

Reducing acute kidney injury patient readmission through appropriate patient information at the point of discharge

Ms Becky Bonfield¹

¹*University Hospital Southampton Nhs Foundation Trust, Southampton, United Kingdom*

Conflict of interest declaration.

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Problem:

Acute kidney injury (AKI) a sudden episode of kidney failure or kidney damage that occurs in 48 hours or within the last 7 days. A common complication of many other acute illnesses and AKI is a frequent problem for around 20% of hospital inpatients. A large acute hospital found that they had a slightly higher than expected readmission rate for patients with AKI. Quality improvement (QI) methodology and 'plan do study act' (PDSA) cycles were used to identify why this was occurring, embed and measure change to improve patient care.

Methods/Intervention:

AKI readmissions were classified as patients who had an AKI during their first admission, and then on their readmission, AKI did not need to be the primary cause for admission. Case reviews were completed in the initial project design. This found common causes of readmission were poor medication safety netting, including a lack of information regarding AKI.

The project involved a baseline survey of patients discharged after experiencing AKI, to understand their knowledge levels of the problem. The results highlighted that more than 80%(N=59) of patients who responded (200 patients surveyed/72 patients responded) were not given meaningful information about their AKI during their hospital stay or after discharge. A patient information leaflet was already available for all staff to give to patients- as well as being available on the trusts patient website.

Lead by the AKI Lead advanced nurse practitioner, multidisciplinary team across the hospital were consulted to determine who was best placed to provide patients information prior to discharge. Based on staff feedback, identifying the overwhelming amount of information provided to patients on discharge, there was consensus that there should be no set criteria about when information should be provided to the patient, but that it would be towards of the end of the patients stay. Statistical process control (SPC) charts plotted AKI discharges and readmission with AKI within 90 days on a week by week basis. The discharges were observed for a 9 month period- from the start of the project until May 2019. PDSA cycles were used to monitor readmissions rates and examine the implementation of patient information across the different wards.

Results:

123 Discharges of patients with AKI across the acute medical directorate were recorded for the period of June –December 2018, during this period UHS reported an AKI episode rate of 4407 (data from renal registry report). Following the completion of the project the readmission rate was reduced for June 2019- December 2019 to 107 patients- a 13% reduction in readmissions.

Conclusion

The key findings of this QI project is that AKI readmissions reduced through appropriate and timely patient information. Assisting in reducing reoccurring AKIs prevents long-term kidney damage. Within the busy Acute Trust, the QI project has reduced unexpected avoidable admissions, through patient education and appropriate information provision, improving bed occupancy and availability.