Program Evaluation on Hospital in Home Model of Care for Veterans with Chronic Spinal Cord Injury
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Purpose
The purpose of this evaluation is to explore evidence and discover if HHF care model is effective in optimizing health outcomes, reducing cost of care and maintaining patient's satisfaction compared to patients treated with inpatient care.

Background
Spinal cord injury (SCI) is a condition which may result in complete or incomplete loss of motor functions, sensory functions, and autonomic function (Singh, Tietz, Khan-Rhyne, Nouri, and Feldman, 2014). SCI impacts patient's physical, psychological, and social well-being and places substantial financial burden on health care systems.

The economic impact of SCI is largely due to long-term complications, including pressure ulcers, bladder and bowel dysfunction, neuropathic pain, and respiratory problems (Singh et al. 2014).

Transferring of SCI patients to intermediate care facilities has been challenging, leading to prolonged hospitalization, increased risk of hospital-acquired infections, worsening pressure ulcers, increased healthcare cost and increased inpatient bed shortage.

A regional VA Hospital's strategic solution to these problems was the implementation of "Hospital in Home" (HiH) program. HiH is a medical service that allows for the provision of active treatment by healthcare professionals for conditions that otherwise would require acute hospital in-patient care in a community setting or patient home (Sheppard and Hille, 2008).

Theoretical Framework
The CDC logic model was used to organize the evaluation process and depict the relationship between HHF inputs, activities outcomes and intended outcomes of interest (CDC 2006).

Situation
Input ➔ Outcomes ➔ Evaluation

Discussion
1. Results for health outcomes, readmission rate and mortality rate were greater with inpatient group when compared with HHF, however the difference was not statistically significant due to the large difference in sample size between the groups.

2. Cost & LOS:
   a. Average LOS between the two groups varied based on the program used and the admitting diagnosis. The difference was not statistically significant.
   b. There was a cost saving in HHF when analyzed by program and admitting diagnosis, which was statistically significant. However, due to the large difference in sample size between the two groups, generalization of this result should be used with caution.

3. Satisfaction: Patients in HHF group were satisfied with the care they received and preferred the HHF program more than inpatient hospital care, likely influenced by less disruptions to family life.

4. Recommendations: Increase the number of admitting diagnoses into the program, identify better strategies to create greater awareness of the program to other areas of the hospital and increasing physician involvement in patient care to include at least one or two compulsory home visits per week, which may be crucial in improving patient acceptance of the program.

Limitations
- Patients in both group were not randomly assigned, but they had remarkably similar characteristics, in terms of level of injury and admitting diagnosis.
- The sample size for the HHF group was relatively small compared to the inpatient group. This could have showed the results.
- The cost analysis was based on the average cost per day during and average cost per day visit, and this does not reflect the total cost of managing these conditions.

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References
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