



A 9-year Exploration of the Effectiveness of Outpatient Antimicrobial Therapy (OPAT) for Diabetic Foot Infection in Admission Avoidance in a large Urban Teaching Hospital



Pauline Wilson, Corey Gillen, Maura Reynolds, Oisín Hegarty, Ceppi Merry, Suzy Clarke,
Multidisciplinary Diabetic Foot Teams, St. James's Hospital, Dublin, Ireland

The aim of this study was to consider the use of OPAT for the management of moderate to severe DFI in patients attending an urban specialist centre



Background



The use of intravenous antibiotics is recommended for the management of moderate to severe diabetic foot infection. (IWGDF 2019). In the absence of surgical resection, extended courses of IV antibiotics are often used thus increasing patients length of hospital stay.

Materials & Methods

Data was collected prospectively for all OPAT admissions between 2013 and 2021. This data was retrospectively reviewed for length of treatment, number of patients with DFI, bed days saved and overall cost savings.

Results

The results show a mean of 342 bed days saved across the 9 years studied. A mean number of 28.4 days of treatment with OPAT, and a mean of 14 patients treated per year with DFI.

During the Covid-19 pandemic OPAT was used as an admission avoidance strategy for people with DFI, in conjunction with day case surgery. The total cost savings were 2,753,020 over the 9 year period or a mean of 305,891 per year.

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bed days saved	356	472	216	209	213	363	290	589	368
Mean length of OPAT	29.66	29.5	30.8	26.12	21.3	28	32	28	31
Patients treated with OPAT	12	16	7	8	16	13	9	22	12
Cost saving @895 per night	318620	422440	193320	187055	190635	324885	259550	527155	329360
Mean cost saving per patient	26551	26402	27617	23381	11914	24991	28838	23961	27446

References

Lipsky, B.A., Senneville, É., Abbas, Z.G., Aragón-Sánchez, J., Diggle, M., Embil, J.M., Kono, S., Lavery, L.A., Malone, M., van Asten, S.A. and Urbančič-Rovan, V., 2020. Guidelines on the diagnosis and treatment of foot infection in persons with diabetes (IWGDF 2019 update). *Diabetes/metabolism research and reviews*, 36, p.e3280.

Conclusions

The use of OPAT for stable moderate and severe infections is an effective admission avoidance strategy in those with DFI and yields significant cost savings. This was most notable during the Covid-19 Pandemic