



## original papers

*Psychiatric Bulletin* (2009), **33**, 325–328. doi: 10.1192/pb.bp.108.019588

HIMANSHU MISTRY AND JUSTIN SAUER

# Psychiatrists and electronic patient records: the South London and Maudsley experience

### AIMS AND METHOD

To explore the experiences and attitudes of psychiatrists to a new electronic patient records system. A questionnaire was emailed to 115 psychiatrists across the South London & Maudsley National Health Service Foundation Trust.

### RESULTS

The total response rate was 66% (senior house officers 75%, specialist registrars 57%, consultants 56%). Technical problems, difficulty with patient confidentiality, administrative burden and impact on clinical work were identified as concerns. However, psychiatrists recognised the potential benefits and the

majority did not wish to return to using paper records.

### CLINICAL IMPLICATIONS

Electronic patient records are rapidly being integrated into the daily practice of psychiatrists. More administrative assistance and specific training should be provided to support clinicians who use this system.

The introduction of electronic patient records is a prime initiative of the National Programme for Information Technology. The goal is for the various National Health Service (NHS) organisations to be able to share a detailed care record of each patient.<sup>1</sup> Wyatt & Sullivan described electronic records as an important component of 'health informatics', a discipline aimed to assist doctors with their clinical decision-making and actions.<sup>2</sup> It has been suggested that electronic record-keeping has the potential to provide better patient information and to improve cost efficiency and reliability of information for quality control and health services planning.<sup>3</sup> Certainly, poorly written, difficult to interpret paper records can contribute to medical errors,<sup>4</sup> and lack of relevant information can also have significant consequences. Eight hundred safety incidents were reported as a result of missing, inadequate or illegible referral letters during 2006.<sup>1</sup> Electronic systems might be expected to militate against such mistakes through greater clarity of communication and availability of information. The Department of Health claimed that 'in an environment of altered patterns of work and increased patient mobility, electronic patient records have the potential to benefit patients in an ever changing healthcare system'.<sup>5</sup> However, technology should complement and improve clinical care, and not impose an extra burden on already overloaded medical staff.<sup>6</sup> According to Coeira, traditional note-keeping might now seem archaic, but well-designed paper records are more effective than poorly designed computer ones.<sup>7</sup>

With the widespread introduction of electronic patient records and massive investment in systems, there

are surprisingly few studies that systematically evaluate their use. One cross-sectional questionnaire survey carried out in Norway looked at 19 hospitals and compared three different electronic record systems. Its authors found that systems were used mostly for reading patient data and for less than half of the tasks for which they were designed.<sup>8</sup>

The system introduced at the South London and Maudsley NHS Foundation Trust is called the Electronic Patient Journey System (ePJS). Use of this system represents a significant shift in practice for doctors. The aim of our survey was to explore early experiences and attitudes towards a newly introduced electronic records system.

## Method

Implementation of the electronic record system meant a paradigm shift in the way records are entered and maintained. Senior house officers (year ST1–3) had an instrumental role in this transition as they entered data more often than the specialist registrars or consultants, for example when clerking the patient and recording patient reviews and ward-round notes. We designed a questionnaire that asked participants to comment on their experiences with use of ePJS (Box 1). The questionnaire was aimed at examining attitudes of doctors towards ePJS, ascertaining the training received in its use and finding out if its use affected their clinical work. The questionnaires were sent by email to 60 senior house officers, 30 specialist registrars and 25 consultant psychiatrists between 22 January and 4 April 2007 across



original papers

**Box 1. Questionnaire**

Your grade: Senior house officer  Specialist registrar   
 Consultant

(please highlight or tick one box)

	<i>Agree</i>	<i>Disagree</i>	<i>Uncertain</i>
1. Have you stopped using paper case records?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are you doubling up clinical entries (paper as well as electronic notes)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are you spending less time in direct clinical care as a result?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are you fully trained in the Electronic Patient Journey System (ePJS)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you think administrative staff should have a larger role in ePJS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Would you prefer to work in a trust with paper records only?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you prefer ePJS to paper records?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Do electronic records better protect patient confidentiality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. In what ways do you think ePJS is helpful? ..... ..... .....			
10. What is the downside of ePJS? ..... .....			
11. Any other comments? ..... .....			

the Trust. This contact list was made available from medical human resources.

## Results

We received 45 (75%) responses from senior house officers, 17 (57%) from specialist registrars and 14 (56%) from consultant psychiatrists, with an overall response rate of 66%. Overall, 70% of clinicians (78% senior house officers, 59% specialist registrars and 57% consultants) continued using paper records at the time of this survey and 53% of them (53% senior house officers, 59% specialist registrars and 43% consultants) were duplicating their entries (Table 1). In total, 45% of clinicians (47% senior house officers, 41% specialist registrars and 43% consultants) believed they were spending less time in direct clinical care since the introduction of ePJS and 75% felt that administrative staff should have a greater role in data input. Nearly two-thirds (62%) of psychiatrists surveyed (64% senior house officers, 71% specialist registrars and 43% consultants) were not trained to make them safe and effective in the use of ePJS. Despite concerns about the system, 76% of clinicians surveyed (91% senior house officers, 47% specialist registrars and

64% consultants) would not like to work in a 'paper only' Trust and 57% (64% senior house officers, 41% specialist registrars and 50% consultants) preferred ePJS to paper notes. Consultants disagreed that ePJS would afford better patient confidentiality (79%), as did the majority of specialist registrars (59%). Senior house officers were more uncertain about this issue (47%).

One response each for questions 3, 4, 7 and 8 were omitted by responders. Consequently there are 75 answers out of 76 responders for those questions (Table 1). We excluded responders who suggested they had not yet been connected to ePJS.

Analysis carried out with help of Kruskal–Wallis tests found no significant difference in the opinions of the three grades of doctors.

## Discussion

This study was undertaken during a period of transfer from paper records to an electronic record system, which began in 2006. At the time of this study most senior house officers, along with the majority of specialist registrars and consultants surveyed, had continued using paper records despite the introduction of the new system. More than half of clinicians surveyed used both paper and electronic records. This implied a possible doubling of administrative work and also the possibility of missing information on ePJS. This balance is likely to have tipped in favour of ePJS as greater experience with the new system was acquired with time. The majority of senior house officers believed that time spent on ePJS took them away from clinical work, but most specialist registrars and consultants did not. It is possible that the senior house officers' greater usage of the system at this time, and its relative novelty, meant that a greater proportion of time was needed to make clinical entries. This is unsurprising considering that senior house officers are usually the greatest users of ePJS, as front-line clinicians.

It was a surprise that nearly two-thirds of doctors had not received training on ePJS. As senior house officers have a pivotal role in putting patient information it is essential that they have formal and adequate training in ePJS, not only so they are competent, but also so they can use the system for maximum benefit. Training is also of utmost importance in view of patient safety, especially as doctors who were not fully trained continued to enter information into the system.

Doctors appear to have felt the increased administrative burden, particularly the duplication of work. The idea that administrative staff should have a greater role in data entry received the greatest positive response of any of the questions. Despite these sentiments, doctors – especially senior house officers – would not like to return to using paper-based records. Although senior house officers clearly preferred electronic case records to paper notes, the senior doctors were more divided on the issue.

Increasing seniority was associated with greater scepticism regarding the confidentiality of patient



Table 1. Psychiatrists' views on the electronic patient record system

	SHO n (%)	SpR n (%)	Consultant n (%)	Overall response n (%)
1 Have you stopped using paper case records?				
Agree	10 (22)	7 (41)	6 (43)	23 (30)
Disagree	35 (78)	10 (59)	8 (57)	53 (70)
Uncertain	0 (0)	0 (0)	0 (0)	0 (0)
2 Are you doubling up clinical entries – paper as well as electronic notes?				
Agree	24 (53)	10 (59)	6 (43)	40 (53)
Disagree	21 (47)	7 (41)	8 (57)	36 (47)
Uncertain	0 (0)	0 (0)	0 (0)	0 (0)
3 Are you spending less time in direct clinical care as a result?				
Agree	21 (47)	7 (41)	6 (43)	34 (45)
Disagree	15 (33)	8 (47)	7 (50)	30 (39)
Uncertain	9 (20)	2 (12)	0 (0)	11 (14)
4 Are you fully trained in ePJS?				
Agree	13 (29)	4 (23)	7 (50)	24 (32)
Disagree	29 (64)	12 (71)	6 (43)	47 (62)
Uncertain	3 (7)	1 (6)	0 (0)	4 (6)
5 Do you think administrative staff should have a larger role in ePJS?				
Agree	34 (76)	12 (71)	11 (79)	57 (75)
Disagree	2 (4)	0 (0)	1 (7)	3 (4)
Uncertain	9 (20)	5 (29)	2 (14)	16 (21)
6 Would you prefer to work in a Trust with paper records only?				
Agree	3 (7)	6 (35)	3 (22)	12 (16)
Disagree	41 (91)	8 (47)	9 (64)	58 (76)
Uncertain	1 (2)	3 (18)	2 (14)	6 (8)
7 Do you prefer ePJS to paper records?				
Agree	29 (64)	7 (41)	7 (50)	43 (57)
Disagree	9 (20)	8 (47)	7 (50)	24 (32)
Uncertain	6 (13)	2 (12)	0 (0)	8 (10)
8 Does ePJS better protect patient confidentiality?				
Agree	6 (13)	2 (12)	1 (7)	9 (12)
Disagree	17 (38)	10 (59)	11 (79)	38 (50)
Uncertain	21 (47)	5 (29)	2 (14)	28 (37)

ePJS, Electronic Patient Journey System; SHO, senior house officer; SpR, specialist registrar.

information. Consultants as a group were least likely to believe the new system would afford greater protection of records. Many junior doctors seemed uncertain in response to this question. The issue of confidentiality with electronic records has been widely debated especially after recent well-publicised incidents of missing electronic data (in the form of compact discs) containing personal and financial information by HM Revenue & Customs in November 2007.<sup>9</sup>

Concerns were raised about the technical glitches, especially slowness and 'crashing' (Table 2). Some felt that ePJS was not user-friendly and was ill designed for quick retrieval of relevant information. Others believed that relying on ePJS as a single source of information was potentially misleading as many continued to use paper records, although this seems inevitable in a switch-over period. A lack of computer terminals restricting access in a number of workplaces was also mentioned, particularly the need for terminals on the wards or in clinic rooms.

Some mentioned that the structure of ePJS did not afford appropriate functionality for subspecialties. These issues, although disruptive for users, are surmountable with functional modifications and greater access seemingly possible with time. Improving the speed of the system and making it easier to use could possibly improve the doctors' experience. Indeed, since the time of the study, a number of the concerns raised with the system have been addressed.

## Limitations

The results of the study may have been affected by varied exposure times to ePJS in the three different grades and also between subspecialties. The questionnaire did not ask participants for their subspecialty or duration of use, and our sample is biased because we asked the views mostly of senior house officers. However, as they are the primary users among clinicians,

original  
papers**Table 2. Respondents' comments on the benefits and downside of the electronic patient record system**

Question	Recurring themes in the responses
9 In what ways do you think ePJS is helpful?	Better accessibility of records out of hours Promotes better communication between professionals Better data collection for governance purpose Decreased incidence of lost records A reduction in errors due to improved legibility Less expensive in the long run
10 What is the downside of ePJS?	Technical problems Limited access points Not a user-friendly system Lack of synchronisation with other electronic patient records Concerns regarding protection of patient confidentiality Not suitable for subspecialties

ePJS, Electronic Patient Journey System.

we were interested in the experience and opinion of junior doctors. It is also possible that dissatisfied doctors were more likely to respond. Certainly, whether doctors felt 'fully trained' in ePJS would be better answered through auditing, but we included a 'screening' question on training, despite its inherent limitations. Our survey was also conducted during a period of major changes to junior doctors' career structure as a result of Modernising Medical Careers, and this could have made the introduction of electronic records seem more burdensome. Without the opinions of other mental health professionals using ePJS, such as nurses, social workers and psychologists, our findings may not be representative.

## Conclusions

Electronic case records are here to stay and are increasingly being integrated into clinical psychiatric practice across mental health services in the UK. This survey, conducted during a period of transition, demonstrates some of the frustrations associated with the introduction of such a system, including technical glitches and increased administrative burden. Greater access to training could potentially address some of the concerns raised, including those involving patient confidentiality. All things considered, however, the majority of electronic record users do not want a return to paper records.

## Acknowledgements

We thank Dr Radhakrishnan of the West London Mental Health Trust for his help with statistical analysis.

## Declaration of interest

None.

## References

- House of Commons Health Committee. *Written Evidence for 'The Electronic Patient Record'*. Department of Health, 2007.
- Wyatt J, Sullivan F. What is health information? *BMJ* 2005; **331**: 556–8.
- McClelland RJ. *Parliamentary Health Committee Inquiry into the Electronic Patient Record and Its Use – Response from the Royal College of Psychiatrists*. Royal College of Psychiatrists, 2007 (<http://www.rcpsych.ac.uk/pressparliament/aboutourparliamentarywork/legislationandresponses/2007/patientelectronic.aspx>).
- Institute of Medicine. *To Err Is Human: Building a Safer Health System*. National Academies Press, 1999.
- Department of Health. *Good Doctors, Safer Patients: Proposals to Strengthen the System to Assure and Improve the Performance of Doctors and to Protect the Safety of Patients*. Department of Health, 2006 ([http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4137232](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4137232)).
- Walsh S. The clinician's perspective on electronic health records and how they can affect patient care. *BMJ* 2004; **328**: 1184–7.
- Coiera E. *Guide to Medical Informatics, the Internet and Telemedicine*. Arnold, 1997.
- Laerum H, Ellingsen G, Faxvaag A. Doctors' use of electronic patient records systems in hospitals: cross sectional survey. *BMJ* 2001; **323**: 1344–8.
- Milmo C. Two more discs missing from tax office as search for data continues. *The Independent* 2007 (<http://www.independent.co.uk/news/uk/politics/two-more-discs-missing-from-tax-office-as-search-for-data-continues-760105.html>).

**Himanshu Mistry** CT3 in Psychiatry, Central and North West London NHS Foundation Trust, Max Glatt Unit, St Bernard's Hospital, Uxbridge Road, Southall, Middlesex UB1 3EU, email: himanshu\_mistry@yahoo.com, **Justin Sauer** Consultant Psychiatrist in Old Age, South London and Maudsley NHS Foundation Trust