

Reduction of Drop Out

Reduction of Hospitalizations



Evidence Series: Poster

Trends in Outcomes for an Automated Peritoneal Dialysis Program with and without Remote Management in Colombia

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Remote Patient Monitoring Program in Automated
Peritoneal Dialysis: Impact on Hospitalizations
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BACKGROUND

Remote Home Management of patients treated with Automated Peritoneal Dialysis (APD) is a technology that could positively impact the results of this therapy.

Figure 1. Remote home management in APD



OBJECTIVES

To explore differences in outcomes for APD patients using Remote Home Management versus those with the conventional standard of care.



ENDPOINTS


- Hospitalization rate
- Drop out to Hemodialysis

METHODS

This retrospective study included three cohorts of patients treated with APD. Data were obtained from the first 90 days of therapy:

- 2017 patient cohort: APD with remote home management (Homechoice Claria with Sharesource)
- 2014 and 2015 cohorts: APD without remote home management
- comparisons were made with historical APD Controls (Cohorts 2014 and 2015) without remote management.

STUDY POPULATION

A total of

947
PATIENTS
 were included

Number of patients in the three years cohorts:

- 2014 (483)
- 2015 (405)
- 2017 (59)

These patients were enrolled at Renal Therapy Services in Columbia.

RESULTS

- The rates of APD drop out to HD were 11.1; 10.7 and 9.7 therapy switches per 100 patient-years at risk for the three cohorts respectively.
- The incidence rate ratios between the cohorts were:
 - o 2017 vs 2014 cohorts was 0.8 (CI 95% 0.22 – 2.4), p=0.421
 - o 2017 vs 2015 cohorts was 0.89 (CI 95% 0.22 – 2.5), p=0.443. See table 1.

Table 1. Comparison of APD Drop Out Rates to Hemodialysis

Year	Incidence Rate Ratio	95% CI	p
2017 vs 2014	0.87	0.22 - 2.4	0.421(ns)
2017 vs 2015	0.89	0.22 - 2.5	0.443(ns)

Trend in Reduction of PD Drop Outs to HD:

PATIENTS USING APD DEVICES WITH SHARESOURCE SHOWED TRENDS SUGGESTING

- ✓ LOWER INCIDENCE OF DROP OUT
- ✓ VERSUS PATIENTS USING
- ✓ DEVICES WITHOUT

REMOTE MANAGEMENT CAPABILITIES.

Disclaimer: The cohort of patients using APD with SHARESOURCE was a smaller group (n=59) than the comparative cohorts (n=485) and (n=405).



RESULTS (CONT.)

- Hospitalization rates for the above cohorts were 0.78; 0.61 and 0.56 admissions per patient-year at risk for the 2014, 2015 and 2017 cohorts respectively.

The incidence rate ratio for hospitalization:

- for the 2017 vs 2014 cohorts was 0.71(CI 95% 0.44–1.1), p=0.055
- for 2017 vs 2015 cohorts was 0.91 (CI 95% 0.56–1.4), p=0.359.

Reduction in Hospitalizations:

PATIENTS USING APD DEVICES WITH SHARESOURCE SHOWED TRENDS FROM 2017 VS 2014 INDICATING

✓ **FEWER HOSPITALIZATIONS THAN PATIENTS USING APD DEVICES WITHOUT SHARESOURCE**

Table 2. Comparison of Hospitalization Rates

Year	Incidence Rate Ratio	95% CI	p
2017 vs 2014	0.71	0.44 - 1.1	0.055
2017 vs 2015	0.91	0.56 - 1.4	0.359

Disclaimer: The cohort of patients using APD with SHARESOURCE was a smaller group (n=59) than the comparative cohorts (n=485) and (n=405).



CONCLUSIONS

- The patient cohort treated with the APD-embedded two-way remote patient management platform showed a trend towards improvement in rates of APD drop out to HD and hospitalization
- This could be a valuable tool for enhancing the results of APD therapy

PATIENTS USING APD DEVICES WITH SHARESOURCE SHOWED TRENDS SUGGESTING

✓ **LOWER INCIDENCE OF DROP OUT VERSUS PATIENTS USING DEVICES WITHOUT REMOTE MANAGEMENT CAPABILITIES.**

PATIENTS USING APD DEVICES WITH SHARESOURCE SHOWED TRENDS FROM 2017 VS 2014 INDICATING

✓ **FEWER HOSPITALIZATIONS THAN PATIENTS USING APD DEVICES WITHOUT SHARESOURCE**

Disclaimer: The cohort of patients using APD with Sharesource was a smaller group (n=59) than the comparative cohorts (n=485 and (n=405).

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