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### **Admission avoidance by introduction of a home intravenous antibiotic service**

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Having a multidisciplinary diabetic foot clinic has been shown to improve patient outcomes and generate cost savings for the NHS. A microbiologist joined our team in August 2010 and this has had an impact on our antibiotic prescribing, duration of treatment and route of antibiotic administration. During 2011, 13 patients were admitted to hospital directly from our diabetic foot clinic due to sepsis and/or because urgent vascular/orthopaedic intervention was needed. Mean duration of stay was 23 days (range 5-56). The estimated cost of these admissions based on the cost of bed stay per day being £331 was £98,969 which is probably an underestimate. With our microbiology consultant colleague we developed the use of home intravenous (IV) antibiotics prescribed from the multidisciplinary diabetic foot clinic to prevent unnecessary hospital admissions. 19 admissions were avoided. 14 patients had IV antibiotics administered at home and 5 post dialysis. Duration of antibiotic treatment was 1-6 weeks. The total estimated cost was £51,320 including cost of IV antibiotics, cost of community nursing time to administer the antibiotics, cost of line insertion and microbiology time. Previously these patients would have been admitted with a mean length of stay of 19 days. Based on the cost of bed stay per day being £331 this would have cost our Trust £119,491. Therefore by avoiding 19 admissions there was an estimated cost saving of approximately £68,171. There was good evidence of healing of the foot ulcers or significant improvement in the chronic wounds in the patients who received their antibiotics in the community. When appropriate this service can be cost effective and advantageous to the patients who prefer to remain in their own home without putting their foot at risk. Patient satisfaction was very high. Bed pressures are ever increasing and this service can prevent admissions with good clinical outcomes.