Challenges facing rural populations seeking orthopaedic paediatric services in western NSW

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Aims: To look at the distance travelled by patients requiring paediatric orthopaedic care in a major rural centre in western NSW.

Methods: We performed an epidemiological review of all the admissions to the paediatric department under the care of the orthopaedic team over a three-month period. The inclusion criteria allowed for patients up to 18 years of age, with a minimum of one night stay. All patients were recorded by postcode, age, type of injury and distance travelled for follow-up appointments. This included fracture clinic for removal of casts, wound checks and post-operative checkups. Type of injury included upper limb, lower limb, infection or spinal injury.

Relevance: Dubbo Base Hospital is the major orthopaedic centre servicing western NSW patients. It is located approximately 410 km north-west of Sydney. It has a population of 41 000, but services over 120 000 population in the catchment area. It services north to the Queensland border and west as far as Cobar and Bourke. Recent challenges with retention of full-time local anaesthetic and orthopaedic staff result in many situations of fly-in/fly-out on-call services. If the local service was to be closed down or amalgamated with the next largest centre (Orange Base Hospital 151 km away) this would pose even greater burden on rural patients in accessing orthopaedic care.

Results: Over a three-month period (September, October, November 2010), 104 patients were admitted to the paediatric ward under the care of orthopaedics. This included 72 upper limb injuries, 21 lower limb injuries, ten infections and one spinal injury. The average age of patients was 10.72 years (1–18 years). The average distance travelled was 99.50 km.

Conclusions: It is well known that rural populations often have to travel great distances to seek specialist care. This study found that the average distance travelled by patients seeking paediatric orthopaedic care was 99.50 km one way. If we break down the results, 35 of the 104 patients were Dubbo residents. The remaining 99 patients were from surrounding rural townships. The average distance travelled by this group of patients was 142 km. This in fact meant that a round trip to the fracture clinic for follow-up was approximately 284 km, posing significant logistical, financial as well as time commitments due to the distance imposed on these families. If the services were lost in this location the average distance for this population would now become 215 km (a total 430 km round trip) for follow-up.