# Systematic Screening for Social Determinants of Health: Implementation and Outcomes in the Inpatient Setting

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## Background

- Patients with complex social needs account for a dramatic percentage of overall healthcare costs[1]
- The shift towards value-based payment has made addressing these social needs a top priority in order to provide higher quality, lower cost healthcare[2]
- Prior studies have shown that interventions targeting social needs (housing, food, transportation) can decrease hospitalizations and ED visits[2,3]
- However, most MD's do not routinely ask patients about their financial/social situations and only provide resources (eg. social work) when obvious barriers are encountered


## Objective

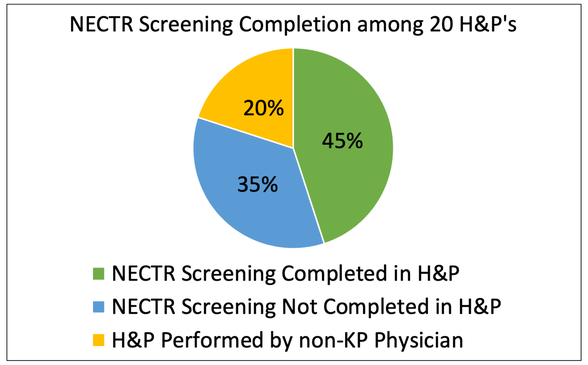
Kaiser Permanente (KP) hospitalists at Memorial Hospital Central (MHC) will systematically screen for social determinants of health using the NECTR screening tool in 75% of new patient H&P's, with the end goal of improving patient outcomes.

## Methods

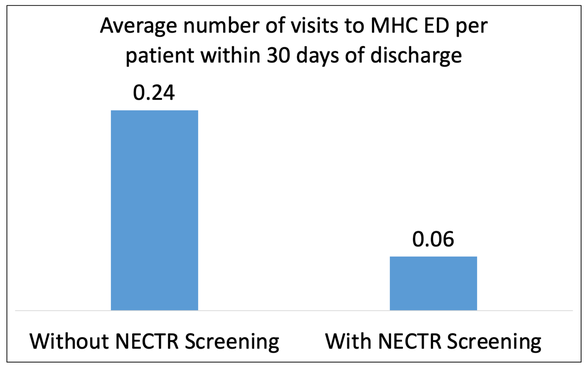
1. KP hospitalist team met & agreed to utilize the NECTR screening questions when completing H&P's for patients being admitted to MHC starting October 15, 2019
   - KP hospitalists were advised to consult social work if any needs were encountered
2. NECTR screening questions were added to the KP electronic H&P template
   - Nutrition support, Exercise and socialization, Caregiver support, Transportation, Resources/finances
3. Retrospective electronic chart review compared the following variables for patients Nov-Dec 2018 (without NECTR screening) versus Nov-Dec 2019 (with NECTR screening)
   - Length of stay
   - Number of MHC ED visits within 30 days of discharge
   - Readmission to MHC within 30 days of discharge
4. Audit of 20 random H&P's from KP hospitalist patients at MHC Nov-Dec 2019 performed to assess NECTR completion rate

## Results

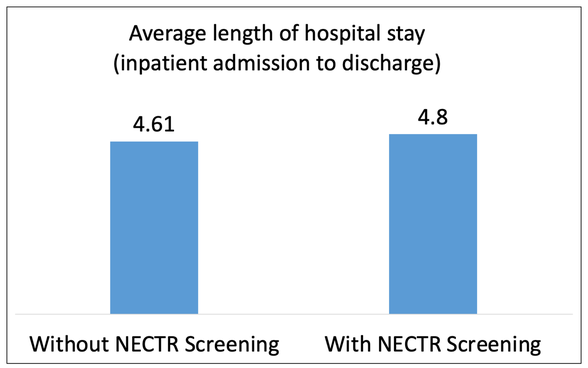
Finding #1: Only 45% of patients discharged by KP hospitalist team had NECTR screening completed upon admission.



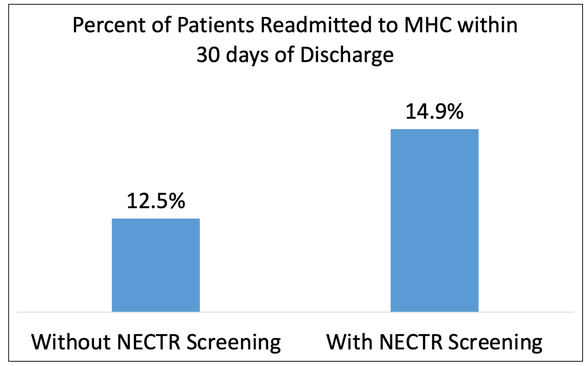

Finding #2: Use of NECTR Screening was associated with decreased ED utilization.




Finding #3: Use of NECTR Screening was not associated with shorter hospital stays or fewer readmissions.




Finding #3: (continued)




## Discussion

- Since many KP patients are admitted to non-KP services initially (eg. ICU), consistent application of any screening tool would require collaboration with additional UCH physicians
- Many MD's do not use the standard KP H&P template, so any screening tool must also be added into personal H&P templates
- Completion of NECTR screening did not necessarily indicate an in-depth conversation of social needs (many screenings documented as yes/no)
- NECTR screening tool is likely not optimized for the social determinants of health relevant to an inpatient setting; this may have affected usage
  - Eg. Lack of exercise is unlikely to be a priority in this setting
- Screening for social determinants of health may be done more consistently if targeted only for high risk patients (geriatric, significant comorbidities)
- Limited NECTR implementation makes it difficult to draw conclusions regarding the effect on patient outcomes, but results suggest possible decreased ED utilization when social needs are discussed on admission

## Next Steps

- Results will be formally discussed with KP Hospitalists on 4/22/2020
- Future H&P templates should include documentation of whether social work was consulted in order to track the direct effect of screenings
- Future iterations may benefit from 2 distinct H&P's: a "high risk H&P" with a screening tool for social needs and a "low-risk H&P" without

## References

1. Blumenthal, D., Chernof, B., Fulmer, T., Lumpkin, J., & Selberg, J. (2016). Caring for High-Need, High-Cost Patients — An Urgent Priority. *The New England Journal of Medicine*, *375*, 909–911.
2. Appold, K (2017). How hospitalists can help reduce readmissions: Targeting discharge interventions for patients at high risk of readmission. *The Hospitalist*, https://www.the-hospitalist.org/hospitalist/article/146448/transitions-care/how-hospitalists-can-help-reduce-readmissions.
3. Huff, C (2019). Moving beyond medical needs: Some hospitals are treating patients' food and housing shortages. *ACP Hospitalist.* https://acphospitalist.org/archives/2019/03/moving-beyond-medical-needs.htm

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