

Article

Addressing long-term physical healthcare needs in a forensic mental health inpatient population using the UK primary care Quality and Outcomes Framework (QOF): an audit

GO Ivbijaro MBBS FRCGP FWACPsych MMedSci DFFP MA

Family Practitioner, The Wood Street Medical Centre and Visiting Fellow London South Bank University, London, UK

LA Kolkiewicz MBBS MRCPsych

Consultant Forensic Rehabilitation Psychiatrist and Associate Clinical Director, Forensic Directorate East London NHS Foundation Trust, London, UK

LSF McGee RGN RMN DMS

Borough Director East London NHS Foundation Trust, London, UK

M Gikunoo RGN BSc(Hons)

Research Assistant and Practice Nurse, The Forest Road Medical Centre PMS Mental Health Practice, London, UK

ABSTRACT

Objectives This audit aims to evaluate the effectiveness of delivering an equivalent primary care service to a long-term forensic psychiatric inpatient population, using the UK primary care national Quality and Outcomes Framework (QOF).

Method The audit compares the targets met by the general practitioner with special interest (GPwSI) service, using local and national QOF benchmarks (2005–2006), and determines the prevalence of chronic disease in a long-term inpatient forensic psychiatry population.

Results The audit results show that the UK national QOF is a useful tool for assessment and evaluation of physical healthcare needs in a non-community based population. It shows an increased prevalence of all QOF-assessed long-term physical conditions when compared to the local East London population and national UK population, confirming previously reported elevated levels of physical healthcare need in psychiatric populations.

Conclusions This audit shows that the UK General Practice QOF can be used as a standardised instrument for commissioning and monitoring

the delivery of physical health services to inpatient psychiatric populations, and for the evaluation of the effectiveness of clinical interventions in long-term physical conditions. The audit also demonstrates the effectiveness of using a GPwSI in healthcare delivery in non-community based settings. We suggest that the findings may be generalisable to other long-term inpatient psychiatric and prison populations in order to further the objective of delivering an equivalent primary care service to all populations.

The QOF is a set of national primary care audit standards and is freely available on the British Medical Association website or the UK Department of Health website. We suggest that primary care workers in health economies who have not yet developed their own national primary care standards can access and adapt these standards in order to improve the clinical standards of care given to the primary care populations that they serve.

Keywords: mental health, physical health, Quality and Outcomes Framework

Introduction

The physical health of patients suffering from severe long-term mental health conditions is poor, mortality is two to four times higher than in the general population and people with illnesses such as schizophrenia can expect to live 10 years less than people who do not suffer from long-term mental health conditions.¹⁻³ Eighty percent of people with schizophrenia die of natural causes, compared to 97% of the general population but it is well recognised that this group of patients is at particular risk from premature death not just from suicide, but from the complications of physical illnesses such as ischaemic heart disease (IHD), diabetes, respiratory diseases and infection.⁴⁻⁸

Some authors suggest that patients who suffer from the long-term mental health condition schizophrenia, along with their carers and their health providers, may suffer from anosognosia when it comes to other physical illnesses.⁹ Traditionally, anosognosia is defined as 'ignorance, real or feigned, of the presence of a disease (specifically paralysis)'.¹⁰ Anosognosia for physical illness may be one of the reasons to account for the lower recognition of physical illnesses in patients suffering from mental disorder. When the detection of physical illnesses by physicians referring patients to a psychiatric clinic was studied it was found that non-psychiatric physicians missed one-third and psychiatrists one-half of their patients' co-morbid medical conditions.¹ In addition to this possible phenomenon of anosognosia, physical examination carried out by psychiatric trainees is rarely done correctly.¹¹ When patients are admitted to psychiatric hospital, less than 75% are examined at all and there is rarely an attempt to take a physical history.¹²

The UK has seen a growth in forensic psychiatry services since the publication of the Reed report in the 1990s.¹³ The profession of forensic psychiatry is no longer restricting itself to being an entrepreneurial risk-assessment industry, and is increasingly focused on treatment and rehabilitation.¹⁴ Specialist psychiatric rehabilitation services have been developed in high secure hospitals, private medium secure units (MSUs) and, increasingly, in NHS forensic facilities. Forensic patients have multiple, complex psychiatric disorders and carry a high risk of violent behaviour. The process of psychiatric rehabilitation in such settings is challenged by legal sanctions, and patients often view their hospital orders as a punishment and sentence to serve.

The East London NHS Foundation Trust (ELFT) Centre for Forensic Mental Health is one such tertiary referral service for mentally disordered offenders. It serves five deprived boroughs in the East End of

London, and the patient population is typically drawn from the prison service, special hospitals, private MSUs and psychiatric intensive care units (PICUs). At the time of this audit the forensic service had 148 inpatient beds in total. The medium secure service comprised 48 male beds, 12 female beds and 20 male personality disorder beds. The forensic rehabilitation service provided 30 male medium secure forensic maintenance (long-term) rehabilitation beds, 26 male low secure forensic intensive rehabilitation beds and 12 forensic community rehabilitation beds. With the expansion of the forensic rehabilitation service over the last five-year period, it has become clear that our system is struggling to identify and meet the physical health needs of a longer-term male psychiatric population whose length of stay ranges from 2 to 30 years.

How best to deliver physical health care to people suffering from severe long-term mental health conditions has been a matter of debate.¹⁵ The National Institute for Health and Clinical Excellence (NICE) suggested that primary care professionals have an important part to play in the physical and mental health of people with schizophrenia.¹⁶ This concept may be appropriate for patients in the community, but long-term hospitalised mental health patients have no access to routine primary care facilities. The latter group provides a different set of challenges and requires a different model of care.

The World Health Organization (WHO) notes that, in order for mental health provision to be effective, it must relate to quality.¹⁷ The principles behind quality improvement include: accreditation of providers and organisations; the use of standardised programmes; clinical guidelines; measurement of performance; monitoring of outcomes to inform continuous quality improvement; and user and family education. The Centre for Forensic Mental Health has used many of these principles to develop a project to deliver physical health care to a group of 56 male forensic rehabilitation patients.

In September 2004, the Centre for Forensic Mental Health developed a collaborative arrangement with a primary care organisation (The Forest Road Medical Centre Mental Health PMS Practice). The primary care practice decided to use a standardised way of providing physical healthcare to the forensic service, which included the introduction of primary care guidelines and protocols for dealing with long-term physical health conditions, including the use of the clinical section of the Primary Care Quality and Outcomes Framework (QOF).¹⁸

The QOF is a method by which GPs receive remuneration for quality. It is rated according to a nationally standardised proforma that determines how many points the practice should receive for each clinical activity. The total points achieved by

each practice provide an indicator of practice quality. The rating of each standard depends upon either a simple binary yes/no answer, or a score that is proportionate to the range of activities undertaken. It is designed to raise and enhance the clinical and organisational standards in primary care, to measure performance, promote continuous quality improvement, monitor outcomes and promote health. The use of this instrument (QOF) has allowed a long-term forensic population to be provided with an equivalent physical healthcare service to that available in the community.

Objectives

NICE stated that primary care professionals are best placed to monitor the physical health of patients with the long-term mental health condition schizophrenia.¹⁶ It has been suggested that it may be helpful to use a standardised instrument to systematically assess physical co-morbidity in schizophrenia patients.⁹ This view is also supported by the WHO Policy Unit.¹⁷

The aim of this audit was to evaluate the effectiveness of using the UK primary care national QOF in a long-term psychiatric forensic inpatient population. We aimed to compare the standards met by this audit to locally and nationally gathered QOF data, in order to establish the prevalence of long-term physical conditions in a group of male forensic rehabilitation patients in East London, and to compare the prevalence of QOF-measurable physical illnesses to that reported for East London and England.¹⁹

Method

The Forensic Directorate entered into a collaborative arrangement with the Forest Road Medical Centre PMS Practice in September 2004. The GP practice agreed to provide up to a maximum of five clinical sessions with a general practitioner with special interest (GPwSI) in mental health. The GPwSI service aimed to carry out a full health check of every patient in the rehabilitation service, and for all forensic rehabilitation ward teams to refer all patients with physical health problems for evaluation and treatment. The psychiatric service created a section in the continuous multidisciplinary team (MDT) health record, dedicated to general practice entries for the GPwSI. The service was provided to two low secure intensive rehabilitation wards and two medium secure maintenance rehabilitation wards.

In September 2005, one year after the inception of the service, the GP practice research assistant collected data from the case notes on all 56 patients residing on the four wards, using an Excel proforma sheet developed to allow anonymous collection of data about every contact for physical illness, including investigations. The proforma recorded all clinical QOF data retrospectively to cover a one-year period.

Data collected included: the number of patients on each ward; physical health diagnosis of each patient; number of physical care referrals; physical investigations completed; health promotion activity carried out.

Data specific to seven clinical QOF activities were collected: coronary heart disease (CHD); stroke and transient ischaemic attacks (TIAs); hypertension; diabetes mellitus; chronic obstructive airways disease (COPD); epilepsy; hypothyroidism; cancer; and asthma. Data on the eighth QOF clinical area, mental health, were not collected, as management of this was left solely to the treating psychiatric team. East London and the City Mental Health NHS Trust audit committee approved the project as ethical.

Results

Contacts with GPwSI

The total number of contacts by the 54 patients to the GPwSI clinic was 301, with a mean of 5.6 contacts per patient per year, a mode of six contacts per patient per year and a median of five contacts per patient per year; 96.2% of all forensic rehabilitation inpatients used the GPwSI service.

Table 1 shows that the prevalence of physical illness in forensic rehabilitation patients at the Centre for Forensic Mental Health. The prevalence was 57.4% (minimum one condition); 10.7% had two physical conditions and 1.8% had three physical conditions. The presence of long-term conditions among the inpatient forensic rehabilitation population when compared to local and national QOF data for the general population was consistently elevated.

Table 2 shows that over 74% of forensic rehabilitation patients attending the GPwSI clinic are current smokers and 26% of the population are non-smokers or ex-smokers.

Table 3 compares the targets met by the GPwSI inpatient service with the national QOF benchmark. This service met many of the maximum targets for the QOF showing equivalence to community based services.

Table 1 Comparison of national, local and forensic psychiatric unit long-term QOF disease prevalence (excluding mental health)

Disease	Number of patients (<i>n</i> = 56)	Prevalence: forensic rehabilitation service (%)	Prevalence: East London (%)	Prevalence: England (%)
CHD	4	7.1	2.4	3.6
Left ventricular dysfunction	1	1.8	0.3	0.4
Diabetes	10	17.9	3.9	3.3
Cancer	1	1.8	0.3	0.5
Hypertension	7	12.5	9.3	11.3
Hypothyroidism	3	5.4	1.4	2.2
Asthma	3	5.4	4.5	5.8
COPD	6	10.7	1.1	1.4
Stroke	1	1.8	0.9	1.2

Table 2 Smoking status of forensic psychiatry patients in pilot GPwSI project

Smoking status	Percentage
Smoker	74.1
Ex-smoker	7.4
Never smoked	18.5

Discussion

This audit has evaluated the introduction of a GPwSI service to an inpatient forensic psychiatry unit using the clinical section of the QOF 2004–2006.¹⁸ In 2002, NICE suggested that primary care has a central role in providing for the physical healthcare needs of patients suffering from long-term mental health conditions.¹⁶ In 2005, the WHO suggested that for physical health conditions to be effectively managed in those suffering from long-term mental health conditions, there is a need for interventions to be quality based, using a standardised format.¹⁷

This audit has shown the UK QOF, used routinely in primary care since 2004, to be a useful tool for measuring quality and monitoring performance in a forensic inpatient setting. To our knowledge this is the first such use of this framework in a mental health hospital or secure unit in Europe.

Several countries in Europe have been developing tools to assess quality within general practice, and many of these tools are specifically designed to evaluate practice management and organisational issues.²⁰ The UK QOF differs from many of these instruments as it is able to provide information about clinical and organisational administrative quality in GP practices. It is also a dynamic instrument that is reviewed two-yearly by representatives of the UK government, the British Medical Association, the Royal College of General Practitioners and NHS primary care trusts.

The forensic rehabilitation service is a psychiatric secure unit for mentally disordered offenders and shares a number of characteristics with UK prisons. Detained patients have severely restricted liberty, little access to the community and limited access to exercise. The UK has tried to improve prison health-care provision by introducing the principle of 'equivalence of care'.²¹ Prisoners should receive the same level of healthcare as they would were they not in prison – equivalent in term of policy, standards and delivery.²² In the light of the similarity between the psychiatric secure unit and the prison service, the QOF may be a useful tool for the evaluation and delivery of physical and mental healthcare within the prison service. As the QOF tool is freely available on the UK Department of Health website, other countries worldwide could adapt the instrument for use in their local settings.

The prevalence of long-term physical conditions as measured by the QOF was consistently higher than that measured in the general population of East

Table 3 Comparison of results of QOF assessment in forensic rehabilitation unit GPwSI service with clinical section of national targets (excluding mental health)

Indicator	% Met	National target (%)
Secondary prevention in coronary heart disease (CHD)		
Records		
CHD 1: GPSI service can produce a CHD disease register	Yes	Yes
Diagnosis and initial management		
CHD 2: Percentage of patients with newly diagnosed angina (after April 2003) referred for exercise testing and/or specialist assessment	100	25–90
Ongoing management		
CHD 3: The percentage of patients with coronary heart disease whose notes record smoking status in the past 15 months, except those who have never smoked, where smoking status need to be recorded only once	100	25–90
CHD 4: The percentage of patients with coronary heart disease who smoke, whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered within the last 15 months	66.7	25–70
CHD 5: The percentage of patients with coronary heart disease whose notes have a record of blood pressure in the previous 15 months	100	25–90
CHD 6: The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the last 15 months) is 150/90 or less	100	25–70
CHD 7: The percentage of patients with coronary heart disease whose notes have a record of total cholesterol in the previous 15 months	100	25–90
CHD 8: The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the last 15 months) is 5 mmol/l or less	100	25–60
CHD 9: The percentage of patients with coronary heart disease with a record in the last 15 months that aspirin, an alternative antiplatelet therapy, or an anticoagulant is being taken (unless a contraindication or side-effects are recorded)	66.7	25–90
CHD 10: The percentage of patients with coronary heart disease who are currently treated with a beta-blocker (unless a contraindication or side-effects are recorded)	66.7	25–50
CHD 11: The percentage of patients with a history of myocardial infarction (diagnosed after 1 April 2003) who are currently treated with an angiotensin-converting enzyme (ACE) inhibitor	100	25–70
CHD 12: The percentage of patients with coronary heart disease who have a record of influenza immunisation in the preceding 1 September to 31 March	66.7	25–85
Subset – left ventricular dysfunction		
Records		
LVD 1: The GPSI service can produce a register of patients with CHD and left ventricular dysfunction	Yes	Yes
Diagnosis and initial management		
LVD 2: The percentage of patients with a diagnosis of CHD and left ventricular dysfunction (diagnosed after 1 April 2003) which has been confirmed by an echocardiogram	100	25–90
Ongoing management		
LVD 3: The percentage of patients with a diagnosis of CHD and left ventricular dysfunction who are currently treated with ACE inhibitors (or angiotensin II antagonists)	100	25–70

Table 3 Continued

Indicator	% Met	National target (%)
Stroke and transient ischaemic attacks		
Records		
STROKE 1: The GPSI service can produce a register of patients with stroke or TIA	Yes	Yes
STROKE 2: The percentage of new patients with presumptive stroke (presenting after 1 April 2003) who have been referred for confirmation of the diagnosis by CT (computerised tomography) or MRI (magnetic resonance imaging) scan	100	25–80
Ongoing management		
STROKE 3: The percentage of new patients with TIA or stroke who have a record of smoking status in the last 15 months, except those who have never smoked, where smoking status should be recorded at least once since diagnosis	100	25–90
STROKE 4: The percentage of patients with a history of TIA or stroke who smoke and whose notes contain a record that smoking cessation advice or a referral to a specialist service, if available, has been offered in the last 15 months	100	25–70
STROKE 5: The percentage of patients with TIA or stroke who have a record of blood pressure in the notes in the preceding 15 months.	100	25–90
STROKE 6: The percentage of patients with a history of TIA or stroke in whom the last blood pressure reading (measured in the last 15 months) is 150/90 or less	100	25–70
STROKE 7: The percentage of patients with TIA or stroke who have a record of total cholesterol in the last 15 months	100	25–90
STROKE 8: The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the last 15 months) is 5 mmol/l or less	100	25–60
STROKE 9: The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that aspirin, an antiplatelet therapy or an anticoagulant is being taken (unless a contraindication or side-effects are recorded)	100	25–90
STROKE 10: The percentage of patients with TIA who have had influenza immunisation in the preceding 1 September to 31 March	100	25–50
Hypertension		
Records		
BP 1: The GPSI service can produce a register of patients with established hypertension	Yes	Yes
Diagnosis and initial management		
BP 2: The percentage of patients with hypertension whose notes record smoking status at least once	100	25–90
BP 3: The percentage of patients with hypertension who smoke, whose notes contain a record that smoking cessation advice or referral to a specialist service, if available, has been offered at least once	79	25–90
Ongoing management		
BP 4: The percentage of patients with hypertension in whom there is a record of the blood pressure in the past 9 months	100	25–90
BP 5: The percentage of patients with hypertension in whom the last blood pressure (measured in the last 9 months) is 150/90 or less	71.4	25–70
Diabetes mellitus (diabetes)		
Records		
DM 1: The GPSI service can produce a register of all patients with diabetes mellitus	Yes	Yes

Table 3 Continued

Ongoing management		
DM 2: The percentage of patients with diabetes whose notes record BMI (body mass index) in the previous 15 months	100	25–90
DM 3: The percentage of patients with diabetes in whom there is a record of smoking status in the previous 15 months, except those who have never smoked, where smoking status should be recorded once	100	25–90
DM 4: The percentage of patients with diabetes who smoke and whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered in the last 15 months	60	25–90
DM 5: The percentage of diabetic patients who have a record of HbA _{1c} (haemoglobin A _{1c}) or equivalent in the previous 15 months	100	25–90
DM 6: The percentage of patients with diabetes in whom the last HbA _{1c} is 7.4 or less (or equivalent test/reference range depending on local laboratory) in last 15 months	70	25–50
DM 7: The percentage of patients with diabetes in whom the last HbA _{1c} is 10 or less (or equivalent test/reference range depending on local laboratory) in last 15 months	80	25–85
DM 8: The percentage of patients with diabetes who have a record of retinal screening in the previous 15 months	80	25–90
DM 9: The percentage of patients with diabetes with a record of the presence or absence of peripheral pulses in the previous 15 months	90	25–90
DM 10: The percentage of patients with diabetes with a record of neuropathy testing in the previous 15 months	70	25–90
DM 11: The percentage of patients with diabetes who have a record of the blood pressure in the previous 15 months	100	25–90
DM 12: The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less	100	25–55
DM 13: The percentage of patients with diabetes who have a record of micro-albuminuria testing in the previous 15 months (exception reporting for patients with proteinuria)	90	25–90
DM 14: The percentage of patients with diabetes who have a record of serum creatinine testing in the previous 15 months	100	25–90
DM 15: The percentage of patients with diabetes with proteinuria or micro-albuminuria who are treated with ACE inhibitors (or angiotensin II antagonists)	80	25–70
DM 16: The percentage of patients with diabetes who have a record of total cholesterol in the previous 15 months	90	25–90
DM 17: The percentage of patients with diabetes whose last measured total cholesterol within the previous 15 months is 5 mmol/l or less	70	25–60
DM 18: The percentage of patients with diabetes who have had influenza immunisation in the preceding 1 September to 31 March	50	25–85
Chronic obstructive airways disease (COPD)		
Records		
COPD 1: The GPSI service can produce a register of patients with COPD	Yes	Yes
Initial diagnosis		
COPD 2: The percentage of patients in whom diagnosis has been confirmed by spirometry including reversibility testing for newly diagnosed patients with effect from 1 April 2003	100	25–90
COPD 3: The percentage of all patients with COPD in whom diagnosis has been confirmed by spirometry including reversible testing	100	25–90

Table 3 Continued

Indicator	% Met	National target (%)
Ongoing management		
COPD 4: The percentage of patients with COPD in whom there is a record of smoking status in the previous 15 months	100	25–90
COPD 5: The percentage of patients with COPD who smoke, whose notes contain a record that smoking cessation advice or referral to a specialist service, if available, has been offered in the past 15 months	100	25–90
COPD 6: The percentage of patients with COPD with a record of FEV ₁ (forced expiratory volume in 1 s) in the previous 27 months	75	25–70
COPD 7: The percentage of patients with COPD receiving inhaled treatment in whom there is a record that inhaler technique has been checked in the preceding 27 months	25	26–90
COPD 8: The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March	50	25–85
Epilepsy		
Records		
EPILEPSY 1: The GPSI service can produce a register of patients receiving drug treatment for epilepsy	No patients	
Ongoing management		
EPILEPSY 2: The percentage of patients aged 16 and over on drug treatment for epilepsy who have a record of seizure frequency in the previous 15 months	No patients	25–90
EPILEPSY 3: The percentage of patients aged 16 and over on drug treatment for epilepsy who have a record of medication review in the previous 15 months	No patients	25–90
EPILEPSY 4: The percentage of patients aged 16 or over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the last 15 months	No patients	25–70
Hypothyroidism		
Records		
THYROID 1: The GPSI service can produce a register of patients with hypothyroidism	Yes	Yes
Ongoing management		
THYROID 2: The percentage of patients with hypothyroidism with thyroid function tests recorded in the previous 15 months	100	25–90
Cancer		
Records		
CANCER 1: The GPSI service can produce a register of all cancer patients diagnosed	Yes	Yes
Ongoing management		
CANCER 2: The percentage of patients with cancer diagnosed from 1 April 2003 with a review by the practice recorded within six months of confirmed diagnosis. This should include an assessment of support needs, if any, and a review of co-ordination arrangements with secondary care	100	25–90
Asthma		
Records		
ASTHMA 1: The GPSI service can produce a register of patients with asthma, excluding patients with asthma who have been prescribed no asthmatic-related drugs in the last 12 months	Yes	Yes

Table 3 Continued

Initial management		
ASTHMA 2: The percentage of patients aged eight and over diagnosed as having asthma from 1 April 2003 where the diagnosis has been confirmed by spirometry or peak flow measurement	100	25–70
Ongoing management		
ASTHMA 3: The percentage of patients with asthma between the ages of 14 and 19 in whom there is a record of smoking status in the previous 15 months	100	25–70
ASTHMA 4: The percentage of patients aged 20 and over with asthma whose notes record smoking status in the past 15 months, except those who have never smoked where smoking should be recorded at least once	100	25–70
ASTHMA 5: The percentage of patients with asthma, and whose notes contain a record that smoking cessation advice or referral to a specialist service, if available, has been offered within the last 15 months	100	25–70
ASTHMA 6: The percentage of patients with asthma who have had an asthma review in the last 15 months	100	25–70
ASTHMA 7: The percentage of patients aged 16 and over with asthma who have had influenza immunisation in the preceding 1 September to 31 March	33.3	25–70

London and the UK as a whole. This is in keeping with previous findings.^{1–3,5–8,23} The prevalence identified during this audit further underlines the need for primary care input for inpatient psychiatric populations. The limitation of this audit is that the patient population was solely male. The impact of including females will be evaluated when the audit is extended to cover the whole East London inpatient forensic population.

Altogether, 74.1% of the inpatient forensic rehabilitation population attending the GPwSI clinic are current smokers, which is very similar to the prevalence found in long-term patients in a high secure psychiatric hospital, Rampton, where in 2005 71% of the population were smokers.²⁴ The high prevalence of COPD in our sample (10.7%) may be related to smoking status. Rates of cigarette smoking have generally been reported to be higher in the population of schizophrenics than in the general population.²⁵ This pilot has shown that it is possible to use the QOF to quantify smoking status within the population. QOF assessment also provides an opportunity to institute smoking-cessation clinics and other lifestyle changes.

Table 3 compares the standards met with nationally agreed QOF clinical targets. The GPwSI service achieved maximum targets on all clinical indicators except for smoking cessation and influenza vaccination. This probably reflects the lack of primary care nursing input to this pilot service.

This audit found that 54 out of 56 patients (96.4%) used the GPwSI service during its first year and those with QOF-related conditions made more use of the

GPwSI service. The mean number of consultations was 5.6 and the mode six consultations per patient per year. This compares to an average male consultation rate of 2.52 consultations per year in a 1998 community survey carried out by the Centre for Innovation in Primary Care.²⁶ It will be interesting to see what the consultation rate will be post-QOF assessment.

Conclusion

This audit has demonstrated the usefulness of using the UK General Practice QOF as a standardised instrument to monitor and evaluate physical healthcare provision to patients with long-term mental health difficulties in a long-term secure psychiatric inpatient setting. The audit has also shown that the introduction of a GPwSI to such units is a useful adjunct to support psychiatric services to identify physical healthcare needs and provide improved physical care standards of equivalence to those provided to the general population in the community.

ACKNOWLEDGEMENTS

We thank all those who contributed to the continuous improvement of clinical care for the patients at the Centre for Forensic Mental Health, East London NHS Foundation Trust, UK.

REFERENCES

- 1 Koranyi EK. Morbidity and rate of undiagnosed physical illnesses in a psychiatric clinic population. *Archives of General Psychiatry* 1979;36:414–19.
- 2 Tsuang MT, Perkins K and Simpson JC. Physical diseases in schizophrenia and affective disorder. *Journal of Clinical Psychiatry* 1983;44:42–6.
- 3 Brown S, Inskip H and Barraclough B. Causes of excess mortality in schizophrenia. *British Journal of Psychiatry* 2000;177:212–17.
- 4 Office of Population Census and Surveys. *1993 Mortality Statistics: Cause*. London: HMSO, 1995.
- 5 Harris EC and Barraclough B. Excess mortality in mental disorder. *British Journal of Psychiatry* 1998; 173:11–53.
- 6 Barr W. Physical health of people with severe mental illness. *BMJ* 2001;323:321–2.
- 7 Lawrence D, Holman CJD and Jablensky AV. *Preventable Physical Illness in People with Mental Illness*. Perth: The University of Western Australia, 2001.
- 8 Phelan M, Stradins L and Morrison S. Physical health of people with severe mental illness. *BMJ* 2001;322:443–4.
- 9 Jeste DV, Gladsjo JA, Lindamer LA *et al*. Medical comorbidity in schizophrenia. *Schizophrenia Bulletin* 1996;22:413–30.
- 10 Stedman TL. *Stedman's Medical Dictionary* (25e). Baltimore MD: Williams and Wilkins Company, 1990.
- 11 Rigby JC and Oswald AG. An evaluation of the performing and recording of physical examinations by psychiatric trainees. *British Journal of Psychiatry* 1987;150:533–5.
- 12 Osborn D and Warner J. Assessing the physical health of psychiatric patients. *Psychiatric Bulletin* 1998;22:695–7.
- 13 Reed J. *Report of Working Group on High Security and Related Psychiatric Provision*. London: Department of Health, 1994.
- 14 Lindqvist P and Skipworth J. Evidence-based rehabilitation in forensic psychiatry. *British Journal of Psychiatry* 2000;176:320–3.
- 15 Brown S. Excess mortality of schizophrenia. A meta-analysis. *British Journal of Psychiatry* 1997;171:502–8.
- 16 National Institute for Health and Clinical Excellence. *Schizophrenia. Core interventions in the treatment and management of schizophrenia in primary and secondary care*. London: National Institute for Health and Clinical Excellence, 2002.
- 17 World Health Organization. *Mental Health Policy, Plans and Programmes (Updated Version)*. Geneva: World Health Organization, 2005.
- 18 NHS Confederation/British Medical Association. *Supporting Documentation New GMS Contract. Investing in general practice*. London (UK): BMA, 2003. Available from www.bma.org.uk and www.nhsconfed.org (accessed 21 February 2008).
- 19 NHS Health and Social Care Information Centre. www.ic.nhs.uk/services/qof/date (accessed 21 February 2008).
- 20 Engels Y, Campbell S, Dautzenberg M *et al*. Developing a framework of, and quality indicators for general practice management in Europe. *Family Practice* 2005;22:215–22.
- 21 Home Office. *Report of an Efficiency Scrutiny of the Prison Medical Service*. London: Home Office, 1990.
- 22 Health Advisory Committee for the Prison Service. *The Future Organisation of Prison Health Care. Report by the Joint Prison Service and National Health Service Executive Working Group*. London: Department of Health, 1997.
- 23 Cohen A and Phelan M. The physical health of patients with mental illness: a neglected area. *Mental Health Promotion Update* 2001;2:15–16.
- 24 Cormac I, Ferriter M, Benning R *et al*. Physical health and health risk factors in a population of long-stay psychiatric patients. *Psychiatric Bulletin* 2005;29:18–20.
- 25 Hughes JR, Hatsukami DK, Mitchell JE *et al*. Prevalence of smoking among psychiatric outpatients. *American Journal of Psychiatry* 1986;143:993–7.
- 26 Centre for Innovation in Primary Care. *Practice Data Comparison Project. Looking After Long Term Illness: implications for practice consultation rates*. Sheffield: Centre for Innovation in Primary Care, 1999. www.innovate.org.uk

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr Gabriel O Ivbijaro, The Wood Street Medical Centre, 6 Linford Road, London E17 3LA, UK. Tel: +44 (0)20 8430 7710; fax: +44 (0)20 8430 7711; email: gabriel.ivbijaro@nhs.net

Accepted March 2008