IMPLEMENTATION OF AN AUTOMATED PERITONEAL DIALYSIS PROGRAM WITH REMOTE MONITORING IN A NETWORK OF RENAL CLINICS IN COLOMBIA.

Sanabria, Mauricio; Devia, Martha E; Vesga, Jasmí; Carvajal, Claudia; Forero, David; Rivera, Angela; Bunch, Alfonso.

Background:

The remote monitoring for Automated Peritoneal Dialysis (APD) technology, require an implementation process to overcome barriers that could limit its use.

Objective:

This report has the objective of present the characteristics of the implementation process of the APD Program with remote monitoring in the Renal Therapy Services (RTS) Network in Colombia.

Methods:

This is a cross sectional study with description of the implementation process and the early results of the program´s indicators for the four quarter of 2017.

Results:

The implementation process was done for all the RTS clinics in Colombia, with systematic education for the clinical team in the new APD Technology; a rule for alarms in the sharesource platform was stablished ***(see table 1)***

A total of 417 patients with APD with remote monitoring were included in this analysis; we made indicators for adherence to the APD measured with the remote monitoring ***(see table 2)***

Conclusions:

The adherence to APD Program with remote monitoring is quite high but there is a substantial number of blood pressure measurement out of goals. Remote monitoring could be a tool for improvement the clinical outcomes in APD programs.

Table 1. Monitoring platform alarm code

Monitoring platform alarm code			
Length of treatment	Description	!	!!
Lost Treatment Time	It is activated when the actual treatment time is lesser than the programmed time	30 minutes	No treatment
Changes in treatment		!	!!
Lost dwell time	It is activated when the actual dwelling time is lesser than the programmed time	15 minutes	30 minutes
Lost treatment volume	It is activated when the actual volume delivered is lesser than the total volume programmed to be delivered	5%	10%
Drain completed early	It is activated when a drain is bypassed	1 bypass	More than 1 bypass
Change in initial drain	It is activated when the actual initial drain volume differ from the programmed initial volume	NA	≥ 50%
Fluid control		!	!!
High drain volume	It is activated when it is ≥ 200% of the standard prescription or ≥ 190% of the small fill volumes	None	Event
Patient		!	!!
# Bypass during infusion/dwelling	It is activated when the number of bypass is equal to or greater than the set value	None	2 bypasses
System alarm		!	!!
Events occurred during treatment	It is activated with the TOTAL number of events is equal to or greater than the set value	10 events	15 events

Table 2. Indicators for program monitoring

Indicators	Measurement	Results
Treatment prescription	Percentage of patients with dwelling times < 1.5 hours	7.8%
	Percentage of anuric patients with dry days	24%
Adherence to treatment	Total adherence: Percentage of sessions performed Vs prescribed	90.1%
	Time on cycler - Percentage of delivered time Vs prescribed time	89.6%
Clinical indicator	Percentage of sessions with BP >140 mm Hg and/or >90 mmHg	44.5%
	Percent of patients with BP < 90 mm Hg y/o < 60 mmHg	8%

RTS