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Timing of Renal Supportive Care (RSC) decision making in patients with advanced chronic kidney disease (CKD): effect on hospitalisations and place of death.

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Background and Aim

- Patients with CKD have a high mortality risk.
- Deaths in acute hospital settings are associated with higher medical intervention rates and costs which may not be in the best interest of the patient[1,2].
- Early advanced care planning with focus placed upon patient goals rather than intensive medical treatment may improve quality of life[1,3].
- With the unpredictable trajectory of end stage CKD, the timing for palliative care referral, if appropriate, is often difficult to predict.

The aim of this study was to investigate when RSC decisions were being made for applicable patients with advanced CKD in the kidney health service of a large tertiary referral hospital, and the effects, if any, this had upon the patients' place of death and hospitalisation rates.

Methods

Criteria for review

Patients reviewed were from the Royal Brisbane and Women's Hospital Kidney Health Service, and who met all the following criteria:

- ✓ enrolled in the CKD.QLD registry study between June 2011 and May 2014 and
- ✓ who were CKD Stage 4 or 5 at time of consent, and
- ✓ had consented and then died prior to commencing RRT

Patients who commenced renal replacement therapy were not included in this review.

Data Collected

- Dates of RSC decision, date of death, location of death, and all Queensland Health hospital admissions for all identified patients in the 12 months prior to date of death.
- RSC decision was based on any documented plan by a treating clinician in clinic or patient record. It did not necessarily mean a palliative care referral was made. This plan must have been made prior to the terminal admission to be included.

Results

- 99 patients were identified.
- Of these, 64 patients had an RSC decision documented, with 35 having either no documented RSC decision or were planned/intended for RRT.

Place of death

- **Figure 1** demonstrates that those patients with an RSC plan were less likely to have died in an acute care hospital compared to RRT planned patients; [23/64 (35.9%) versus 25/35 (71.4%) p=0.0008].
- Patients with on an RSC pathway were more likely to have died in a palliative care unit, nursing home or their usual residence than RRT planned patients [31/64 (48.4%) versus 4/35 (11.4%), p=0.0002].

Timing of RSC decision

- **Figure 2** demonstrates the range of timing from decision for an RSC pathway to death. Decision for a RSC pathway occurred in the last month of life for 13/64 (20.3%) patients, in the last 1-6 months of life for 19/64 (29.6%) patients, and prior to the last 6 months of life in 32/64 (50%) patients.
- **Figure 3** indicates that there was a stepwise trend for the place of death to be external to an acute care hospital when an RSC decision had been made 31-180 days (57%), and over 180 days (78%) prior to death, when compared to decisions in the last 30 days (38%).
- If an RSC decision was made in the last 6 months of life, the place of death was more likely to be in an acute hospital setting compared to those with a decision made more than 6 months prior to death [16/32 compared to 7/32, p=0.036].

Hospitalisations in the final 12 months of life

- There were no significant differences in the number of hospital admissions over the 12 months prior to death [RSC median 2.0 vs non-RSC median 3.0, p=0.26] and total LOS [RSC median 20.5 days versus non-RSC median 26 days, p=0.67]

Conclusions

- The timing of RSC decision was late in the care management of many patients.
- Having a RSC pathway defined was associated with patients being more likely to die in a home or palliative care setting rather than an acute hospital.
- The total 12 month hospital admissions between the two groups did not appear different, suggesting a similar health decline trajectory between the groups.
- Efforts to identify appropriate patients for earlier commencement of RSC planning are suggested to avoid acute hospital deaths.
- Further study is needed to determine if those with community palliative care involvement have less hospitalisations.

Figure 1

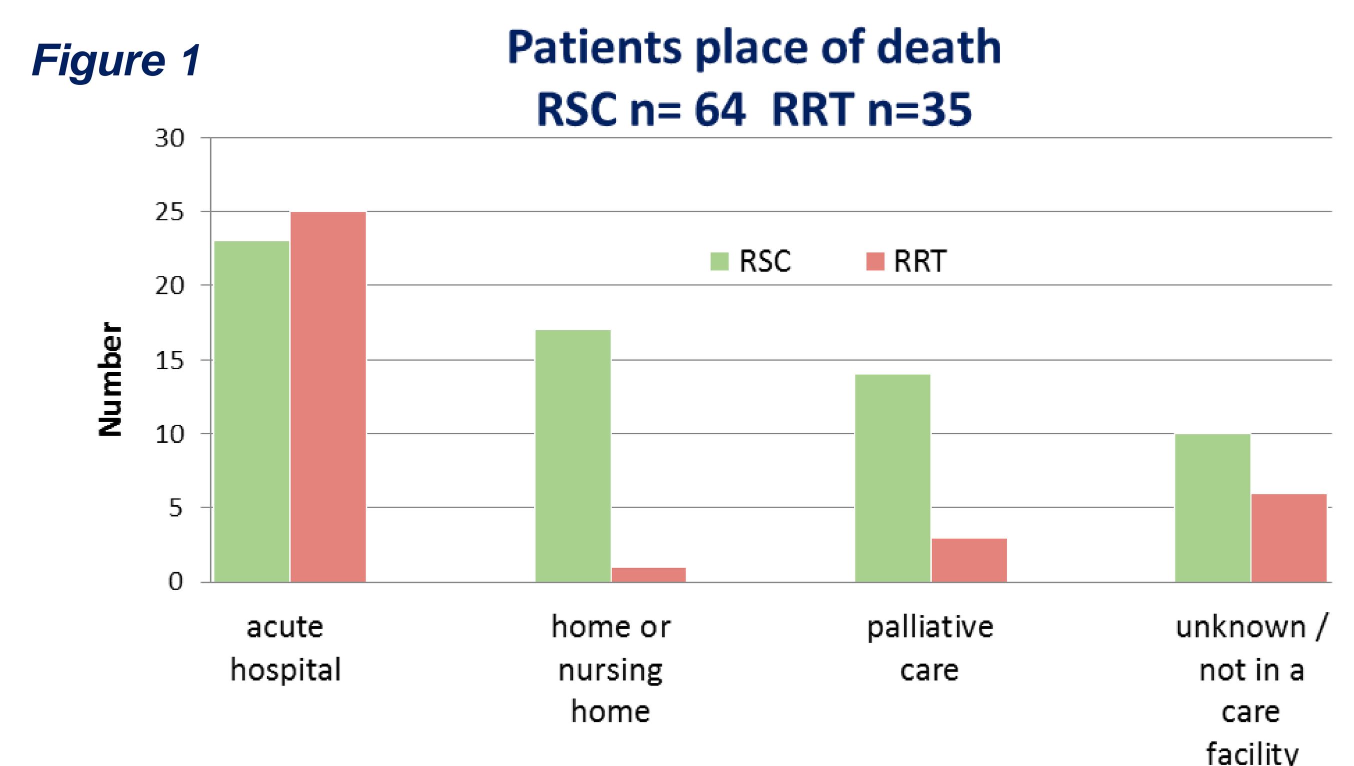


Figure 2

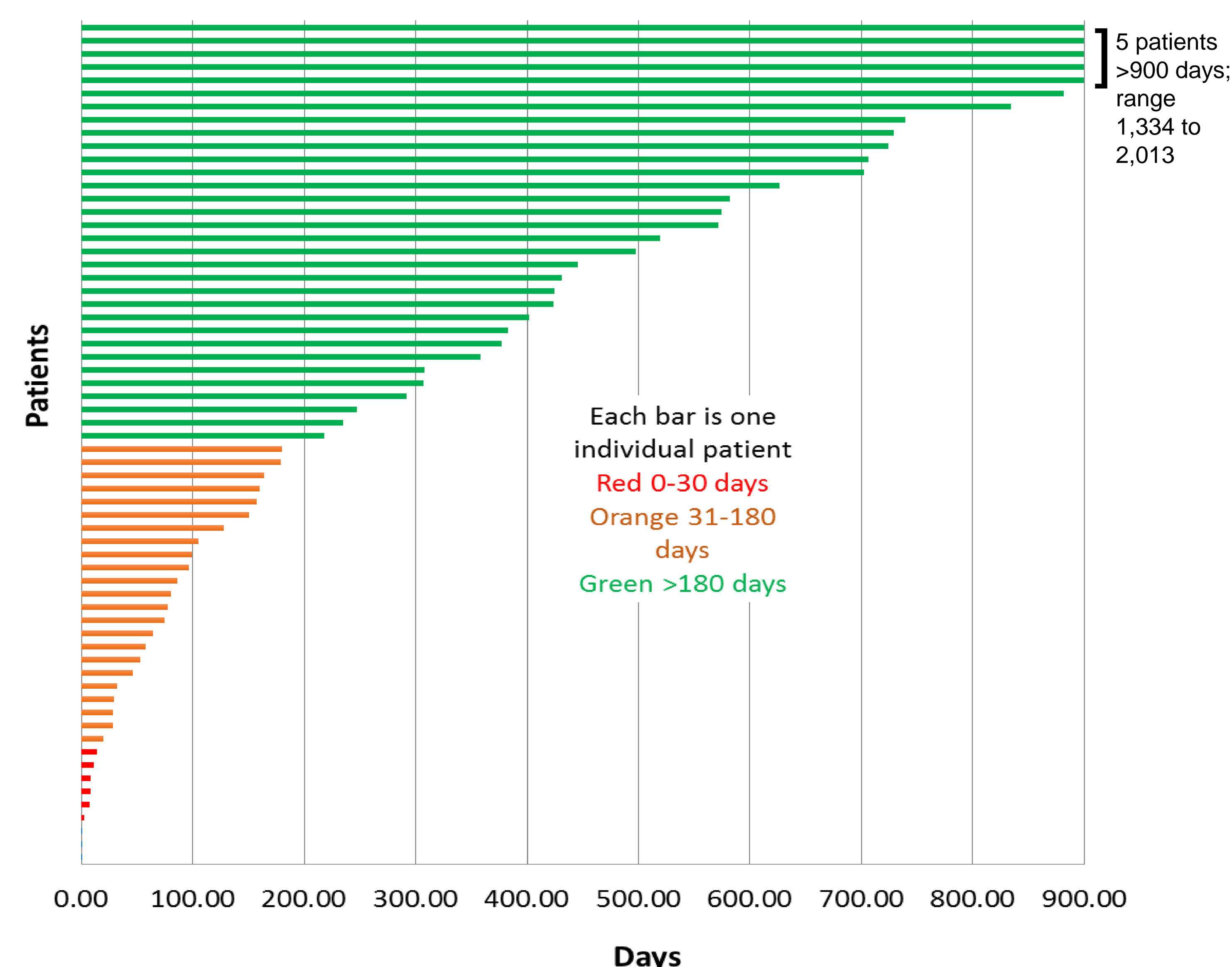
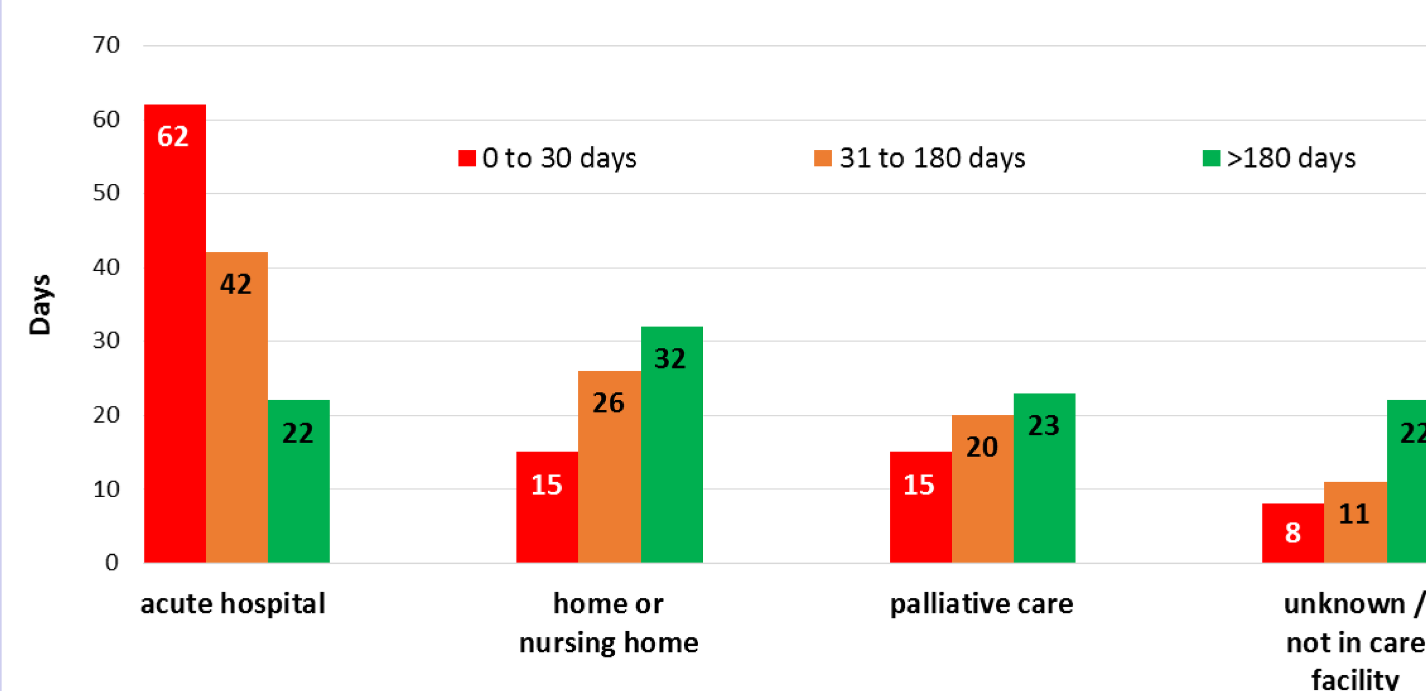


Figure 3



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