

Medicines management technicians in mental health

By **Beverley Faulkner**, BTec, **Samantha Bateman**, MRPharmS, CertPsychPharm, **Michael Marven**, MRPharmS, MCMHP and **Ian Harrison**, FRPharmS, MCPP

Pharmacy services in Oxfordshire Mental Healthcare NHS Trust have been redesigned over the past few years, extending the role of medicines management technicians. This article looks at how the role has developed and the benefits it brings to both patients and staff



Rachel Harvey, medicines management technician at Oxfordshire Mental Healthcare NHS Trust, takes a blood sample from a patient

As part of the Oxfordshire Mental Healthcare NHS Trust's medicines management strategy, pharmacy services have been redesigned with the aim of providing systems which are more receptive to the needs of users and which make best use of the skills of all pharmacy staff within existing resources.

The new model for medicines management was implemented across the two largest mental health units in June 2004, and has been designed to extend the role of pharmacy technicians. Initial funding for the project came through virement from the introduction of generic clozapine.

New premises

Owing to pressures for space for clinical staff on the former pharmacy site, the main phar-

Beverley Faulkner is pharmacy operational manager and **Samantha Bateman** is clinical lead pharmacist at Oxfordshire Mental Healthcare NHS Trust. **Michael Marven** is chief pharmacist at Oxfordshire and Buckinghamshire Mental Healthcare NHS Trusts and **Ian Harrison** is health care consultant, Alchemy Healthcare.

macy department was relocated off-site to a commercial business park. It was agreed that the pharmacy services supplied centrally would be: procurement, stock assembly, dispensing, distribution, administration and medicines information. Appropriate shared desk space for clinical pharmacists, technicians and clerical staff, and a meeting room to double up as a staff room, were also required. A unit on a business park was selected, co-located with an NHS short-line medicines store also managed by the trust. Training needs for the new technicians role were also met in the new facility.

Role of the MMT

One of the key elements of the redesign of pharmacy services was the establishment of medicines management technician (MMT) posts embedded within ward teams. Typically, the role of MMT is similar to that held by pharmacists in the pre-clinical pharmacist era of ward pharmacy. A recent article by Carter et al highlighted MMT roles in an acute setting in West Cumberland.¹

The role of the MMT in the Oxfordshire Mental Healthcare NHS Trust was based on the acute pharmacy model but adapted and extended to address the differences in a

mental health trust. A comparison of the West Cumberland acute model and the Oxfordshire mental health model is shown in Panel 1 (p59).

Since one of the primary reasons for poor outcomes in mental health is non compliance with medicines, the role of MMT was developed with a specific remit to promote concordance with medicines by being an accessible source of information and advice and by using recognised motivational interviewing techniques to work with service users.

Key to the MMT role is that the technicians currently spend over 70 per cent of their time on the wards, and have a high level of patient contact. They attend relevant nurse handover meetings and can be trained to take blood samples. The average MMT workload breakdown is shown in the Figure 1 (page 60).

As in acute care, MMTs themselves identify patients needing advice about common problems, such as incorrect inhaler technique. Responsibility for ordering supplies of stock medicines in the trust lies with MMTs, who also fax treatment sheets to the central pharmacy when a new non-stock drug is prescribed. Nurses only order directly from the pharmacy if their MMT cannot

be reached by pager. Our MMTs have been trained to think about current patient needs and prescribing trends.

The technicians who have become MMTs were previously the backbone of the dispensary. Suitably trained assistant technical officers are now used to partially fill that gap. Because of the large number of sites within the trust, ATOs are not used at ward level to avoid travelling. The MMTs and clinical pharmacists are based on the main hospital sites in satellite bases with access to all necessary IT and reference resources.

Aspects of the roles that are unique to the MMTs in the Oxfordshire Mental Healthcare NHS Trust are outlined in Panel 2 (p60).

Patient contact MMTs give advice to patients about how to use their medicines. Risk analysis in certain patients with mental illness identifies those who might suffer serious effects if they do not take certain medicines. It was therefore a natural step to involve MMTs in running a service that involves motivational interviewing. The technicians have received specialised training and can give feedback to clinicians if they recognise particular signs and responses. The reality is that patients from certain socio-economic backgrounds may relate better to a staff member of a technical grade compared with a professional grade.

Ward handover meetings Attendance at ward handover meetings aids MMT proactivity. The meetings are important for MMTs to keep abreast of medication changes under discussion and to contribute to patient care. In the same way as clinical pharmacists, MMTs keep a record of their contributions and interventions.

The involvement of a MMT on relevant nursing staff handover meetings has also proved to be helpful to the clinical pharmacists. Although clinical pharmacists in the trust already spend over 60 per cent of their time on mental health wards, including key ward rounds, they value the additional “eyes and ears” of the MMTs. Of seven clinical pharmacists in the trust, two now spend 70 per cent of their time on wards and five devote half of their time to clinical activities.

Blood monitoring The blood monitoring of patients receiving clozapine therapy to avoid blood dyscrasias is a particular issue in refractory schizophrenia. Since it is usually the technicians who report blood test data to the clinicians and the drug manufacturer, it was decided to release nurse time by training the MMTs to draw blood themselves. Training in phlebotomy is therefore offered to the technicians although it is not compulsory. Four out of six MMTs have now been trained to draw blood samples, and the number of missed and late blood tests in the trust has decreased to almost nil.

Panel 1: Comparison of the West Cumberland acute model with the Oxfordshire mental health model

Activities	West Cumberland	Oxfordshire (mental health)
Taking medication histories	On admission	“Medicines mandate” rather than full drug history is taken
Clarifying discrepancies in medication histories	On admission	Shortly after admission
Screening patients’ own medicines	On admission	On admission and patients who self-administer
Phlebotomy	Not stated	Yes
Monitoring blood results	Antibiotics	Clozapine
Counselling on medicines self-administration	Including warfarin and inhalers	Including mental health and discharge medication
Short-term leave medication	Not stated	Yes, selection of compliance aid
Discharge medication	Yes	Contact primary care to ensure repeat prescribing, selection of compliance aid
Monitoring compliance	Antibiotics	All medicines especially psychotropic medicines
Shift handover meetings	Not stated	Yes
Motivational patient education	Not stated	Ad hoc interventions at nurse handovers or in discussion with patients
Discharge planning	Transcribing discharge prescriptions	Transcribing discharge prescriptions
Communication with primary care staff	Yes	Yes including community psychiatric nurses
Dispensing	In on-site pharmacy	Centralised off-site pharmacy on a business park

— Reacting to change

Approximately three months into the new service, a semi-structured questionnaire was used to gain MMT perceptions of the changes.

As a result of the relocation of the pharmacy department being brought forward unexpectedly, and the need to implement the MMT service ahead of schedule, some technicians reported feeling “thrown in at the deep end” and unclear about their remit. Managing Challenging Behaviour training (a psychosocial interaction tool) had been organised in preparation for the change but had been delayed because the trainer was ill.

A small number of technicians stated that they would have valued training in time management skills, having previously worked in a dispensary where their role was reactive and co-ordinated by a senior technician. A local medicines management course, accredited by the Institute of Psychiatry, was identified as a useful training

programme for MMTs, although it was not possible for all MMTs to participate in this before implementation. There is a local in-house accreditation programme for technicians which all MMTs must complete.

Half the MMTs reported being happier in their new role. The remainder stated that they were coming to terms with the work but enjoyed interaction on the wards, although in one case a technician reported preferring a pharmacy-based working environment.

The most enjoyable aspects of the new role were reported to be greater variety, improved service to, and relationship with, ward staff and patients, a higher level of autonomy and inter-MMT support. Negative issues raised included that the implementation felt rushed, that the new role remit was initially unclear, that not all procedures were finalised before the transition and that inadequate training given pre-implementation.

Panel 2: Unique features of the MMT role

We believe that the following features are unique to the Oxfordshire MMT role:

- Over 70 per cent of MMT time is spent on the wards.
- The MMTs attend relevant nurse handover meetings.
- One-to-one patient contact is significant. Patients know they have almost daily access to their MMT, who facilitate and promote compliance with medicines by using motivational interviewing techniques.
- Blood samples can be taken by MMTs for mandatory monitoring of clozapine or for checking the concentration of drugs in the blood.
- Dispensing is now a clinical support function and is provided from a non-hospital site.

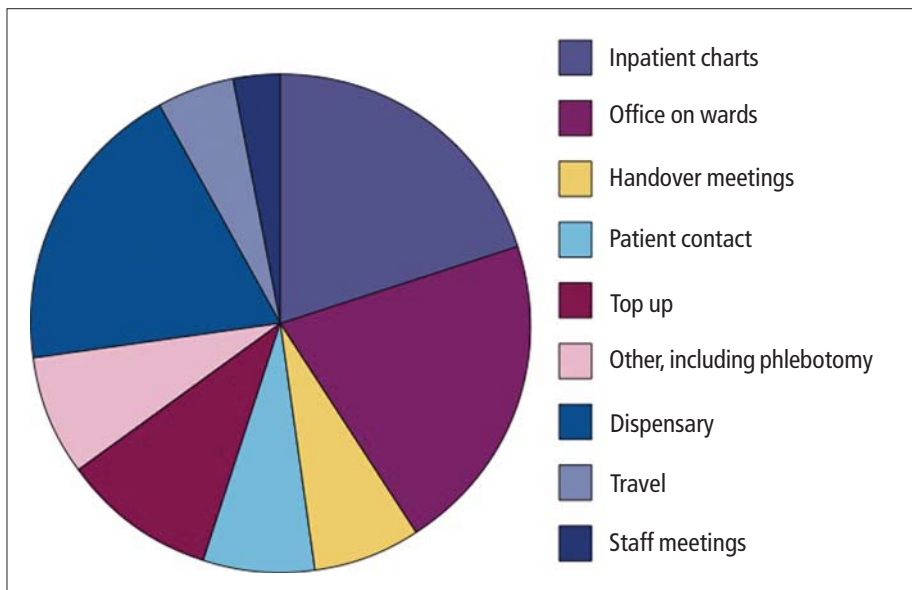
Nevertheless, within four months 50 per cent of MMTs expressed “much greater job satisfaction”.

Benefits

Since baseline measurements were not taken for all the parameters the following benefits seen by the trust are mainly indicative:

- A reduction in ordering time by staff nurses and ward clerks
- A reduction in ward stock levels due to frequent MMT visits
- Reduced incidence of discharge medicines being dispensed and then cancelled or changed

Figure 1: Average MMT workload breakdown



- Time savings in the pharmacy due to a reduced number of returns and phone calls from wards

Retrospective analysis of expenditure on medicines for the wards that were receiving a MMT service indicates that significant savings were achieved. These savings were in addition to those achieved by decreases in medicine acquisition costs and were not as a result of reduced activity on wards.

Time savings have been realised by both clinical pharmacists and nursing staff. The four clinical pharmacists who were working on the particular wards pre- and post-implementation of the new service believe that they have saved five per cent of their time. This time was formerly spent arranging non-stock supplies or prescriptions for discharge/short leave. It has now been possible to reassign the time saved to tasks such as undertaking medication reviews, facilitating shared care and financial reporting activities.

Time savings have also been significant for ward managers and ward clerks (up to one hour per shift) and up to half an hour per shift for staff nurses.

Nurse satisfaction From a 79 per cent return rate of a nursing satisfaction questionnaire (n=24) most rated the supply of medicines as “improved”. A slightly smaller return (71 per cent) for a supplementary question showed that nurses generally felt that there were fewer medication supply errors.

Staff accessibility was rated as “improved” and “more proactive”. The overall increased nurse satisfaction rating was 70 per cent. However, some complaints have been received from nurses who have to do additional work when their MMT is on annual leave.

Lessons learnt

This new process was made possible in a small, stretched department by savings made on the medicines budget. The staff effectively “work smarter”.

A great deal of possibly unnecessary time was devoted to preliminary hard data collection by busy staff. A key lesson learned was that good indicators of success can be measured by comparison of the number of requisitions completed by ward staff with those completed by MMTs. This also provides a pre- and post-implementation performance indicator which can be extrapolated to the saving of ward staff time. Qualitative experience and opinions obtained from all staff involved in the medicines management process, including patients is also invaluable.

At the time of writing there are plans to merge the county-wide mental health service in Oxfordshire, and therefore medicines management delivery, with those of an adjacent county. The first year experience with the new model in Oxfordshire has informed us of a number of MMT issues that require careful preparation.

- Clarity of objectives and definition of new technician roles
- Preparatory staff training for work outside the central pharmacy, including personal safety, how to challenge behaviour and personal effectiveness
- Formalised peer support by other MMTs
- Planning to cope with unlikely contingencies

Conclusion

Given that this new way of working was undertaken with limited resources, the model can be applied to other trusts. In those trusts that already have good clinical pharmacist coverage, as in Oxfordshire, the wards are likely to be receptive to the MMT model described here and will probably view their MMT as an integral part of the multidisciplinary team. With good planning, and preparation of both pharmacy and ward staff, the roll-out of a MMT service with extended roles can be feasible and well received. Strong project leadership and good contingency planning are key to making such changes successfully.

References

1. Carter K, Bewer C, Brewer S, Trodden J, Purdy S. Redefining hospital pharmacy roles in West Cumberland. *Hospital Pharmacist* 2005;12:281–2.

“Focus on technicians” articles

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