Implementing a Screening Tool in the Emergency Room as a Way to Better Care for the Homeless Population

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CONCLUSIONS

The prevalence determines the resources that might be allocated when the intervention to help this vulnerable population is determined. This predilection data has already been used and was pivotal in the allocation of $200,000 from the Post Trauma Foundation to the Street Medicine program. It would appear that resource delivery to the 17th Street would have a priority based on prevalence.

This survey, while previously validated, had not been evaluated in the ED setting. Evaluating whether the survey could be shortened (saving resources while screening) in the future is important, however eliminating any question or group of questions resulted in substantial decrease in the capturing of the data. The most likely question that could be removed (Q4 and Q5) or kept but would have a statistically significant smaller impact on the survey result if it was removed from the screening tool. Finding it, it would appear that this screening tool has the potential to be the most effective at identifying those who could benefit from the Street Medicine team consultation and evaluation.

The use of a screening tool can be a way to quickly identify homeless individuals and implement appropriate resources through the Street Medicine Team, allowing efforts in addition to basic medical needs. Knowing the prevalence of homelessness may increase awareness about the need to educate, present data, outcomes, and potentially benefit those individuals, considering the high cost of the ER for the population.

This screening protocol will continue through mid to late 2015 and will be repeated in the winter months of 2016 in an attempt to capture seasonal variation. It will be important to identify accurate rates to control with much needed resources, including the Street Medicine Program. It is hoped that this will be the beginning of a more comprehensive effort that will carry forward and help eliminate health disparities within the community.

LITERATURE CITED


ACKNOWLEDGEMENTS

I would like to thank Dr. Greenberg and Brett Feldman for their patience and support with this study. I would also like to thank Homeless Services, housing, and staff of the Lehigh Valley Emergency Department, as well as all the patients that participated in this study.

REFERENCES

1. D’Amore, An interdisciplinary approach to the treatment of domestic violence, alcoholism, substance abuse, social isolation, and high morbidity [1]. The need for quality primary care is given to the high level of disease burden and healthcare utilization among this population. Large numbers of homeless individuals access the emergency room (ER) as a place for care on a regular basis and are three times more likely to visit in a year [4,5]. ER visits by homeless individuals can be prevented by adequate primary care and addressing critical social needs in the healthcare setting [5]. For this reason it is important to dedicate efforts to better ways to care for this population.

The Lehigh Valley Health Network (LVHN) Street Medicine team is an integrative, interdisciplinary mobile team that cares for the homeless population. Basic medical needs are delivered at the bedside, and medication/counseling is provided. LVHN Street Medicine is offered at ED to provide three months of service. This project was designed to address discharging planning and rapid out-patient follow up to prevent readmissions.

PLAN

The majority of LVHN’s inpatient and outpatient care settings have not standardized an approach to screening for and responding to housing instability, despite its profound effects on health outcomes. With the collection of data, the prevalence estimate of homelessness would ultimately allow for projections of utilization patterns and cost of care for this subgroup. Creating an opportunity for a population that is often marginalized will be to the benefit of the patients themselves and to the LVHN as a whole.

A simple survey was devised to prospectively capture the needed data, consisting of demographic questions and yes/no and true/false questions. The questions were derived from the US department of Housing and Urban Development 2012 definition for homelessness, and the goal of the study is to determine the prevalence of homelessness or at risk for homelessness in the LVHN Emergency Department (ED) population. With this knowledge it will be determined whether the survey can be used prospectively and how the results can be applied to the ED. The protocol can be altered, and the process of screening can be altered to identify at risk individuals, which can be associated with hopes of discovering how better to care for this population.

The protocol passed scientific review by the department of medicine and department of emergency management. The protocol was reviewed without major edits by the Network Office of Research and Innovation and exempt by the IRB due to minimal risk of the study. The baseline prevalence data will be used to evaluate in the evaluation of deployment of resources in the future for medical care of the homeless and to the groundwork for the network to determine if the ED is an appropriate setting to develop an intervention.

METHODS

A five-question survey was administered in the three LVHN ED settings on a scheduled basis. All patients in the ED who met exclusion/inclusion criteria were approached. Patients were assigned randomly to different sections of the ED so screening was done depending on which selection was assigned that day in order to eliminate selection bias. All input by the patient was self-reported and fully anonymous, and a patient was allowed the option of declining participation in the screening at any point in the interview. Patients with a positive screen for homelessness were those answering “yes” to any one of the questions, with the exception of question 1 where a “yes” confirmed status of “at risk for homelessness.”

They were then offered a street medicine consult at the attending’s discretion.

Inclusion criteria: Patients must be 18 years old or older, speak English, have detailed question answering, and who are willing to participate. Patients must be less than 65 years old, do not speak English, do not have the ability to answer survey questions, critically ill, or not willing to participate.

In the last 60 days, have you:

Q1. Been concerned about your housing?

Yes

No

Q2. Have you ever been arrested or arrested in the last year?

Yes

No

Q3. Have you ever been evicted or served an eviction notice?

Yes

No

Q4. Have you ever been homeless or at risk for homelessness?

Yes

No

Q5. If yes to Q4 answer “at risk”

Yes

No

In an effort to blur the survey, it was noted that omitting any one of the questions resulted in a decrease in the percent of homelessness captured.

RESULTS

A total of 1,005 subjects who had taken the survey before, there were 1,544 participants in the analysis. The overall prevalence of at risk for homelessness was 3% and homelessness was 0.5%. Summarized, this cohort had a prevalence of homelessness or at risk for homelessness of 10%.

Prevalence by Site

<table>
<thead>
<tr>
<th>Site</th>
<th>N</th>
<th>Prevalence of Homeless %</th>
<th>Prevalence of at Risk %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED1</td>
<td>320</td>
<td>0.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>ED2</td>
<td>300</td>
<td>0.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>ED3</td>
<td>425</td>
<td>0.4%</td>
<td>1.5%</td>
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</tbody>
</table>

Screening Tool Outcomes in the ED Setting

<table>
<thead>
<tr>
<th>Question</th>
<th>N</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>320</td>
<td>12</td>
<td>308</td>
</tr>
<tr>
<td>Q3</td>
<td>300</td>
<td>14</td>
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<tr>
<td>Q4/Q5</td>
<td>425</td>
<td>20</td>
<td>405</td>
</tr>
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</table>

Questions 4 and 5 were found to be answered “yes” most frequently. Question 4 was identified as the tool that was most likely to not being considered clinically relevant in a positive sense for homelessness.

Women who screened positive were more likely to screen positive (4.6% versus 2.9% among males) than men (p<0.05). There were no statistically significant differences in survey question responses.

U.S. Department of Housing and Urban Development (DOE) definition of Homelessness:

• An individual who lacks a fixed, regular, and adequate nighttime residence.

• An individual who has a primary nighttime residence that is a public or private place not designed for or ordinarily used as a residence by its inhabitants.

• An individual who has a regular sleeping accommodation for longer than one week, or is otherwise living in a public or private place not designed for, or ordinarily used as, regular sleeping accommodations.

• An individual who is homeless and is occupying or. What is the primary cause of homelessness? What are the contributing factors? How can we address and reduce homelessness in our community?