

## Discussion

These cases highlight that HIV patients are being put at risk of serious drug errors due to prescribing of medication with important drug–drug interactions by different physicians in different locations. It is common practice for HIV clinics to write to GPs with details of prescribed medication but is not standard practice for GPs or other services to routinely write to HIV services. Our standard letter also contains a ‘footer’ highlighting that drug–drug interactions are common. In view of the concern of prescribing errors, we introduced a policy of requesting a faxed summary of medication from primary care within the standard letter and subsequently reviewed the impact of this policy. Between 3 September and 15 November 2010, we requested prescribing data from GPs for 99 consecutive HIV-infected patients attending a large HIV outpatient clinic in North Central London. An amalgamated list of medications prescribed for each patient by primary care and the HIV service was examined for potential drug–drug interactions. Fifty-six GPs provided prescribing data. The medication lists from GPs and the HIV service were identical in three cases. No patients had life-threatening drug–drug interactions. However, 33 had potentially significant drug–drug interactions and, for almost all, the HIV service was not aware the patient was being prescribed the implicated drug.

Our findings demonstrate that there is a lack of documented awareness of drugs prescribed in each service, which is responsible for regular dispensing of medication, despite efforts to improve communication. It is essential that the patients and all clinicians involved in their care are aware of the potential for drug–drug interactions and ensure that up-to-date prescribing information is shared. However, even if this happens, our highlighted cases demonstrate that inadvertent changes to prescribing may occur in between visits to the HIV service by physicians who may be unfamiliar with the complex drug interactions of HIV therapy. The Royal Pharmaceutical Society has recently published guidance due to concerns of poor communication of prescribing information between healthcare providers.<sup>6</sup> This

raises the question as to whether all medication (including HIV drugs) should be prescribed via primary care, thus providing a single site for all prescribing. While this would reduce inadvertent prescribing errors due to communication problems, this model of care is, to date, untested in the UK.

Since the start of the HIV epidemic patients have been cared for in specialist services. However, due to the success of antiretroviral therapy, HIV is now considered a long term condition, of which the majority are conditions in which care is delivered in the community. The British HIV Association have recently developed a position statement on greater engagement with primary care that highlights many of the complex issues that would need addressing to facilitate a change in the model of care.<sup>7</sup>

However, while HIV services continue to prescribe HIV medication, greater awareness is needed of prescribing between specialist services and primary care. We recommend that details of drugs prescribed elsewhere are recorded and updated on the primary care prescribing database to avoid untoward prescribing errors.

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## The death of diagnosis

We have observed that junior doctors appear reluctant to attempt a diagnosis nowadays and tend to leave the diagnosis box in the clerking form blank, or record a descriptive term, eg ‘collapse ?cause’. This absence could lead to a delay in appropriate treatment or non-specific use of broad-spectrum antibiotics, resulting in iatrogenic complications and prolonged admission.<sup>1,2</sup> A specific diagnosis would also avoid unnecessary investigations.

This service evaluation examined how frequently acute medical patients receive a diagnosis, as opposed to a clinical epithet, on admission or later during their hospital stay.

Over three days, the records of 100 consecutive patients from the Medical Admissions Unit (MAU) and four general medical wards at a UK provincial teaching hospital were analysed to see if, and at which point during their stay, a definite, provisional or differential diagnosis was recorded. Patient files were reviewed at three time points:

- 1 after junior review, within four hours of admission
- 2 after senior review, within 24 hours of admission
- 3 at the time of discharge from hospital, and on the discharge summary.

**Table 1. The prevalence and level of diagnosis from admission to discharge.**

	Four-hour junior review	24-hour senior review	Discharge letter
Clear diagnosis	24	46	55
Provisional diagnosis	24	9	N/A
Differential diagnosis	27	25	N/A
No clear diagnosis	25	20	14

Internal inconsistencies due to discharge summaries not being written.

A diagnosis was defined by one fitting ICD-10 criteria. Cases were recorded as 'no clear diagnosis' if only a descriptive term was applied. The length of stay was examined according to the presence of a diagnosis.

These 100 patients had a median age of 71.5 years (range 19–96 years). 46 were male. Junior doctors saw all patients within four hours; 24% received a definite diagnosis, 24% had a provisional and 27% had a differential diagnosis. However, 25% received no level of diagnosis or a symptom such as 'nausea' recorded as their diagnosis (Table 1). They often had an unfocused management plan, such as 'take bloods, chest X-ray and senior review'.

All patients received a more senior review, either from a registrar or consultant, within 24 hours of admission, so that 46 patients now had a clear diagnosis. The senior review radically changed six provisional diagnoses of junior doctors. Twenty patients still had no diagnosis; four were labelled with non-specific sepsis.

At the time of discharge, 69 records contained a discharge letter; 55 with a clear diagnosis, which also described appropriate treatment, while 14 had no clear diagnosis, usually containing only a description of their illness. However, 31% of patients left hospital without an EDAN (electronic discharge

advice note), the system in use at the time, of whom two patients had died during their stay. The outcome of the other 29 patients without discharge letters was unknown.

Those patients who received a clear or provisional diagnosis made by junior doctors had a much shorter length of stay than those without one, seven versus 21 days ( $p=0.067$ ).

Why do some junior or senior doctors not make a diagnosis? The history may be difficult to obtain, as 12 cases in this series presented with confusion and sometimes there are language barriers.

We speculate that time pressed junior doctors are reticent to make a definitive diagnosis because of inexperience and expect a senior colleague to make one.<sup>3,4</sup> Alternatively, they may not have been taught that appropriate treatment results from applying the correct diagnosis. Certainly, appropriate and specific treatment cannot flow from labelling an acute patient with 'collapse', 'sepsis', or 'chest pain' of indeterminate origin. They commit themselves instead to ordering excessive investigations and may over-prescribe antibiotics. Most of the provisional diagnoses made by junior doctors in this series were correct and could have been used to start treatment immediately.<sup>5</sup> After review by a senior doctor, half of patients had a clear

diagnosis. More experienced senior doctors made more diagnoses, but juniors could benefit by attempting one too. Shorter length of stay seems associated with a clear diagnosis. We advocate an emphasis on the art of diagnosis in medical training.

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