# Hot Spotters: An Interdisciplinary Approach to Coordinating Care in High Risk Individuals.



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# **Background**

A small percentage of a community's population often results in a large percentage of utilized resources. 18-23% of urban adults utilized emergency services on an annual basis. The percentages can be much larger in rural environments. A large portion of these individuals account for the majority of visits<sup>1.</sup> The frequent and highly frequent users tend to have a variety of health and social issues. In the most extreme cases, 1% of the population can use up to 90% of the resources. Acute episodes of chronic illnesses, mental health issues and substance abuse provide a strain on emergency rooms, EMS, police, fire and the legal system. Of the highly frequent users 70% had multiple chronic illness, mental health issues and/or substance abuse.

# **Significance**

The issue is more compounding as these individuals often have legal issues, housing issues and access to a primary care provider. Despite the large contact with healthcare system these individuals have poor health outcomes. The frequent use resulted in fragmented especially when the legal system was involved. The return on investment for the high cost of care did not increase quality of life, it actually produced the opposite. These individuals have an increased risk of mortality <sup>1</sup>.

## **Project**

A nursing led collaborative program was created to address these high risk individuals. The aim of this program was to reduce overuse of emergency services, legal and law enforcement usage by highly frequent users. The program provided a broad range of services to high utilizing individuals with participation from all the agencies, not just healthcare. Traditionally these programs work with in one discipline, such as a healthcare organization or insurance plan to create a plan for high users. What makes the program in Pasco unique is that it is a nurse led interdisciplinary approach to Hot Spotters and care coordination. Everyone was at the table working together for the individual. The Pasco Hot Spotters (PHS) program utilizes data from healthcare, law enforcement and the legal system to identify high risk users and collaboratively work together to reduce the overall use of services. The group meets monthly to strategize on best practice for the highest users of these systems. Throughout the last year this program has shared data across a variety of disciplines to to stabilize and reduce the need for these high cost services.

### Methods

This evidenced based project evaluated the effectiveness of the PHS focusing on two specific aims: effectiveness and return on investment. The uniqueness of this program is an example of how collaboration can advocate for a vulnerable population of patients. Using a pre/post design, data was collected from all agencies from the 2014/2015 fiscal year and compared with the 2015/2016 fiscal year. The data includes police, fire, ems, legal and healthcare contacts before Hot Spotters engagement and after. In addition, the program hopes to highlight this work as a best practice for care coordination across multiple disciplines

"The Uniqueness of this program is one community's response to advocate for a vulnerable population of patients."

# **Findings**

Figure 1 Program evaluation of HP program

- 1. EMS decreased by 50%
- 2. Incarceration decreased by 75%
- 3. Wrap around services used increased by 100%
- 4. Medication compliance increased by 50%.
- 5. The biggest outcome was inter-professional communication.

## Conclusions

- 1. Early identification and referral decreased law enforcement costs.
- 2. Housing is key for this populations success.
- 3. A community working together helped keep patients out of the system.

#### Discussion

- -The first year of the Pasco Hot Spotters program resulted in an N=4. The number of participants was small. This provided limited data on the effectiveness of the program.
- -The data was hard to find and interpret. Each agency had a slightly different method of reporting actual cost/benefit. This project highlighted the lack of any computerized documentation for the jail system.
- -Expanding evaluation of the program 2 years out may provided a clearer view of the benefits of the program.

#### References

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