Redefining Dialysis Care on the Hawaiian Islands: Reducing Health Disparities and Resource Utilization

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INTRODUCTION

- Native Hawaiians and Pacific Islanders, particularly those on the islands, have
 the highest rates of diabetes, coronary artery disease and kidney disease of any
 racial group. Geographic, economic and access to care challenges have led
 patients on the islands with End Stage Kidney Disease (ESKD) to suffer poorer
 outcomes when compared to other ethnic and racial ESKD populations.
- Geography, infrastructure and limited availability on certain islands can lead to missed or shortened in-center dialysis treatments. Home hemodialysis (HHD) can address many of these challenges but has only had limited availability and previously been challenged due to the high humidity present in Hawaii.
- The Tablo Hemodialysis System HHD machine is FDA cleared for home use capable of producing dialysate on demand. Tablo utilizes an interactive touchscreen to guide users, step by step, facilitating training of patients for HHD. Tablo's mid dialysate flow rate (max of 300ml/min) and unique design reduce water and electricity usage.
- Here we describe a novel approach to addressing access to ESKD care for Native Hawaiian and Pacific Islanders on the Hawaiian Islands through a home hemodialysis program with Tablo.

METHODS

- The Tablo home hemodialysis program was begun in Dec 2021 with the first patient sent home in February 2022. Training was accomplished by the home dialysis nurse in the homes of patients in Maui and Hawaii.
- Traditional in-clinic HHD training was performed for those patients on Oahu.

RESULTS

- A total of 24 patients were transitioned to HHD on Tablo. 4 patients were trained in their homes on Maui and Hawaii and 20 were trained traditionally in the dialysis clinic on Oahu. 1893 treatments have been performed to date.
- Device performance demonstrates a treatment success rate of 97%. No device issues related to high humidity were experienced. Tablo's water and energy efficiency resulted in state approval for a financial rebate to Tablo home patients.

CONCLUSION

- Implementation of a HHD program with and without brick-and-mortar facilities with the easy to learn Tablo HHD device expanded access to HHD to Native Hawaiians on Maui, Hawaii and Oahu.
- Tablo demonstrated tolerance of the unique Hawaiian environment and reduced cost of utilities resulting in a high treatment success rate and financial rebates to encourage its continued use.