

# GETTING A PLACE AT THE GAMES

**Love sport? Could you imagine yourself working at international competitions such as the Olympic and Commonwealth Games? Mark Stuart, Bill Horsfall and Mel Blachford describe how pharmacy services were organised during the 2006 Commonwealth Games that took place in Melbourne, Australia**

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The pharmacy within the polyclinic of the athletes' village at the Melbourne Commonwealth Games was a showcase of modern Australian pharmacy practice. Twenty volunteer pharmacists from Australia served a record 4,500 athletes and 1,500 team officials who converged on Melbourne for the 12 days of competition.

The pharmacy was located at the entrance to the purpose-built medical centre where many medical disciplines were represented. The close proximity to specialist sports medicine, physiotherapy, podiatry, optometry, medical imaging and dentistry services meant that athletes received treatment from a highly specialised multidisciplinary team in a single visit to the polyclinic.

The pharmacy was one of the best equipped in games history. Since it was purpose-built, features to optimise patient communication, including two counselling areas, were an integral part of the planning. The pharmacy had three computer terminals and a state-of-the-art barcode scanning system to reduce any possibility of a dispensing error. After an item was dispensed and labelled, the pharmacist would scan the product with a laser scanner. This would then check that the drug booked out from the dispensing system matched the product that had just been issued. Since July 2004, this electronic scanning equipment has become compulsory by law in the Australian state of Victoria.

Unlike the Olympic Games, the Commonwealth Games integrates events for athletes with a disability into the main competition schedule — first

introduced to the Manchester games in 2002. The design of the pharmacy meant that athletes in wheelchairs had an easily accessible area with counselling benches at the optimum size and height to enable them to have equal, personalised and confidential conversations.

## Dispensing systems

For dispensing, a modified program and hardware were used. Modifications to the dispensing system included removing fields that would normally be used for drug costing or claim purposes, adding fields to record the athlete's and prescriber's unique games accreditation number, and adding a drop down list of all Commonwealth countries, to be selected for each patient. Since all the athletes resided in the athletes' village, the name of their country was sufficient to locate the athlete if any later communication was necessary. Additionally, each prohibited or restricted medicine was tagged with a clear alert message that would appear at the time of dispensing.

To complement the verbal counselling provided by the games pharmacists, the system was linked to various electronic resources to provide printed consumer medicines information about every drug dispensed. Information about the patient's medical condition was also given where possible and self care information cards on diseases, supplied by the Pharmaceutical Society of Australia, were given to athletes during each personal consultation with a pharmacist.

Visiting team doctors were given prescribing rights for the duration of

the games. They were able to prescribe only for athletes and officials from their own country.

A unique prescription format was used, which included the athlete's and prescriber's country and games accreditation number. The prescription required signatures of a doctor, pharmacist and athlete. This was to confirm that the athlete was aware of the status of the drug and of any therapeutic use exemption (TUE) forms that needed to be submitted to the Commonwealth Games Federation TUE Committee before the athlete started the treatment. Examples of drugs requiring special exemptions to be used therapeutically include inhaled, intravenous or intra-articular corticosteroids and inhaled beta<sub>2</sub>-agonists such as salbutamol.

To ensure that the use of medicines issued to athletes complied with the World Anti-doping Code, all medicines, including OTC products, were supplied only on prescription. This ensured that thorough checks against the prohibited list were undertaken for every medicine issued and that a comprehensive patient history was retained. All drugs in the polyclinic pharmacy were supplied free of charge to all athletes and officials.

## Specific formulary

A specific formulary was developed for use within the pharmacy. It contained a comprehensive range of medicines, including many specifically to treat sports injuries, including topical and oral non-steroidal anti-inflammatory drugs, injectable corticosteroids and topical preparations for sprains, strains



and bruising. It also contained information about the status of each drug in sport and information for local and international doctors about the unique prescribing process within the polyclinic. It also provided detailed information about contraindications, precautions, adverse reactions and interactions.

Providing medicines information to athletes, and to both local and visiting international health care professionals, was a key role for this pharmacy. A comprehensive range of information sources was available to pharmacists. The Pharmaceutical Press donated access to the online 'MedicinesComplete' for the duration of the games, which enabled access to references including 'Martindale', the British National Formulary, Stockley's 'Drug interactions', 'Dietary supplements' and 'Herbal medicines'. 'MedicinesComplete' was frequently used to identify foreign drug preparations that athletes were already taking and to find Australian equivalents. Other Australian reference books were also available to pharmacists.

Links with the pharmacy department at the Royal Melbourne Hospital and a local community pharmacy were established before the games. During the games, additional urgent medicines could be obtained from these places at short notice and after hours.

The unique games environment provided pharmacists with a constant supply of challenges not usually encountered in normal practice. Knowledge of the anti-doping code, musculoskeletal medicine and tropical

and contagious diseases was often put to the test.

The polyclinic had two admissions for patients with malaria who required drug treatment, one of whom required their existing malaria medication to be identified and resupplied. There was also a case of chickenpox in a hockey player — the pharmacy obtained urgent supplies of varicella vaccine for use by some of the other players in the team. Maintaining the cold delivery chain for this live vaccine during a 40C heatwave in Melbourne was another logistical challenge for the pharmacists.

#### **"Fireworks eye"**

The evocative and quirky opening ceremony to the games culminated in a spectacular fireworks display inside the Melbourne stadium, watched by the athletes from within the arena. Considerable smoke and flying ash from the display resulted in a number of admissions to the polyclinic straight after the ceremony and the following morning. Some 15 prescriptions for lubricant or anti-inflammatory eye drops were dispensed for athletes with irritated eyes, dubbed "fireworks eye" by the polyclinic pharmacists, immediately after the ceremony. The volume of prescriptions for eye injuries also rose dramatically following the boxing events where a number of athletes were treated for injuries.

Allergies and insect bites were one of the most common presenting conditions. A number of athletes were bitten by insects, including mosquitoes, with one experiencing severe symptoms requiring administration of an intravenous corticosteroid that

needed a TUE. A few days of extreme heat early in the games seemed to exacerbate the incidence of sunburn, itchy skin rashes and dehydration.

#### **Injuries**

Prescriptions for sports-related injuries accounted for the greatest proportion of dispensed medicines. Topical diclofenac gel was the most dispensed item, with nearly 200 tubes dispensed over the games period. Oral diclofenac and paracetamol were also among the fastest movers. Anti-allergy preparations including loratadine and oxymetazoline nasal sprays were the second- and third-most popular drugs dispensed, closely followed by preparations for cough and colds. A number of pregnancy tests were also dispensed.

#### **VIP visits**

One of the highlights for the games pharmacists was royal visits to the polyclinic by the Queen, Prince Philip and Prince Edward. They observed the routine running of the polyclinic and greeted the pharmacists on duty before having lunch with athletes in the huge village dining hall. The prime minister of Australia, John Howard, also visited the polyclinic and observed the running of the pharmacy.

The Melbourne games pharmacy has set a new standard of excellence for pharmacy at future games. ■

#### **Further information**

For further information about pharmacy at previous Commonwealth and Olympic games visit [www.sportpharmacy.com](http://www.sportpharmacy.com)