

# The Role of Remote Patient Monitoring in Peritoneal Dialysis - Understanding Patient Perspectives

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**Aim:** To understand patient and healthcare provider perspectives regarding peritoneal dialysis treatment documentation and the potential role for remote monitoring to improve data capture

## Introduction

Remote patient monitoring (RPM) has potential to assist with managing patients treated with peritoneal dialysis (PD). Despite this, few studies have considered patient or healthcare provider perspectives regarding RPM in PD management. We aimed to identify current practices of data recording/patient monitoring in PD and to better understand consumer opinion regarding the role of RPM.

## Method

English speaking, adult patients with recent experience of more than 3 months PD treatment and healthcare providers from an urban PD facility in Australia were purposefully selected and invited to complete qualitative semi-structured interviews regarding:

1. Current practices of PD treatment documentation/monitoring
2. Perspectives towards the role of RPM

Interviews were recorded, transcribed and inductively coded using grounded theory.

## Results

Interviews were completed with 9 of the 16 patients selected (7 participants refused to be interviewed) and 5 healthcare professionals (2 physicians, 3 PD nurses).

Interview Code	Age	Gender	Ethnicity	Current type of PD	Time treated with PD (months)	Reason for Kidney Failure	Current use RPM
Patient 1	57	Male	Caucasian	APD	16	Diabetes	No
Patient 2	65	Female	Caucasian	APD	40	APCKD	No
Patient 3	64	Male	Caucasian	APD	30	Myeloma	No
Patient 4	69	Female	Sri Lankan Tamil	APD	42	Diabetes/Myeloma	No
Patient 5	70	Male	Italian	APD	6	Diabetes	Yes
Patient 6	73	Female	Caucasian	APD	4	Hypertension	No
Patient 7	76	Male	Caucasian	APD	72	Nephrosclerosis	No
Patient 8	81	Male	Greek	APD	66	Diabetes	No
Patient 9	35	Male	Samoa	APD	5	Diabetes	Yes

Table 1 – Demographics of patients interviewed

Interview Code	Gender	Role	Experience with PD (years)
Healthcare provide 1	Male	PD nurse	16
Healthcare provide 2	Male	Physician	10
Healthcare provide 3	Female	PD nurse	8
Healthcare provide 4	Male	Physician	20
Healthcare provide 5	Female	PD nurse	8

Table 2 – Demographics of healthcare providers interviewed

## Preliminary Analysis

1. Current practices of PD treatment documentation/monitoring

Major Themes:

- Influence of dialysis unit preference on patients’ data recording practices
- Differing patient practices regarding abnormal data.

2. Perspectives towards the role of RPM

Major Themes:

- Impact of RPM to clinical care
- Change in patient-dialysis unit relationships
- Data sharing/protection
- Perceived barriers to data recording

## Conclusion

RPM may offer a useful adjunct to the care of patients treated with PD, however some patients and healthcare providers have concerns about potential barriers and data security. Participants also identified the potential for RPM use to alter important patient-dialysis unit relationships.

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