Patient Adherence

Evidence Series: Poster

Discrepancy between prescribed and actual APD prescription delivery:

Identification using cycler remote management technology

Catherine A Firanek et al

Firanek C et al, MP557 Discrepancy between prescribed and actual APD prescription delivery: Identification using cycler remote management technology Neph Dial Trans 2017; 32 (suppl 3): iii633

Sharesource

BACKGROUND

Historically, clinicians have been unable to proactively identify patients missing or shortening PD treatments.

NON-ADHERENCE TO >10% of the Peritoneal Dialysis (PD) prescription is associated with TECHNIQUE FAILURE PERITONITIS HOSPITALIZATIONS & MORTALITY[1,2]

1. J Bernardini, M Nagy, B Piraino. Pattern of Noncompliance with Dialysis Exchanges in Peritoneal Dialysis Patients. Am J Kidney Dis 2000; 35: 1104-1110.
2. J Bernardini, B Piraino. Compliance in CAPD and CCPD Patients as Measured by Supply Inventories During Home Visits. Am J Kidney Dis 1998; 31: 107-107.

Automated Peritoneal Dialysis (APD)

cyclers embedded with Remote Patient Management (RPM) technology may help the clinician detect treatment-related issues earlier, potentially allowing earlier intervention.

OBJECTIVES

Evaluate actual APD treatment time compared with prescribed treatment time, using an APD device with embedded RPM technology (Homechoice Claria with Sharesource).

ENDPOINTS

Patient adherence and early intervention.

METHODS

RETROSPECTIVE DATA ON 399 European APD PATIENTS WERE ANALYZED

- Patients with ≥3 months on the Homechoice Claria with Sharesource were examined for weekly treatment frequency and actual versus prescribed treatment time.
- An assumption was made that patients perform APD therapy 7 days per week.
- Patients with gaps in treatment >30 days were omitted/excluded.
- Any treatments occurring in the first 14 days from the very first available treatment were considered as training time and were excluded.
- Time (days) on treatment was determined from the first treatment after the training period to the last available treatment for a patient.
- Weekly treatment frequency was the number of treatments in Sharesource/30 x 7. E.g. If a patient had 27 treatments out of 30 days, then Weekly rate = (27/30) x 7 = 6.3.
- Treatment differences were treatment time prescribed – actual treatment time performed.

Note: Claria with Sharesource was used in this study which is similar in function and design to Amia with Sharesource.

RESULTS

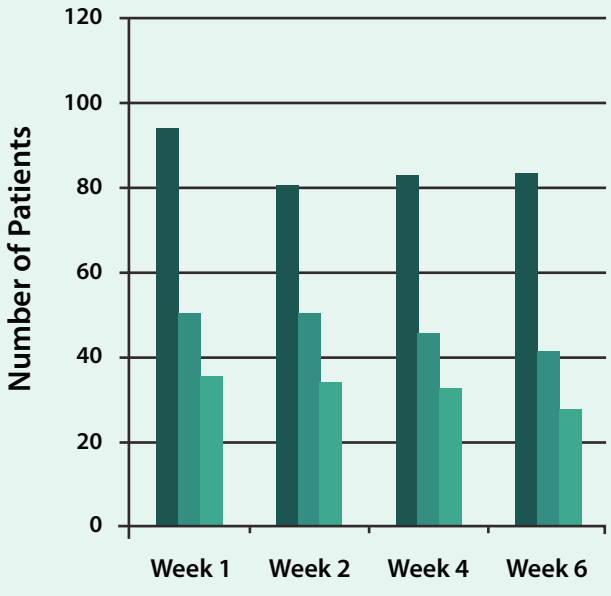
In the first week of therapy:

- 24.3% (97) and 9.5% (38) of patients had ≥100 minutes and ≥300 minutes, respectively, less actual therapy time than prescribed

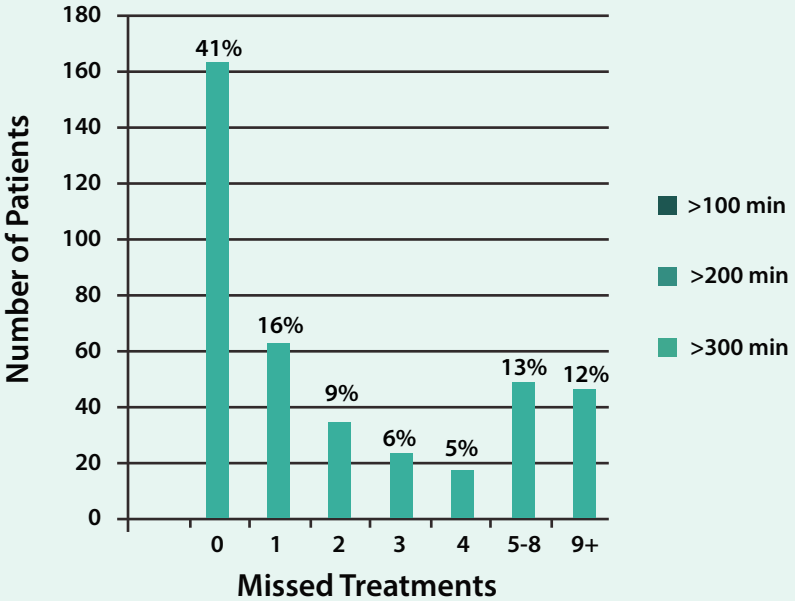
During the 1st month of therapy:

- 30% (115) of patients missed ≥4 treatments (>10% of prescribed therapy)
- 12% (47) of patients missed ≥9 treatments

Number of Patients Who Missed Significant Treatment Time / Week by Week of Therapy (N=399)



Number of Missed Treatments in First Month of Dialysis (N=399)



RESULTS

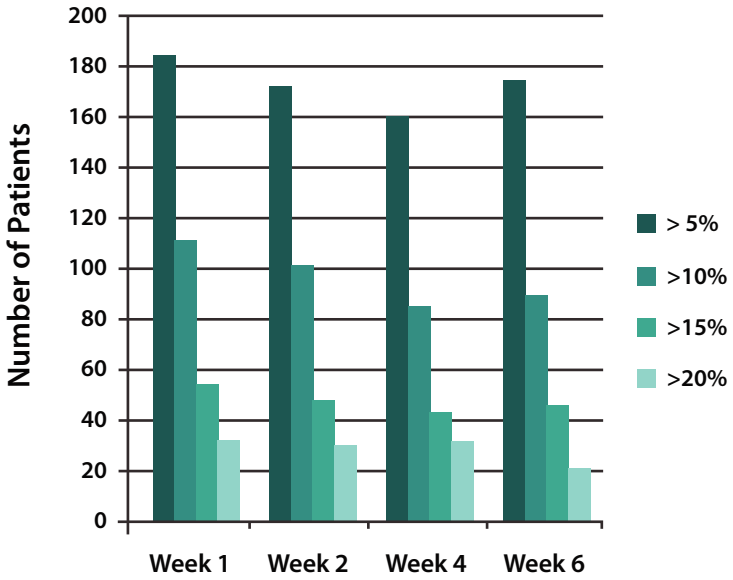
In combined results of weeks 1,2,4 and 6:

- 43% of patients missed >5% of prescribed dwell time

20.6% OF PATIENTS MISSED >10% OF PRESCRIBED DWELL TIME

- 11.9% of patients missed >15% of prescribed dwell time
- 7% of patients missed >20% of prescribed dwell time

Number of Patients With at Least 3 Months of Treatment Who Missed Significant Dwell Time by Week of Therapy (N=399)



CONCLUSIONS

- Current standard of care does not allow visibility to determine adherence to prescribed PD therapy.
- Sharesource remote patient management platform allows clinicians to securely view their patients' daily home dialysis treatment data.
- Visibility to adherence patterns may provide opportunities for clinicians to intervene, educate or retrain the patient in a more timely manner.
- Clinicians using APD with Sharesource have **greater visibility to**

PATIENT ADHERENCE PATTERNS WHICH MAY ALLOW EARLY INTERVENTION

This study was an observational study.

Baxter's **Homechoice Claria** APD system is intended for automatic control of dialysis solution exchanges in the treatment of pediatric and adult renal failure patients undergoing peritoneal dialysis in the HOME HEALTHCARE ENVIRONMENT including comparable use in professional healthcare facilities.

The **Amia** Automated PD System is intended for automatic control of dialysate solution exchanges in the treatment of adult renal failure patients undergoing peritoneal dialysis. All therapies using the **Amia** Automated PD System must be prescribed and performed under the responsibility of a physician who is familiar and well-informed about peritoneal dialysis.

The **Sharesource** portal is intended for use by healthcare professionals to remotely communicate new or modified treatment parameters with compatible dialysis instruments and transfer completed treatment data to a central database to aid in the review, analysis, and evaluation of patients' historical treatment results. This system is not intended to be a substitute for good clinical management practices, nor does its operation create decisions or treatment pathways.

Rx Only: For safe and proper use of products mentioned herein, please refer to the appropriate Instructions for Use or Operator's Manual.

US-RC42-210035 v1.0 09/21

Baxter