

# Systemic Review of 30 day Internal Medicine Hospital Re-admissions; Risk Factors and Prevention

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## Introduction

Hospital 30-day readmission rate is one of the main standards that hospitals follow to evaluate their performance, efficiency and patient satisfaction. Knowing that there is huge room for improvement in healthcare systems, decreasing 30-day readmission rates is a policy priority that hospitals implement to avoid penalties. In this study, we analyze 214 encounters of re-admission of the internal medicine department of the year 2016 with our main focus on 106 encounters of same diagnosis re-admissions

## Purpose

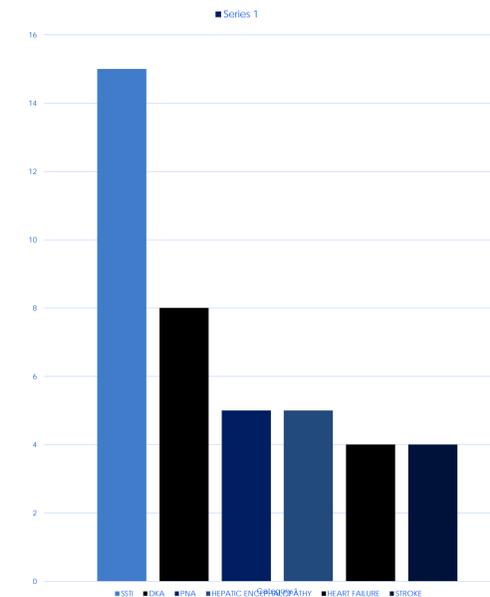
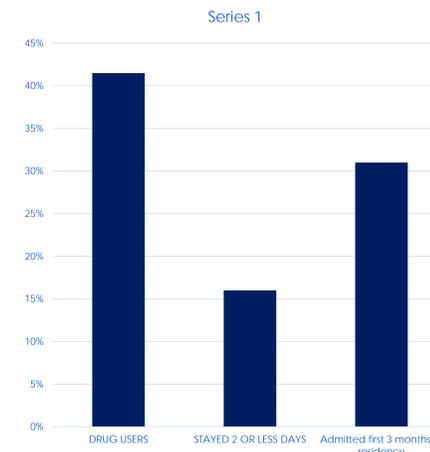
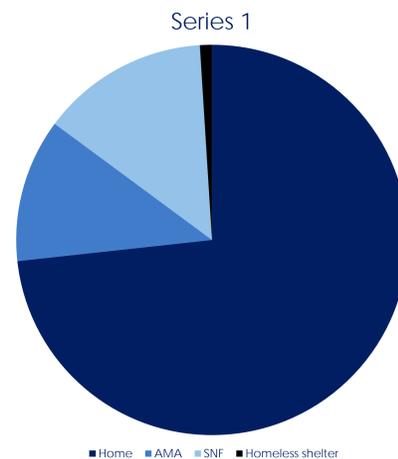
To examine our current pattern of 30-day re-admission with same diagnosis to identify patients at risk of admission with the same diagnosis. What to do to prevent re-admission and how to improve medicare response by reducing cost

## Materials and Methods

Retrospective chart review study of recorded 2016 same diagnosis re-admissions of Internal medicine department.

## Results

There was a total of 214 encounters of re-admission to internal medicine department in 2016, 106 were admitted for the same diagnosis as discharged. Skin and soft tissue infection diagnosis (14%), followed by urinary tract infections (10%) were the most common diagnoses. Average admission age was 49 years. Dissecting the pool of patients we noticed that average length of stay was 5.4 days, 51% of the patients were of Hispanic race, 80% were females, 48% were unemployed, 58% had below normal albumin level, 42% were drug users, 70% were discharged home compared to 13% to skilled nursing facility. 33% of re-admissions were observed to be within the first 3 months of intern-resident year as compared to 11% within the last 3 months of intern-resident year. 20 encounters had hospital discharge follow-up prior to re-admission, none of the patients had meds-to beds as the program had not been implemented.



## Discussion

In this study we examined factors that may have contributed to re-admission to the internal medicine service in 2016. Majority of patients had no outpatient follow-up or did not take medications as prescribed.

We were not sure whether patients were given appointments for follow up, but only 19% followed up after discharge. Also information regarding medication prescription was not available to tell us whether patient had not received the medication or did not take medication properly as advised. We also tried to compare the rate of re-admissions months to assess whether having new residents has an effect on the rate.

## Conclusion

- Most common diagnosis associated with same diagnosis readmit within 30 days was SSTI (14.15%)
- Abnormally low albumin (less than 3.4) is associated with higher rates of same diagnosis readmission within 30 days.
- Drug use is associated with a higher risk of readmission with same diagnosis within 30 days.
- Patients discharged home had higher rates of readmission within 30 days than those discharged to Skilled nursing facilities.
- Higher length of stays didn't decrease the rate of readmission.
- Rate of readmission with same diagnosis was inversely correlated to resident experience and training.
- In 2017 Kern Medical internal medicine department implemented "meds to beds which is giving patients medications needed before discharge as well as securing hospital discharge appointments. Hence a repeat of the project a year after the two new implementations can show if an improvement in quality care was achieved .

## Acknowledgements

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