MENU

Evidence Series:
# Study

## Remote Patient Monitoring Program in Automated Peritoneal Dialysis:
Impact on Hospitalisations

*Sanabria Mauricio et al*

BEGIN

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Sharesource

## MAIN MENU

# INTRODUCTION

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

Automated peritoneal dialysis (APD) is a growing PD modality but as with other home dialysis methods, the lack of monitoring of patients' adherence to prescriptions is a limitation with potential negative impact on clinical outcome parameters.

Remote patient monitoring (RPM) allowing the clinical team to have access to dialysis data and adjust the treatment may overcome this limitation.

## OBJECTIVES

To determine clinical outcomes associated with RPM use in incident patients on APD therapy.

## ENDPOINTS

Number of hospitalizations per patient-year and hospital days

# METHODS

- A retrospective cohort study
- An RPM program was used and the patients were divided into **two cohorts:**

## 1 APD RPM COHORT:

patients using the Homechoice Claria device with Sharesource technology =

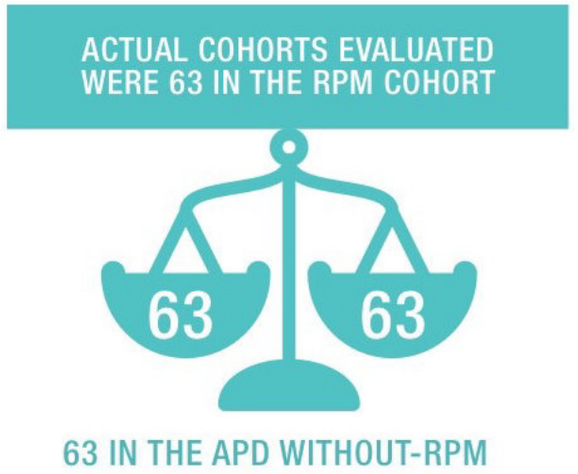
**65** (18%)

## 2 APD WITHOUT-RPM COHORT:

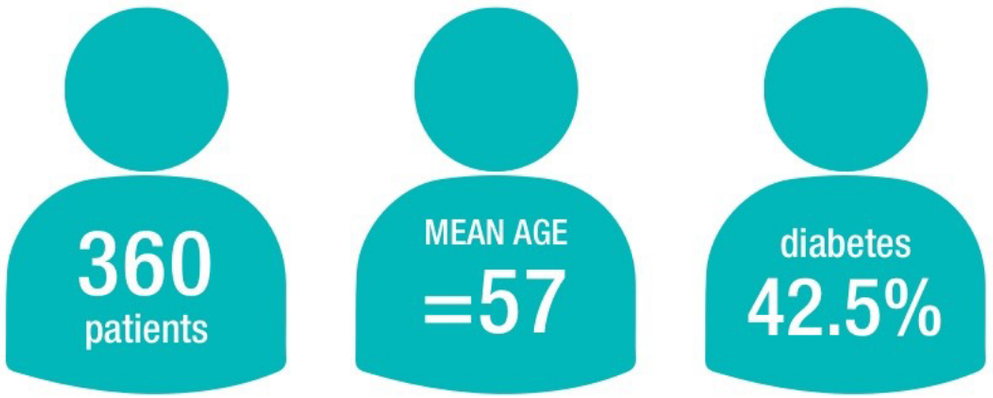
patients using Homechoice without RPM=

**295** (82%)

- Hospitalisations and hospital days were recorded over 1 year
- Propensity score matching 1:1, to ensure there is less potential for selection bias, the actual cohorts evaluated were 63 in the RPM Cohort and 63 in the APD without-RPM Cohort



# STUDY POPULATION




- 360 patients initiating APD between 1 October 2016 and 30 June 2017 in 28 Baxter Renal Care Services (BRCS) units in Colombia.
    - Mean age = 57 years (diabetes 42.5%)

# RESULTS

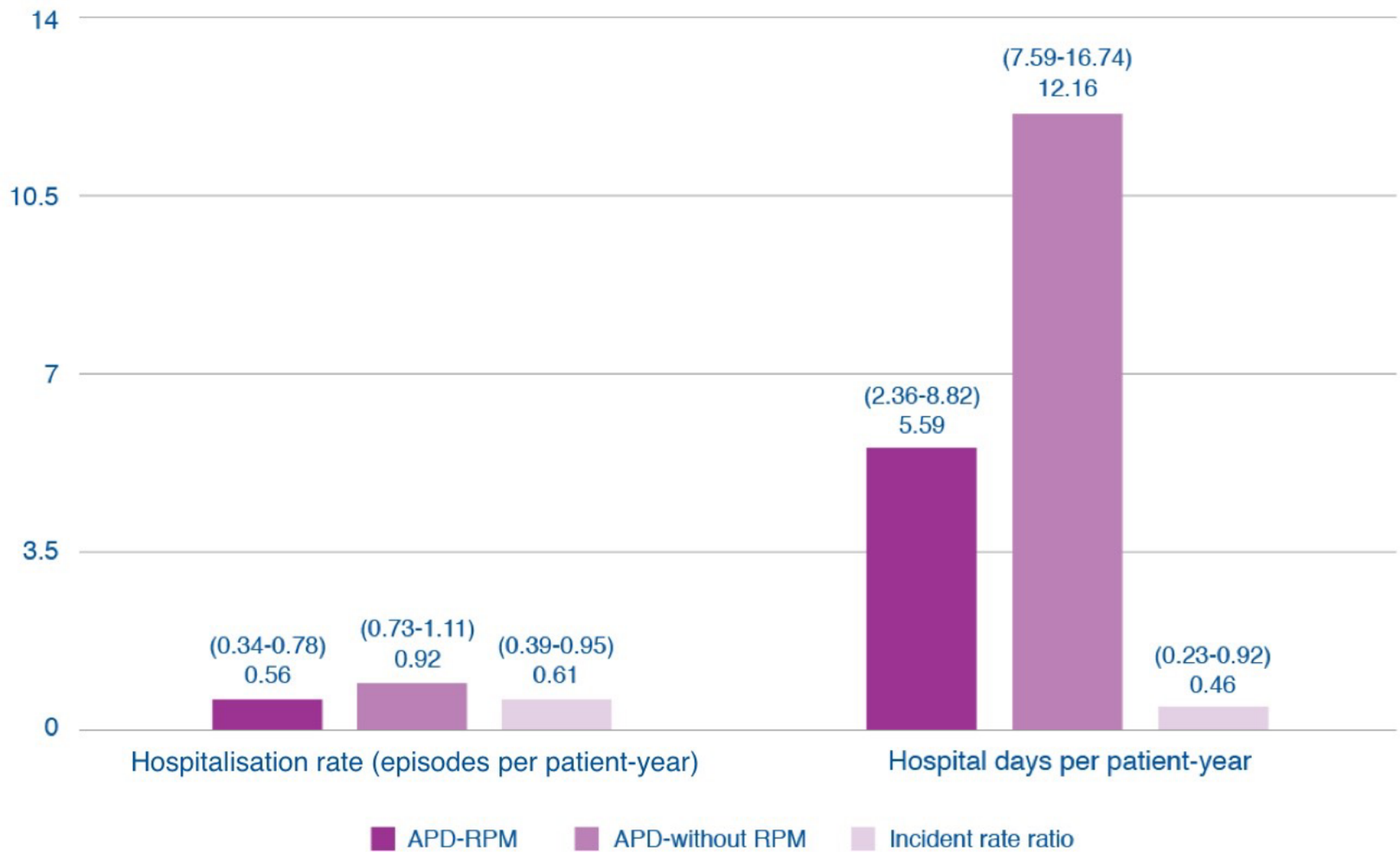
- After propensity score matching, APD therapy with RPM (n = 63) compared with APD-without RPM (n = 63) was associated with significant reductions in hospitalisation rate:


**0.36**

**fewer hospitalisations**

**REDUCTION OF HOSPITALISATION RATE by 39%**

# Clinical Outcomes Associated with RPM Matched Sample Based on Negative Binomial Regression



# CONCLUSIONS

The use of RPM in APD patients was associated with lower hospitalisation rates and fewer hospitalisation days

**RPM could be an EFFECTIVE TOOL to improve clinical** outcomes of APD therapy

# Cost impact of Improvement in Health Outcomes from Remote Monitoring based on Australian costings. (63 Patients)

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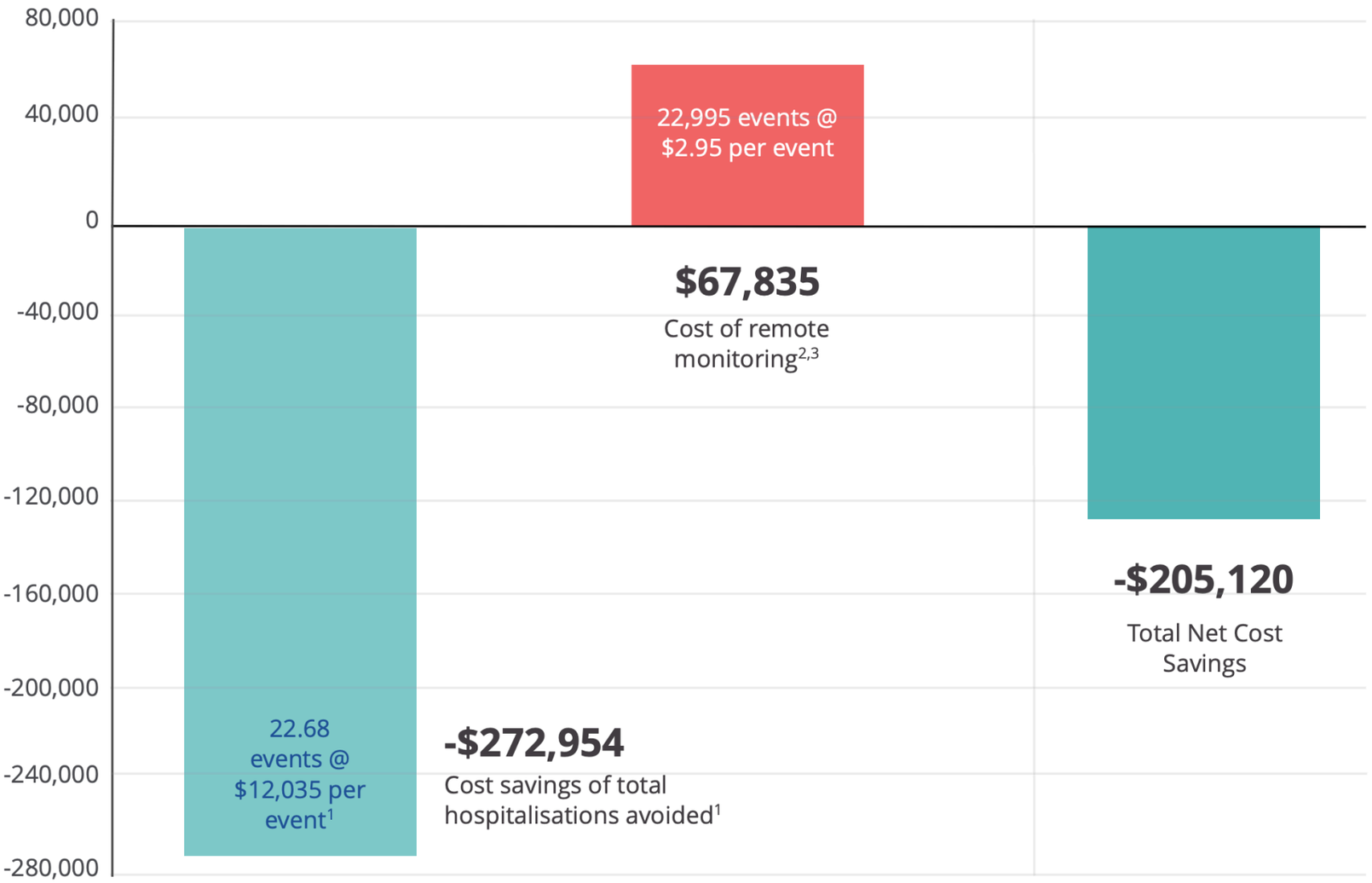
63
patients

Cost avoided per patient annum

$3,256




1. Hospitalisation cost based on 2016-17 results (Round 21) of the NHCDC, an annual Australia-wide data collection of hospital costs covering approximately 83% of hospitalisations in Australia. Admissions selected based on Sanabria 2017 hospitalisations reported. For more detail refer Sharesource report by HPA (Data on file)
2. 22,995 events: based on 63 patients for 365 days
3. Sharesource: Baxter Price of remote monitoring per day