidelines, literature review and feedback from a steering committee and reference group of service users and carers. All providers of NHS inpatient mental health services in England were asked to submit details of between 20 and 100 eligible service users/patients admitted between April 2017 and September 2018. To ascertain data reliability, participating services re-audited 5 sets of case-notes with a second auditor, and the coordinating team checked 10 randomly-selected sets of case-notes from 3 services, also selected at random. The reference group and steering committee identified key findings and developed a series of recommendations, which were discussed in regional quality improvement workshops and on-line webinars.

Findings: Data from 3795 case notes were analysed. A sizeable proportion of records indicated that at least one important aspect of initial assessment was not documented. Many service users/patients who could have benefited from an intervention targeted at optimising physical health did not receive it. Only a minority (39%) were referred for psychological therapy. Use of outcome measures varied considerably but no single outcome measure was being used routinely. Most individuals had a care plan recorded in the notes, but a review date was documented in only two-thirds, and almost half of individuals had not received a copy.

Conclusions: There was considerable variation between English mental health services across many variables, and much scope for improvement. Clinicians should ensure that care plans are developed collaboratively with service users/patients and identified carers should be provided with information about support services. Health services should investigate the reasons for low referral rates for psychological therapies. Clinicians should ensure all service users have jointly developed crisis plans in place at discharge. Service managers should agree outcome measures to evaluate the treatment provided and clinicians should use these measures at initial assessment and

* Corresponding author at: University Department of Psychiatry, College Keep, 4-12 Terminus Terrace, Southampton SO14 3DT, United Kingdom.
E-mail address: dsb1@soton.ac.uk (D.S. Baldwin).

review appointments. The implementation of such changes provides an opportunity for collaborative research into mental health service delivery and quality.

© 2020 The Author(s). Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Background

Clinical audit is a quality improvement process which seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. It comprises sustained and cyclical activity, by which aspects of the structure, processes, and outcomes of care are selected and systematically evaluated, and changes are implemented at an individual, team or service level, with further monitoring to confirm improvement in healthcare delivery [1]. Although external evidence on its effectiveness in improving outcomes is mixed [2–4], clinical audit has been adopted widely within clinical governance measures in local and national health care systems, and is regarded as a key component for supporting improvements in clinical practice.

Local clinical audit is undertaken extensively within locality-specific mental health services, as a mechanism for evaluating and improving the quality of care. The recommendations for changed practice which arise from such audits are embraced inconsistently and implemented variably, for structural, process-driven and attitudinal reasons [5,6]. In England, national clinical audits on commonly-occurring medical conditions are commissioned and managed by the Healthcare Quality Improvement Partnership (HQIP), and are part of the National Clinical Audit and Patient Outcomes Programme, funded by NHS England. Improvements in clinical care associated with such audits are thought to arise from many factors, including awareness-raising, patient advocacy group partnership, media engagement, targeted service commissioning, payment incentives and accreditation schemes [7].

The Royal College of Psychiatrists hosts a range of national audits of mental health services. The Prescribing Observatory for Mental Health (POMH-UK) helps specialist mental health services across the UK to improve their prescribing practice through audit-based quality improvement programmes: recent findings from POMH studies include potentially hazardous prescribing of valproate-containing medicines to women of reproductive age [8] and widespread poor monitoring of physical health after rapid tranquilisation [9]. The National Audit of Dementia examines the quality of care received by people with dementia in general hospitals: key findings include variable quality of assessments of cognition and functioning [10] and sub-optimal screening for delirium [11]. The National Clinical Audit of Psychosis aims to increase the quality of clinical care provided to people with psychosis: key findings include sub-optimal assessment and treatment of comorbid physical health conditions [12], low use of clinical outcome measures in early intervention services [13], and marked variations in the use of community treatment orders [14].

A previous binational (England and Wales) audit of psychological therapy for adults with anxiety or depression identified marked variations in service provision [15], and reports of bad experiences of therapy in approximately 5% of individuals [16]. The National Clinical Audit of Anxiety and Depression (NCAAD) was a three-year improvement programme established to evaluate and improve the quality of care received by hospitalised service users/patients with primary diagnoses of anxiety or depressive disorders in National Health Service (NHS) funded secondary mental health services in England. It comprised a core audit on care during and after a period of hospital care, a spotlight audit on psychological therapies, and a second spotlight on the experiences of service users who received psychological therapy. More details are available at <https://www.rcpsych.ac.uk/improving-care/ccqi/national-clinical-audits/national-clinical-audit-of-anxiety-and-depression/what-is-ncaad>. The core audit addressed seven themes

(access to services; comprehensiveness of assessment; shared decision making; guidance-concordant prescribing; guidance-concordant psychological therapies; discharge arrangements; outcome measurement) and measured the performance of 54 providers of mental health services (Mental Health Trusts) in meeting thirteen quality standards derived from national and professional guidance (Table 1). The objectives of NCAAD were to enable Trusts and other organisations to improve the quality of care for people admitted to hospital for treatment of anxiety and depression; to provide comparative data on quality of care; to provide comparative data on service user outcomes following treatment; and to generate data which support local quality improvement initiatives by identifying and sharing examples of best practice.

2. Methodology

The thirteen standards were developed based on NICE guidelines and quality standards, a literature review, and through iterative feedback from a NCAAD steering committee and a reference group comprised of several service users and carers with lived experience of anxiety/depression, and carers with experience of providing support. Contributing partners included advocacy and professional groups (Anxiety UK, British Psychological Society, Care Quality Commission, Carers Trust, HQIP, McPin Foundation, Mind, Rethink Mental Illness, Royal College of General Practitioners, Royal College of Nursing, and Royal College of Psychiatrists). The reference group was involved from the start of the audit process, including the development of the tools used to measure services' performance, and contributing to decisions about which data should be collected. The audit tool included items relating to

Table 1
Selected standards

- | |
|---|
| 1. The Trust routinely collects data to assess equity of access. |
| 2. Service users have timely access to inpatient care when required |
| 3. Service users' assessments are comprehensive and include consideration of: <ol style="list-style-type: none"> Identification of social support and/or stressors in relation to finance, education/employment and relationships Previous traumatic experiences or associated symptoms Previous treatments and response to them (if applicable) |
| 4. Service users' physical health is considered as part of their assessment and treatment, with support, advice or onward referral offered where appropriate |
| 5. The needs of service users' family members, friends or carers are considered as part of the assessment process and they are offered an assessment of their needs |
| 6. Care plans are jointly developed with service users and their family member, friend or carer (if applicable), and they are given a copy with an agreed date for review |
| 7. Psychotropic medication is provided in line with the relevant NICE and BNF guidance for the service user's diagnosis/condition |
| 8. Psychological therapies are provided in line with relevant NICE guidance for the service user's diagnosis/condition |
| 9. Within 24 h of discharge a discharge letter is sent to the service user's GP and copy of the service user's care plan is sent to the accepting service (if applicable) |
| 10. The service user and their family member, friend or carer (if applicable) receives at least 24 h' notice of discharge and this is documented |
| 11. Service users discharged from an inpatient setting receive a follow-up within 48 h of discharge |
| 12. Service users have a crisis plan agreed and in place prior to discharge from an inpatient service |
| 13. Assessments include the use of an appropriately validate outcome measure (s) (e.g. symptoms, level of functioning and/or disability) which are used to monitor, inform and evaluate treatment |

demographic information, diagnosis, admission, assessment, care planning, medication, psychological therapies, physical health, discharge, re-admission, follow-up, crisis planning, and outcome measures (see Table 1).

Participating organisations were asked to generate a list of all eligible service users/patients within their Trust, and to submit the details of between 20–100 randomly selected service users/patients through a secure on-line system. Eligible service users/patients were those who met the following criteria: aged 16 years or older; admitted for inpatient care between April 2017 and September 2018 (inclusive); and a primary diagnosis at discharge of an anxiety or depressive disorder using ICD-10 coding.

Exclusion criteria were a diagnosis of cyclothymia or an affective or non-affective psychosis (including F32.3 depressive episode with psychotic symptoms), and admission to a forensic unit or long-stay ward. If service users/patients had more than one admission during the data collection period, data from only the first admission were returnable. As some primary diagnoses were recorded infrequently, we constructed four broad categories of psychiatric diagnoses with certain similarities, sufficient in size to permit comparisons and to prevent potential identification of individuals when findings were returned to participating Trusts.

The number of 'cases' submitted by participating Trusts ranged between 19–101 individuals (median, 80). The NCAAD team checked returns against eligibility criteria, identifying duplicate cases, missing data and unexpected values, and attempted to clarify seemingly erroneous data with local audit teams. From 3885 returns, data from 3795 case notes were subsequently analysed using IBM SPSS Statistics 21, Stata or Microsoft Excel 2016. Where there were clear errors (for example, a discharge date before an admission date) but no response was received from the relevant Trust, the data response was changed to 'unknown/not documented'. In a second round of analysis, the team amended responses if they could identify data entry errors with a high degree of confidence; but when this was not possible, no changes were made. To ascertain the reliability of data, all Trusts were asked to re-audit five sets of case-notes from the submitted sample, with a second auditor: in addition, the NCAAD team performed a quality assurance check of 10 randomly selected sets of case-notes, from each of three Trusts also selected at random.

Once the audit was complete, the reference group and steering committee together helped to identify key findings, leading to key recommendations in published reports. Through a series of consultations with the reference group in collaboration with the McPin Foundation, service users and carers gave responses to the results, considered whether they related to their own experience and discussed potential recommendations. The key findings and ensuing recommendations were subsequently discussed in a series of facilitated regional workshops with participating Trusts, held shortly after report publication, followed by interactive on-line webinars.

3. Findings

Equity of access (standard 1). Demographic and clinical characteristics are summarised in Table 2. Data on ethnicity were not recorded in 212 (6%) cases. The recorded ethnicity profile of audit participants is broadly similar to that in the English national population, according to the 2011 Census (which has 85% self-described as 'White'). Most service users/patients (77%) were resident in mainstream housing. Approximately 6% of the sample were homeless, this having marked regional variation (e.g. 12% homeless in the London region). The most commonly recorded (34%) primary diagnosis was depressive episode. Approximately 43% of service users/patients had a recorded comorbid diagnosis, the most common additional diagnoses being mental and behavioural disorders due to psychoactive substance use (14%) and disorders of adult personality and behaviour (11%); approximately 6% had a recorded long-term physical illness.

Table 2
Demographic and clinical characteristics.

Demographic features	
Gender, n (%)	Male 1944 (51.2); Female 1845 (48.6); Non-binary/other 6 (0.2)
Age band, n (%)	16–17 yrs., 95 (3); 18–25 yrs., 481 (13); 26–35 yrs., 671 (18); 36–45 yrs., 621 (16); 46–55 yrs., 703 (19); 55–65 yrs., 473 (13); 66+ yrs., 751 (20)
Ethnicity, n (%)	White 3194 (89), Asian/Asian British 155 (4), Black/African/Caribbean/Black British 81 (2), Mixed/Multiple Ethnic Group 69 (2), Other Ethnic Group 66 (2), Unknown/Not Documented 212 (6), Declined to answer 18 (0.5)
Employment status n, (%)	Retired 772 (20), employed more than 16 h per week 668 (18), long-term sick or disabled 665 (18), unemployed and seeking work 660 (17), no benefits / not working 191 (5), student 157 (4), homemaker 90 (2), employed less than 15 h per week 81 (2), unpaid/voluntary work 21 (1), unknown/not documented 482 (13), declined to answer 8 (0.2)
Accommodation status n (%)	Mainstream housing 2936 (77), homeless 223 (6), other 163 (4), other care support 80 (2), mental health care support 52 (1), sheltered housing 48 (1), acute/long stay healthcare 34 (1), criminal justice support 6 (<0.1), unknown not documented 250 (7), declined to answer 3 (0.1)
Diagnostic features	
Depressive episode (F32): n (%)	1289 (34): male 673 (35), female 615 (33) *
Recurrent depressive disorder (F33); persistent mood disorder (F34), other mood disorders (F38–39): n (%)	657 (17): male 287 (15), female 370 (20) *
Phobic anxiety disorders (F40); other anxiety disorders (F41); obsessive-compulsive disorder (F42): n (%)	801 (21): male 363 (19), female 436 (24) *
Reaction to severe stress and adjustment disorders (F43): n (%)	Phobic anxiety disorders n = 17 Other anxiety disorders n = 691 Obsessive-compulsive disorder n = 93 1048 (28): male 621 (32), female 424 (23) *
	Acute stress reaction n = 248 Post-traumatic stress disorder n = 181 Adjustment disorders n = 596 Other reactions to severe stress n = 23
Additional diagnoses n (%)	
None or uncertain	2182 (58)
1 additional diagnosis	1349 (36)
2 additional diagnoses	229 (6)
3 or more additional diagnoses	35 (0.9)

* In 6 service users/patients, gender was not recorded or reported as non-binary/other.

Access to inpatient care (standard 2). A total of 1031 (27%) case-notes contained no data on the date and time when a receiving hospital had been contacted about the need for admission. The admission date was recorded in all patients, but the time of admission was not specified in 422 (11%) individuals. In 2270 service users/patients for which requisite data were available, the median time between the request to admit and actual admission was approximately 5 h (range 1–31 h), although median waiting times were longer than 25 h in two Trusts. Delays were longer in the youngest individuals (aged 16–17 years) where the median delay was 17 h. Trusts varied in the proportion of their admissions (14%–100%) which occurred within the national target of four hours. Most (69%) admissions were designated as 'emergencies' (via crisis resolution or home treatment teams, community mental health teams, Emergency departments, or through Section 135/136 of the Mental Health Act). Most admissions (83%) were voluntary, but a minority (17%) were through provisions of the Mental Health Act. In the 3242 cases (85% of the total sample) where both date of admission and date of discharge were stated, the median length of stay was 13 days (range, 1–469 days): the median length of stay was less than 7 days in 3 of 54 Trusts (6%), and greater than 28 days in 6% (again, 3 of 54 Trusts).

Comprehensiveness of assessment (standards 3 and 4). A sizeable proportion of records indicated that at least one important aspect of initial assessment was not documented. As examples, 21% of case-notes included no evidence of enquiry about a history of trauma; and 19% of the case-notes did not contain documentation of the previous response to treatment where this was relevant. Over 10% of records contained no documentation of education or employment, or difficulties relating to finances, or information relating to dependents. Over half of the sample were recorded as overweight; almost half were recorded as current smokers, or consumers of alcohol; and almost 30% were recorded as misusing drugs or alcohol. Many service users/patients who could have benefited from an intervention targeted at optimising physical health did not receive it: for example, only 29% of those who required an intervention targeted at body weight were offered one, and only 47% of identified cigarette smokers were offered advice about how to stop smoking (Table 3).

Collaboration in decision-making (standards 5 and 6). A family member, friend or carer was identified as the main source of support in 2339 (62%) case-notes. These records contained documentation of the provision of information about support services in 1458 service users/patients (62%), and of a carer assessment being offered in 579 (25%) patients. A care plan was in place in most (3445, 91%) service user/patients, with documentation of joint development (clinicians and patient) in 2826 cases (82%); however a review date was documented in only 2251 (65%), and just over half (2016, 59%) received a copy of their care plan.

Guidance-concordant psychotropic drug prescribing (standard 7). The majority of service users/patients (3317, 87%) were prescribed at least one psychotropic medicine. The case-notes included no record of whether written or verbal information about medication was given before discharge from hospital in 27% of the 3285 service users/patients who were both prescribed medication and discharged in the audit period. Reviews of medication were conducted in 2861 (87%) individuals prior to discharge, with consideration of response in 2294 (80%) and of side effects in 1775 (62%). Those aged less than 30 years ($n = 596$) were less likely to have had antidepressant medication reviewed: only 102 (23%) were followed-up within one week of admission, and records indicated a review of medication in only 64% of service users/patients. Review of records relating to the most commonly prescribed (i.e. those prescribed to $\geq 5\%$ of patients) medicines (citalopram, fluoxetine, mirtazapine, sertraline, venlafaxine) found that prescriptions reflected *British National Formulary* guidance in 99.8% of cases. Among those who received antipsychotic medication, documentation included records of blood glucose in 85%, BMI in 73%, and blood cholesterol in 46%. Benzodiazepine anxiolytics or 'z-drug' hypnotics were prescribed in 1373 (36.2%) of participants: the dataset did not allow accurate information on the duration of prescriptions, but 93% of those who were

prescribed hypnotic or anxiolytic medications at the point of leaving hospital had a review of medication within two weeks of discharge.

Guidance-concordant psychological therapies (standard 8). A minority (1478, 39%) of service users/patients were referred for individual, group, or combined individual-group psychological therapy (with much variation between Trusts (2.6%–87%): 54% of referred patients had started individual therapy and 72% had started group therapy, by the end of the audit period. The main reasons for not having started therapy were that the patient declined (31% of referrals for individual therapy, 44% of referrals for group therapy), or that the referral was considered inappropriate (21% for individual therapy, 14% for group therapy). Waiting times for therapy could only be calculated in 515 referrals, and were found to have poor inter-rater reliability. The most common individual therapies were cognitive behavioural therapy and counselling (221 and 63 patients, respectively), the most common group therapies being art-based psychotherapies and mindfulness (62 and 55 individuals, respectively). After exclusion of those in whom comorbid conditions (substance use disorders [$n = 543$], personality disorders [$n = 359$], learning difficulties [$n = 32$]) might impact the offered therapy, and after also excluding those with conditions for which NICE makes no specific recommendation for psychological treatment [$n = 513$], 2348 service users/patients could be included in an analysis of guideline-concordant psychological intervention: 884 individuals in this sub-group (38%) had been referred, and 255 (47%) of those who had started therapy were receiving guidance-concordant therapy.

Discharge planning (standards 9–12). A total of 3301 service users/patients (87%) were discharged from inpatient care during the audit period. Notice of imminent discharge (i.e. within 24 h) was given to 2546 (77%) individuals, and 1401 (70%) of identified family members or carers. A discharge letter was sent to a general practitioner in 2831 (99%) of the service users/patients who were registered in primary care: 1270 letters (45%) were sent within twenty-four hours of discharge. A care plan was sent to an accepting service in only 1526 individuals (46% of those discharged). There was considerable variation between Trusts in the time between discharge and the sending of a discharge letter. The majority (2962, 90%) were followed-up after discharge (82% by face-to-face appointments, 18% by telephone): where dates could be calculated, follow-up appointments occurred within 48 h of discharge in 1628 (57%) patients. A total of 2448 individuals (74%) had a crisis plan in place at the time of discharge.

Outcome measurement (standard 13). The use of outcome measures varied considerably across Trusts (used in between 7 and 100% of patients): overall, there was evidence of at least one outcome measure being used at least once in 61% of cases. The most commonly used measures were the Health of the Nation Outcome Scale in adults (18 years or older) (55%), and the Children's Global Assessment Scale in younger

Table 3
Identification of and intervention for markers of poor physical health.

Parameter	Patients screened n (%)	Patients needing an intervention, n (%)	Patients needing and offered an intervention, n (%)
BMI ≥ 25 kg/m ²	2590 (70)	1375 (53)	404 (29)
BMI ≥ 30 kg/m ²	2590 (70)	615 (24)	218 (36)
BMI ≥ 23 kg/m ² (South Asian and Chinese only)	102 (70) #	59 (58)	18 (31)
Blood pressure	714 (19)	65 (9.1)	29 (45)
Glucose control	451 (12)	50 (11.1)	8 (16)
Cholesterol	388 (10)	13 (3)	2 (15)
Smoking status	3155 (84) §	1387 (44)	646 (47)
Alcohol consumption	3084 (83) Δ	1431 (46)	507 (35)
Alcohol consumption above 14 units / week	–	407 (13)	271 (67)
Substance misuse	3468 (91)	1011 (29)	345 (34)

Three thresholds are used for intervention for BMI: BMI ≥ 25 kg/m² corresponds to being overweight (and includes any South Asian or Chinese origin people with BMI at that level); BMI ≥ 30 kg/m² denotes obesity, where people are regarded as being at increased risk of long-term health problems; BMI ≥ 23 kg/m² is a recognised threshold for being overweight in South Asian or Chinese origin people. #: documented refusal in 10 case-notes; § documented refusal in 22 case-notes; Δ documented refusal in 72 case-notes.

(aged 16–17 years) individuals (40%): but no single outcome measure was being used routinely.

Feedback from workshops and webinars. Feedback from 64 workshop participants comprised numerical scores on satisfaction with presentation content and delivery, and free-text comments on highlights and possible improvements: participants indicated their willingness to engage with quality improvement processes including the implementation of the audit recommendations. Similarly positive feedback was obtained from the 43 webinar participants.

4. Principal recommendations arising from key findings

The audit findings led the NCAAD service user and carer reference group and the NCAAD steering committee to jointly identify certain key areas for improvement, relating to assessment, care planning, psychological therapies, crisis plans, and use of outcome measures. These are summarised below. The full list of recommendations is available at <https://www.rcpsych.ac.uk/improving-care/ccqi/national-clinical-audits/national-clinical-audit-of-anxiety-and-depression> [17].

- a) As important information (demographic factors, history of trauma, previous response to treatment, psychiatric comorbidities, and physical health) is not being recorded routinely, NHS Trusts should provide effective systems that enable clinicians to record key information for all service users, so that appropriate care plans can be developed.
- b) Although most service users had a documented care plan, shared decision-making needs to be improved, as service users are not always given a copy of their care plan, and key information is not being routinely shared with service users and carers: therefore, clinicians should ensure that care plans are developed collaboratively and service users are given a copy, and that identified carers are provided with information about support services; and service managers should review the involvement of carers and ensure that information is available in accessible formats to all service users prescribed medication.
- c) As psychological therapies were only offered to a minority of service users, clinicians should routinely offer psychological therapies in line with NICE guidance, and Trusts should investigate the reasons for low referral rates.
- d) Although a majority received a follow-up after discharge, many service users did not have a crisis plan at the point of discharge, and sufficient notice of discharge was not always provided: therefore, clinicians should ensure that all service users are given at least 24 h' notice in advance of discharge, that jointly developed crisis plans are in place at discharge, and that all service users receive follow-up within 48 h; and Trusts should provide systems to ensure discharge letters are sent to primary care services within 24 h.
- e) As outcome measures are not being used routinely to assess change, Trusts should agree outcome measures that can be used reliably to evaluate the treatment provided and ensure that clinicians are trained in the use of these measures; and clinicians should routinely use outcome measures at both initial assessment and review appointments.

5. Discussion

The NCAAD design has certain strengths, including its co-development with service user and carer organisations, the inclusion of all providers of inpatient mental health services within England, its large size, and embedded measures to enhance reliability. Its findings reflect the performance of English inpatient mental health services in meeting pre-specified and widely accepted quality standards for anxiety and depression during the period 2017–2018. Because of the specific methods employed in the audit process, we think it unlikely that the generated

sample is atypical in terms of demographic or clinical factors. Furthermore, the recommendations which derive from these findings benefit from the involvement of service users/patients and carers and professional groups, and have key target groups for implementation. However, there are some limitations. These include the restriction to mental health service providers in England, the possibility that local audit teams returned data from only the most auditable case-notes, and the reliance of the audit on clinical records written for other purposes (often in situations where it may be difficult to summarise complex multidisciplinary treatment decisions succinctly within a care plan): some clinical activities may have been performed but not recorded, and others may have been documented but not actually performed. Additional limitations include the focus on process markers rather than outcome measures, and the inability of the NCAAD team to externally audit more than 30 sets of case-notes (representing less than 1% of all returned individual datasheets). The findings and recommendations may not be fully generalizable or uncritically applicable to mental health services in other countries within the United Kingdom or beyond.

The substantial variability between mental health services in meeting multiple quality standards raises concern and requires further exploration in subsequent evaluations: it would be important to determine whether such geographic variation is a persistent finding, and associated with differences in local patient populations (for example, higher proportions of homeless individuals, or people with comorbid conditions) or staff provision. The considerable variation between services in the proportion of service users/patients referred for psychological intervention (2.6% to 87%) is particularly striking, and accords with previous findings [15]. Aspects of psychological therapy provision were explored in a subsequent spotlight audit, which identified important potential influences such as long waiting times and lack of choice in key aspects of therapy [18]. Further studies are needed to examine whether the ensuing principal recommendation, namely the implementation of Trust-wide psychological therapies management committees will lead to more consistent, greater and quicker access.

The aspects of clinical care which were undertaken most consistently (such as sending a discharge letter to the general practitioner, and following-up patients promptly after discharge) already benefit from long-established engrained quality improvement systems. The multiple findings that important personal (for example, history of traumatic experiences) and clinical (for example, previous response to treatment) details were not recorded in case-notes for substantial proportions of individuals suggests the need for concerted efforts to ensure the comprehensiveness of assessment over the course of hospital admission: these may be facilitated by standardised checklists or periodic reminders to make suitable enquiries. Recording of accurate demographic information is also essential at a service level, for monitoring and advancing equity of access in mental health care. Such systemic prompts could also be implemented to ensure that individuals with identified physical health improvement needs (such as reduction in weight, smoking cessation, and reduction in alcohol consumption) could receive them either whilst in hospital or after discharge. Similar systems could be adopted to encourage the incorporation of repeated use of outcome measures within routine clinical practice, as recommended by the International Consortium for Health Outcomes Measurement [19]: but this would require substantial clinician training programmes, service user engagement, and managerial endorsement. The success of other recommendations, such as the collaborative development of care plans, provision of adequate notice of discharge from hospital, and early review following discharge is likely to be reliant upon close and effective partnerships with service users/patients and carers. Some recommendations might sometimes be hard to implement in the 'hurly-burly' of clinical practice: for example, many service users/patients wish to leave hospital as soon as they are able, and the imperative for services to provide 24 hours' notice of discharge may not necessarily be welcome. The recommendations may require certain service

providers to make substantial changes: and similar structural and systemic reorganisation may be needed to enhance communications and working relationships with primary care services.

To conclude, the National Clinical Audit of Anxiety and Depression examined the performance of 54 English mental health service providers of inpatient services in meeting recommended care quality standards, and identified frequent and substantial deficits in performance and marked variation between services. It is uncertain whether mental health services in other countries experience similar problems. The key findings relating to assessment, decision-making, psychological therapies, discharge planning and outcome measurement provide an evidence base for a series of recommendations for individual care and treatment and mental health service delivery, implementation of which will rely on structural and systemic changes.

Acknowledgements

Many thanks to all members of the steering and service user and carer reference groups, our partner organisations, and contributing staff in participating health services. The audit was funded by NHS England. The views expressed in this publication are those of the authors and not necessarily those of the funder. The audit was commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). Thanks also to Jessica Butler (RCPsych) for clarifying numerical queries and Mary Houston (University of Southampton) for typographical support.

References

- [1] National Institute for Clinical Excellence. Principles for best practice in clinical audit. Radcliffe publishing; 2002.
- [2] Johnston G, et al. Reviewing audit: barriers and facilitating factors for effective clinical audit. *BMJ Quality & Safety*. 2000;9(1):23–36.
- [3] Ivers N, et al. Audit and feedback: effects on professional practice and healthcare outcomes. *Cochrane Database Syst Rev*. 2012;6.
- [4] Jamtvedt G, et al. Does telling people what they have been doing change what they do? A systematic review of the effects of audit and feedback. *BMJ Quality & Safety*. 2006;15(6):433–6.
- [5] Balogh R, Bond S. Completing the audit cycle: the outcomes of audits in mental health services. *International J Qual Health Care*. 2001;13(2):135–42.
- [6] Berk M, Callaly T, Hyland M. The evolution of clinical audit as a tool for quality improvement. *J Eval Clin Pract*. 2003;9(2):251–7.
- [7] Stewart K, Bray B, Buckingham R. Improving quality of care through national clinical audit. *Future hospital journal*. 2016;3(3):203.
- [8] Paton C, et al. A UK clinical audit addressing the quality of prescribing of sodium valproate for bipolar disorder in women of childbearing age. *BMJ Open*. 2018;8(4):e020450.
- [9] Paton C, et al. Physical health monitoring after rapid tranquillisation: clinical practice in UK mental health services. *Therapeutic Advances in Psychopharmacology*. 2019;9:2045125319895839.
- [10] Souza R, et al. Quality of care for people with dementia in general hospitals: national cross-sectional audit of patient assessment. *Clin Med*. 2014;14(5):490.
- [11] Codling D, et al. Delirium screening and mortality in patients with dementia admitted to acute hospitals. *Aging Ment Health*. 2020:1–7.
- [12] Crawford MJ, et al. Assessment and treatment of physical health problems among people with schizophrenia: national cross-sectional study. *Br J Psychiatry*. 2014;205(6):473–7.
- [13] Royal College of Psychiatrists. *National Clinical Audit of Psychosis: National report for the Early Intervention in Psychosis Spotlight Audit 2018/2019*, Healthcare Quality Improvement Partnership, Editor; 2019 London.
- [14] Lei H, et al. Factors influencing use of community treatment orders and quality of care that people receive: results of a national survey in England and Wales. *BJPsych Bulletin*. 2019;43(5):227–35.
- [15] Williams R, et al. Patient preference in psychological treatment and associations with self-reported outcome: national cross-sectional survey in England and Wales. *BMC Psychiatry*. 2016;16(1):4.
- [16] Crawford MJ, et al. Patient experience of negative effects of psychological treatment: results of a national survey. *Br J Psychiatry*. 2016;208(3):260–5.
- [17] Royal College of Psychiatrists. *National Clinical Audit of Anxiety and Depression*; 2019.
- [18] Royal College of Psychiatrists. *National Clinical Audit of Anxiety and Depression (NCAAD) Spotlight audit*; 2020.
- [19] Obbarius A, et al. Standardization of health outcomes assessment for depression and anxiety: recommendations from the ICHOM Depression and Anxiety Working Group. *Qual Life Res*. 2017;26(12):3211–25.