Renal Patient View users are more likely to begin RRT on a home-based modality: an effective source of pre-dialysis education?

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1. Background:

• Renal Patient View (**RPV**) is an established system that gives patients with chronic kidney disease access to live test results and information about their condition and treatment.
• It was hoped that patient facing records/ Electronic patient records (EPR) in addition to meeting patient demand for viewing results and letters will also have a role in patient benefit.

2. Aim:

To investigate the effect of RPV on patient choices of Renal replacement therapy (RRT).

## 3. Methods:

Retrospective observational cohort study

RPV user database extant on January 25th 2012 was linked by patient CHI / NHS number with the UK Renal Registry (UKRR).

Variables: RPV: Demography, date of first logon to RPV, usage log
    UKRR: Timeline data, Date of beginning RRT, deprivation indices, Ethnicity and referral data.

Usage:

RPV usage	Definition
Early users	Logon to RPV > 90 days prior to RRT start
Late users	Logon to RPV after RRT start
Persistent users	Logon to RPV at least 3 months prior to RRT start + made continued use up to the census date

Inclusion & Exclusion criteria
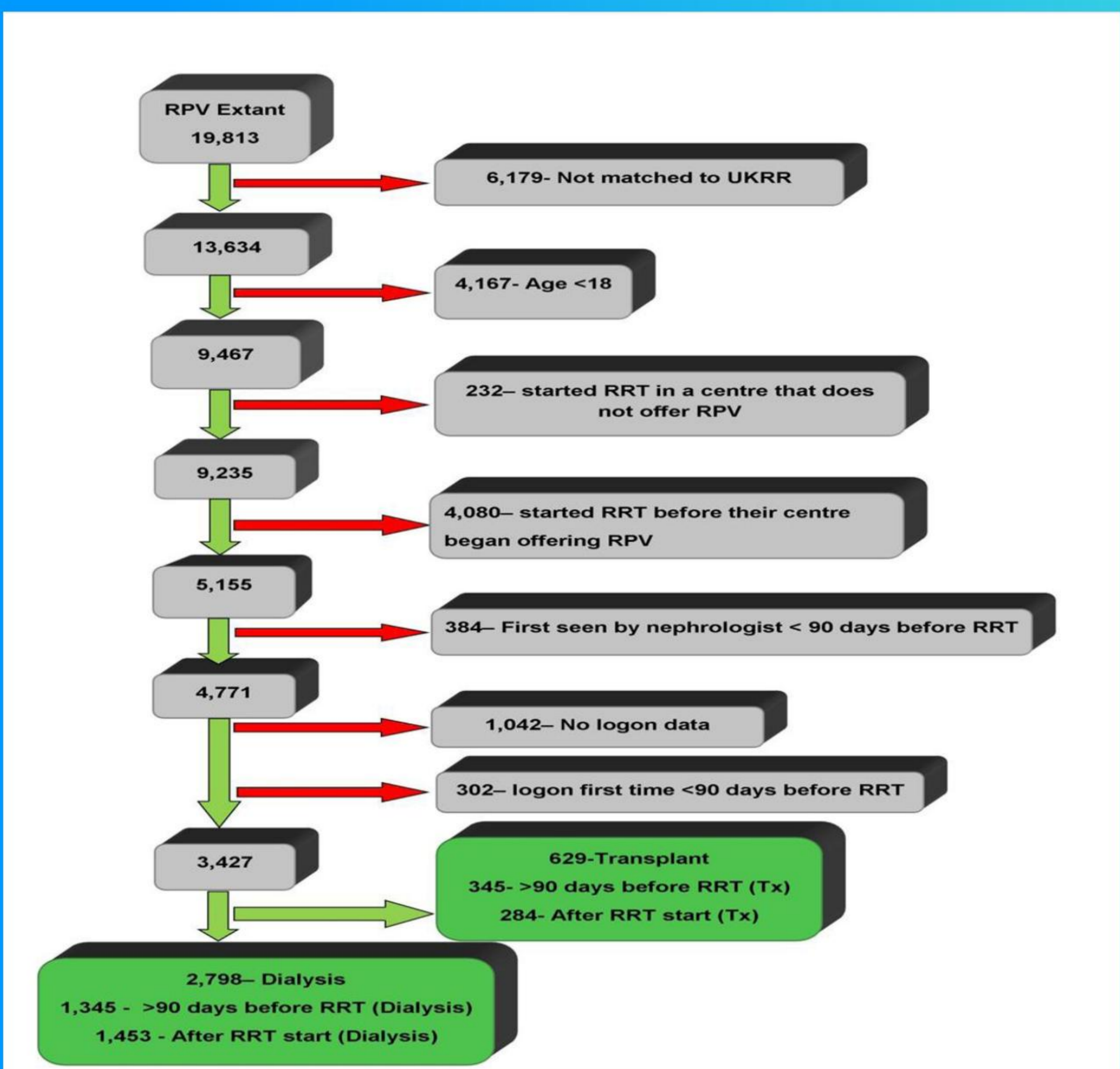
Statistical analyses: 1. Done using SAS 9.3
                2. Chi-squared tests
   3. Logistic regression models.

6. Conclusion:

1. RPV registrants are more likely to begin RRT on a home-based modality or with a live donor transplant.

2. Only slightly more so if 'persistent users'.

4. Results:

Demography:

Variable	Timing of first RPV logon relative to RRT start	
	> 90 days before RRT (Early RPV users)	After starting RRT (Late RPV users)
N	1,690	1,737
Mean (SD) age	56.7 (15.0)	56.0 (15.6)
Male (%)	1,013 (59.9)	1,116 (64.3)
Female (%)	677 (40.1)	621 (35.7)
Missing ethnicity (%)	215 (12.7)	236 (13.6)
Asian (%)	118 (6.9)	106 (6.1)
Black (%)	26 (1.5)	41 (2.3)
Chinese (%)	10 (0.5)	10 (0.6)
Other (%)	20 (1.0)	14 (0.8)
White (%)	1,301 (77.0)	1,330 (76.5)
Deprivation LQ	7.1	7.2
Deprivation median	13.2	13.5
Deprivation UQ	23.5	23.8

Dialysis Modality:
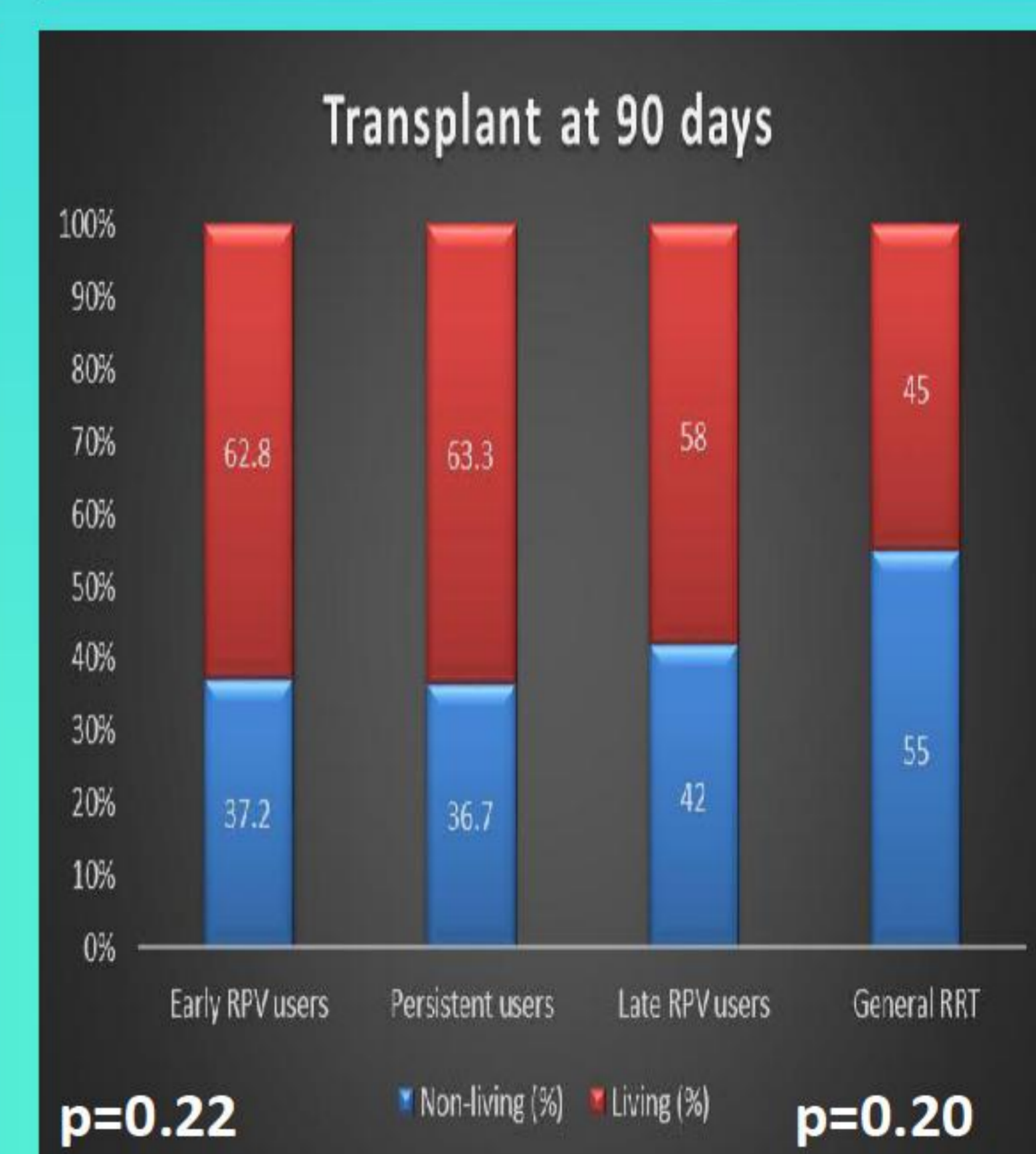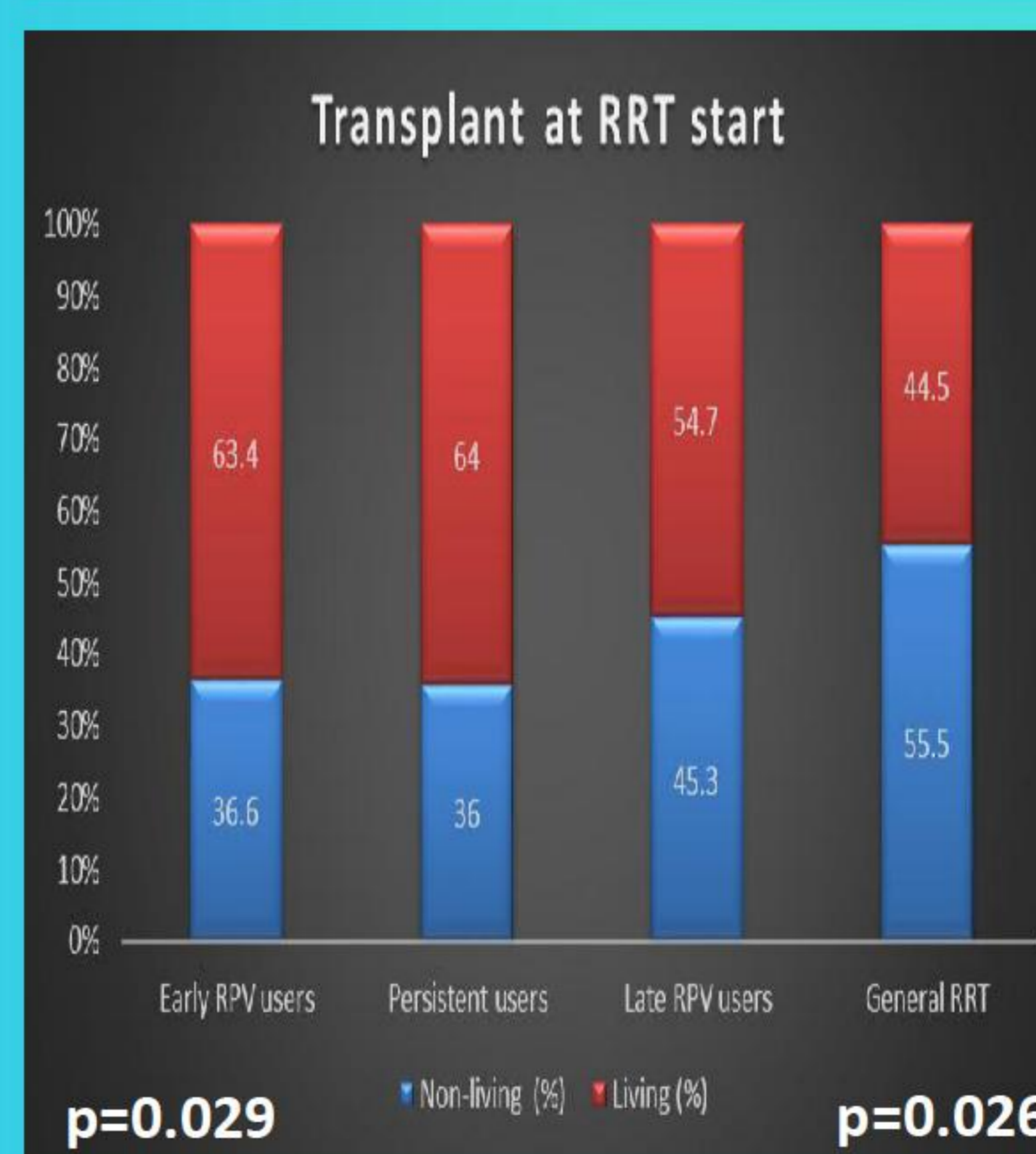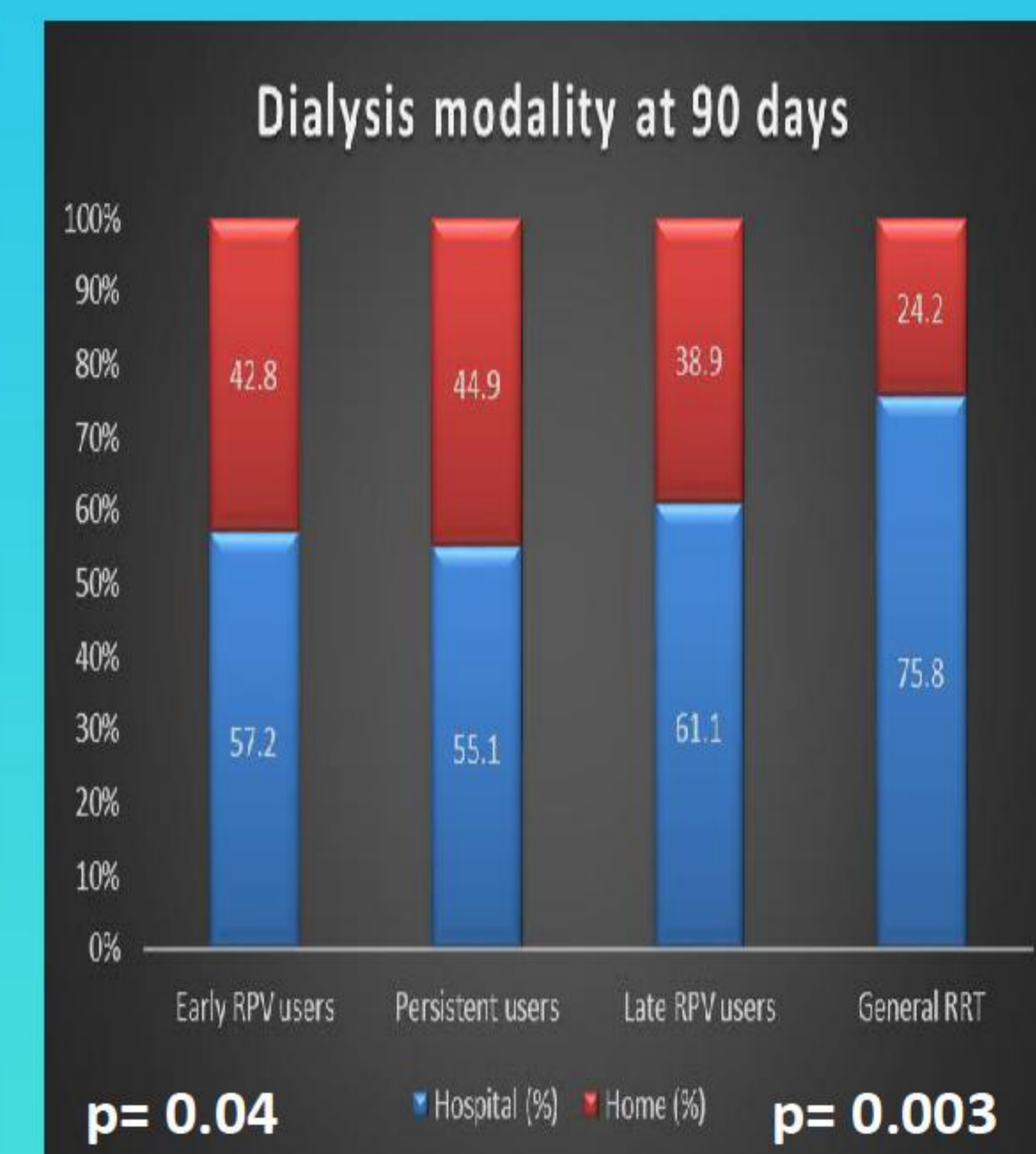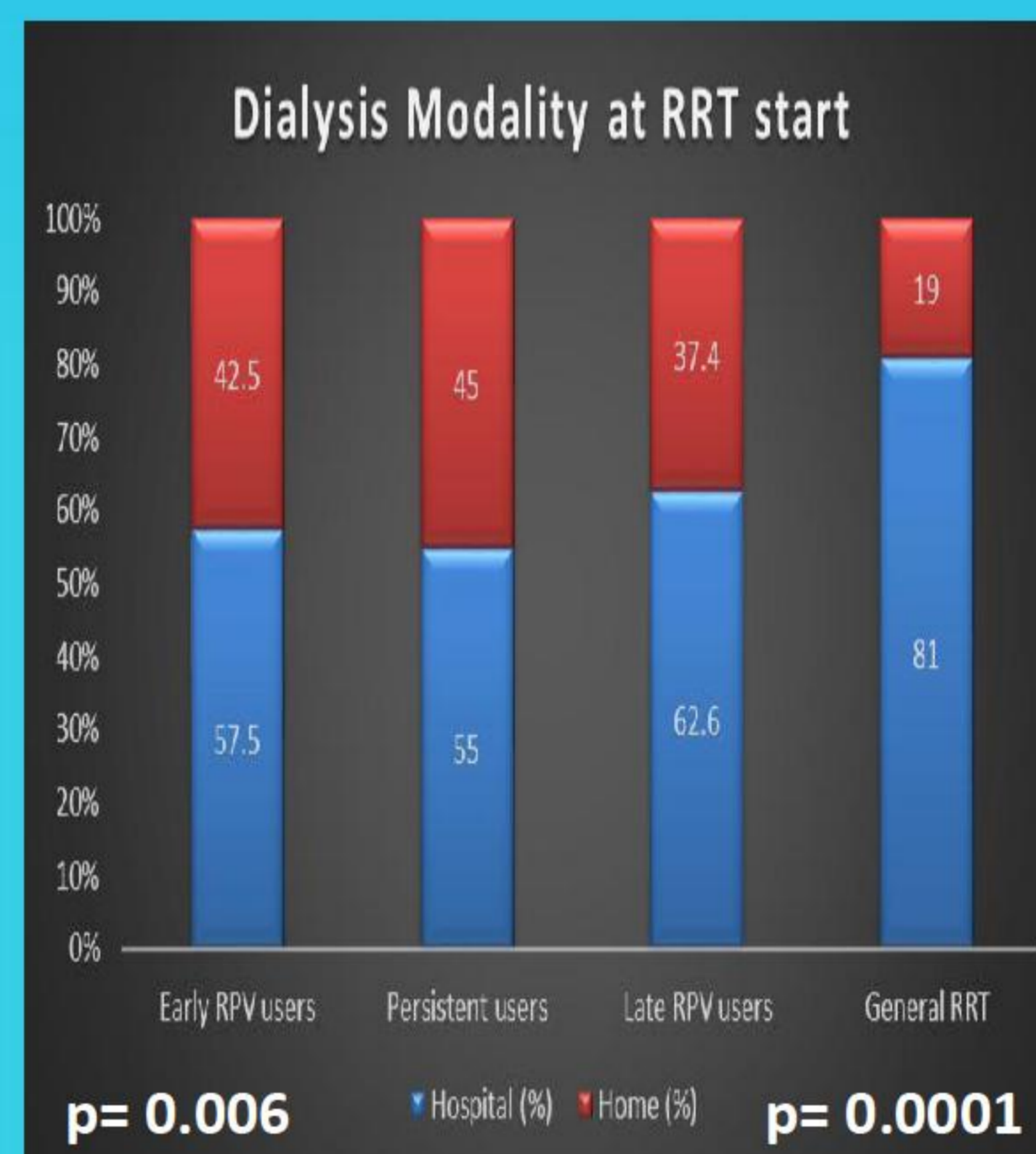
5. Strengths & Limitations:

Strengths: 1. RPV attracts strong and sustained use by many renal patients in the UK.
        2. Fertile ground for future studies.
Limitations: 1. Results might not be generalizable to the wider RRT population.
          2. Difficult to tease out if this is a true effect of RPV.

3. Possible mechanisms include:
    The center: an effect of being managed in an environment where RPV is offered?
    The patient: an effect of being a patient that chooses to register with RPV.
    Availability of supplementary self-education opportunities.

4. RPV registration and patterns of use warrant further investigation.

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