LOCOG Polyclinic  
London 2012 Olympic and Paralympic Games

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Background

The polyclinic situated in the Olympic/Paralympic Village for London 2012 was primarily for the medical care and treatment of Olympic and Paralympic athletes. Team officials, accredited press and broadcast staff, the volunteer workforce and the wider Olympic/Paralympic family were also able to access medical services. In addition to primary care and a small emergency department, athletes and team officials could access physiotherapy, specialist sports massage, dentistry and optometry services. These services were free of charge and provided via the volunteer workforce recruited by the London Organising Committee of the Olympic and Paralympic Games (LOCOG).

Public health services for London 2012 were provided by the organisations which are usually responsible for them - local authorities, primary care trusts and the Health Protection Agency.

Staff provision to the Polyclinic

The Medical Service Manager for LOCOG had requested that a member of staff from the Health Protection Agency (HPA) be present in the Polyclinic in the week prior to the respective openings of both the Olympics and the Paralympics and throughout the Games. A Consultant in Communicable Disease Control (CCDC), a nurse consultant or senior health protection nurse worked in the Polyclinic alongside the volunteer medical and nursing workforce during this time.

The primary purpose for the physical presence of HPA staff was to act as a source of advice and support on health protection issues for Polyclinic staff. Under current UK legislation (Public Health Control of Disease Act 1984 Health Protection (Notification) Regulations 2010), registered medical practitioners are required to notify certain diseases or exposures to the Proper Officer of the relevant local authority. For North East and North Central London the Proper Officer function rests with the Health Protection Unit.

Team doctors accompanying athletes attended a briefing event prior to the start of the Olympic and Paralympic Games at which an explanation of their reporting obligations was given by HPA staff. The list of notifiable diseases was published within a small booklet entitled Healthcare Guide, which was issued to all team doctors.
HPA staff met with the primary care and emergency department staff during each shift to remind them of the requirement to notify any of the diseases specified in the Health Protection Regulations. HPA staff provided posters and algorithms for the consulting rooms to assist medical staff with reporting. HPA staff in the Polyclinic could access the web-based reporting database for the North East and North Central London Health Protection Unit directly, and routinely entered cases of notifiable disease reported to them by the volunteer medical workforce.

Data for Polyclinic Syndromic Surveillance

The main point of access to medical services for athletes and others was via the Polyclinic in the main Olympic/Paralympic Village. In addition there, were medical facilities in every sporting venue, and in one of the hotels housing the Olympic/Paralympic family. Each time a medical service was used the doctor, physiotherapist, dentist, masseuse or other provider recorded details of the consultation and treatment using a Medical Encounter Form (MEF). For previous Games, the MEF was paper-based and filled out manually by the medical workforce. For London 2012, however, the process for recording medical encounters was via an electronic format, and the medical encounter forms provided an electronic record of the signs and symptoms of the presenting illness or injury. The International Olympic Committee (IOC) has for many years conducted surveillance of injuries sustained by athletes, with a view to improving facilities and conditions for sporting excellence.

For the 2012 Games LOCOG also wished to gain some understanding of the incidence and pattern of infectious disease during Games time. To this end, an additional field was added to the Medical Encounter Form, the completion of which was obligatory for care providers. It asked whether the encounter was classified as:

- fever,
- rash,
- diarrhoea or vomiting,
- respiratory symptoms,
- jaundice,
- meningitis/encephalitis
- none of the above.

However, there were some limitations. HPA staff had limited involvement in the design of the syndromic surveillance system or the Medical Encounter Form, though they did agree for the syndromes to be reported. Staff completing these forms were not fully aware of the purpose behind this surveillance activity, so may not have been as accurate as possible in selecting a syndrome. More than one syndrome could be selected for each MEF. The system was neither sensitive nor specific.

Data extraction and analysis

Once every 24 hours, LOCOG medical staff ran a search on the MEF system to identify the numbers of people reported with the various syndromes outlined above. The results of the search were presented to HPA in an Excel spreadsheet PDF and e-mailed to HPA staff in the Polyclinic. These HPA staff did have some access to the MEF database but the system was not able to search for the individual records relating to the reported syndromes. For example: if the system noted that six people from the same venue had been reported with diarrhoea or vomiting, staff could try to look at all MEFs with gastrointestinal complaints as the reason for consultation. This was less than satisfactory, as there was no accurate way to...
cross-reference the reported syndromes with actual signs and symptoms, and thus allowing further investigation of people who may have had an infective cause for their symptoms. This system could have been useful in detecting an outbreak related to a common exposure, such as a food-borne pathogen or toxin, but the limitations described weakened it as a surveillance tool.

**Interpretation of the syndromic surveillance data**

The population of people with access to medical services via the Polyclinic was not static. Workforce numbers on the various sites varied with the amount of sporting and cultural activity occurring at different times. Teams from countries around the world moved from training camps into the Village starting at around two weeks prior to the opening ceremony and carrying on until just prior to their respective sporting events. These variations resulted in a fluctuating number of people entitled to access the medical services. The denominator population was not accurately recorded and varied daily.

There was no background data available for the usual level of illness or syndromes that could be expected in the population accessing the Polyclinic, which made interpretation of reported numbers difficult. If baseline data had been available it would have facilitated interpretation of observed numbers with each syndrome through comparison with expected numbers.

A further caveat regarding use of syndromic surveillance from the Polyclinic lies in the use of some teams’ own medical facilities. Many countries had their own team doctors, who saw athletes and officials outside the Polyclinic, and therefore some cases would not have been reported through this system. The number of cases detected via syndromic surveillance may therefore be an underestimate of the true disease burden.

**Results of syndromic surveillance from the Polyclinic**

Despite the practical difficulties described above, the HPA did receive data regularly from the Polyclinic, and was able to assemble the data in such a way as to feel assured that there was not an outbreak of illness that needed investigation or control measures. As illustration, the results for the reported syndromes are reproduced in Annex 1, both in terms of venue and by category of person.

The data were reported on a daily basis to the Olympic Coordination Centre via the daily teleconference, and subsequently as a written report for inclusions in the OCC sitrep.

The syndromic surveillance conducted via the Polyclinic did not detect any significant outbreak that could have been of significance for the Games.
Annex 1: results for reported syndromes

Chart 1: Reported respiratory symptoms by category of person, London 2012 Olympic and Paralympic Games

Chart 2: Reported respiratory symptoms at Olympic/Paralympic venues 2012
Chart 3: Reported rash symptoms by category of person, London 2012 Olympic and Paralympic Games

Chart 4: Reported rash syndromes at Olympic/Paralympic venues 2012

Chart 5: Reported D&V symptoms by category of person, London 2012 Olympic and Paralympic Games
Chart 6: Reported D&V symptoms at Olympic/Paralympic venues 2012
Chart 7: Reported fever symptoms by category of person, London 2012 Olympic and Paralympic Games

Chart 8: Reported fever symptoms at Olympic/Paralympic venues 2012