Sharesource

Evidence Series:
Poster

Discrepancy between prescribed and actual APD prescription delivery:

Identification using cycler remote management technology

Catherine A Firanek et al

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
HOSPITALISATIONS
& 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 can detect early treatment-related issues, allowing intervention to potentially prevent clinically significant events.

OBJECTIVES

Evaluate actual APD treatment time compared with prescribed treatment time, using an APD device with embedded RPM technology (Homechoice Claria with Sharesource). Determine if Clinicians using APD with Sharesource have greater visibility to patient adherence patterns to allow early intervention

ENDPOINTS

Patient adherence and early intervention

METHODS

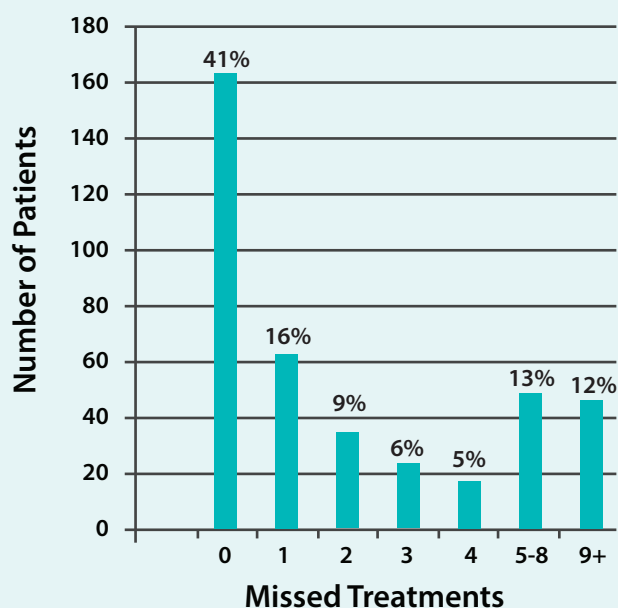## DATA ON
399 European APD
PATIENTS
WERE ANALYSED

- 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. Eg 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.

RESULTS

During the 1st month of therapy:

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

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

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

Number of Patients vs Missed Treatments

- 0: 41%
- 1: 16%
- 2: 9%
- 3: 6%
- 4: 5%
- 5-8: 13%
- 9+: 12%

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

Number of Patients by Week

Legend:
- >100 min
- >200 min
- >300 min

Weeks: Week 1, Week 2, Week 4, Week 6
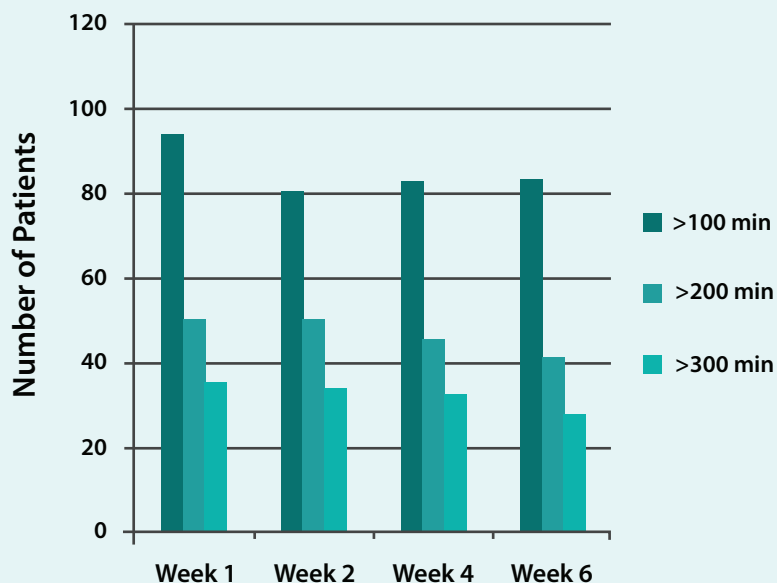
RESULTS

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

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

20.6% OF PATIENTS
MISSED >10%

OF PRESCRIBED DWELL TIME

- 11.9% missed >15% of prescribed dwell time
- 7% 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)

Legend:
- > 5%
- >10%
- >15%
- >20%

Y-axis: Number of Patients (0–200)
X-axis: Week 1, Week 2, Week 4, Week 6
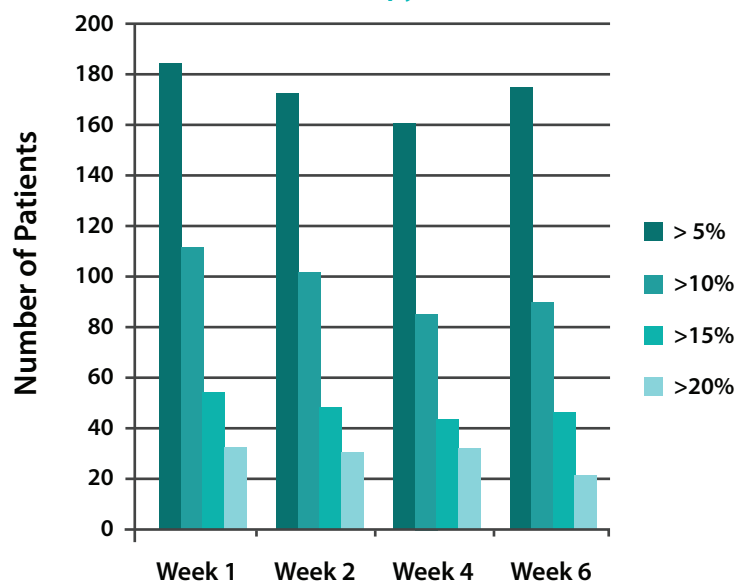
CONCLUSIONS

- 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

Baxter