



# Costs and benefits of the Diabetic Foot Clinic

A retrospective study in Samoa

## Introduction

The Pacific Region has the highest prevalence rates of diabetes mellitus in the world. Diabetes complications like diabetic foot ulcers are common and if left untreated can result in lower limb amputations. In June 2015, a Diabetic Foot Clinic (DFC) opened at Tupua Tamasese Meaole (TTM) Hospital in Samoa. A retrospective study was undertaken to compare the costs and benefits of the DFC, with those of acute hospital care and amputation.

## Method

Medical records were reviewed for clients who were admitted at TTM Hospital for a diabetic foot ulcer in the period between June 2013 and June 2015, and for clients who were treated for a diabetic foot ulcer at the DFC for the period June 2015 until May 2016. Qualitative data was collected through structured client interviews and staff questionnaires at the DFC. The same costs were compared for the two treatment options.

## Results

Hospital treatment	Diabetic Foot Clinic
<ul style="list-style-type: none"> <li>• 563 clients were admitted with diabetes related circulatory complications.</li> <li>• For these 563 clients, 667 hospital admissions were recorded.</li> <li>• The average length of stay was 11 days per admission.</li> <li>• No ulcers healed during admissions.</li> <li>• 30% of clients had an amputation.</li> <li>• Average cost per admission was <b>WST\$7,239</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• 46 clients with non-infected foot ulcers were treated.</li> <li>• Clients attended an average course of treatment of 10 appointments.</li> <li>• 70% of clients received ulcer offloading.</li> <li>• 50% of ulcers healed by May 2016.</li> <li>• The average healing time was 105 days</li> <li>• The average cost per course of treatment was <b>WST\$924</b>.</li> </ul>

## Summary

The treatment costs of the DFC are nearly 8 times lower when compared to the costs of admitting a client with diabetic foot sepsis into TTM Hospital. Not only are their economic benefits of the DFC over hospital admissions, outcomes for clients are also much improved. DFC clients are more likely to heal their ulcers, prevent infection and avoid amputations. Only one client receiving treatment at the DFC required admission to TTM with foot sepsis. The study indicates that the DFC could save costs for the National Health Service and improve outcomes for clients. Savings would increase and more people would benefit, if the capacity of the service was expanded and Samoans were encouraged to seek treatment earlier at services closer to their communities.

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