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**Objective:**

Upon completion of the lecture, attendees should be better prepared to:

- Identify areas of strengths for a specialized IRF burn rehabilitation program
- Identify areas of improvement to further enhance the specialized IRF burn rehabilitation program

**Abstract:**

**Introduction:** Since 2016 designated beds within the hospital's current inpatient rehabilitation program (IRF) has been identified for patients with the diagnosis of burn.

Following admission to the IRF, the patient with burn diagnosis, experiences a continuum of burn care as wound/graft issues are managed by the burn physicians, burn mid-level extenders, while the burn therapists provide the daily IRF rehabilitation therapy. The IRF Medical Director provides general medical oversight and both physicians are present during the weekly IRF patient conference.

An assessment of the specialized burn IRF outcomes, as compared with national and regional data was done to identify areas for improvement and areas of strength.

**Method:** Comparison of this IRF's outcomes was done with national and regional data based upon burn diagnosis, using eRehab. ERehab is an online system from the American Medical Rehabilitation Providers Association that is offered to IRF and facilitates the ability to comply with CMS regulations and to allow a comparison of the IRF data with national and regional data.

The data of eRehab is obtained from a chart review performed while the patient is in acute care and from the Functional Independence Measure aka FIM. The FIM is used by the therapist and nurse to score the patient's level of function in physical, psychological and social function. The 18 item FIM is scored upon IRF admission and discharge. The patient's data is entered into eRehab, under burn diagnosis.

Data can be obtained from eRehab based upon all payor sources or Medicare, Medicare Advantage or non Medicare. The data reflects when the patient was admitted to the IRF from the date of burn, average age, gender, length of stay, FIM score at admission and discharge. The eRehab data of the facility can be compared simultaneously to data of the national and regional areas.

**RESULTS:** Comparison of the data of the burn diagnosis in eRehab shows that this burn center admits patients into the burn IRF program from 4.51 to 16.37 days sooner than regional or national level. However, during the first year, 2016, the LOS was greater by 7 days when compared to the national data. By 2018, the LOS, was approaching the LOS for the regional and national areas with a variance of 0.3 to 1.64 days, respectively.

The patients are admitted to the specialized burn IRF program with higher FIM scores and are discharged with higher FIM scores as compared to the national and regional data.

When looking at discharge placement, this specialized burn IRF program has a greater number of patients discharged home as compared to the national and regional data and fewer patients discharged to SNF or discharged home with home health.

**Implications:** This data would indicate there is a strength when the majority of the acute care burn team remain involved daily with the patient during IRF and can result in quicker discharge from burn center and higher potential to be discharged home vs to another health care institution. The patient's higher level of physical functional skills, FIM scores, upon admission to the IRF will be discussed.

Some of the data not captured in eRehab includes: percent of TBSA and percent of third burns; whether there were burns to face, neck, mouth; hand skills and UE function; and if orthosis are needed.

**Conclusions:** data presentation will show a strength when burn therapists, physicians and mid-level extenders remain involved daily during the IRF stay. This presentation will address the areas of strengths and areas of that require improvement and include education of: non-burn team members in the IRF and the staff obtaining IRF authorizations.

#### **References and Resources:**

Gomez M1, Tushinski M, Jeschke MG.. Impact of Early Inpatient Rehabilitation on Adult Burn Survivors' Functional Outcomes and Resource Utilization. J Burn Care Res. 2017 Jan/Feb;38(1):e311-e317.

DiVita MA, Mix JM, Goldstein R, Gerrard P, Niewczyk P, Ryan CM, Kowalske K, Zafonte R, Schneider JC. Rehabilitation outcomes among burn injury patients with a second admission to an inpatientrehabilitation facility. PM R. 2014 Nov;6(11):999-1007. doi: 10.1016/j.pmrj.2014.05.010. Epub 2014 May 28.

Tan WH, Goldstein R, Gerrard P, Ryan CM, Niewczyk P, Kowalske K, Zafonte R, Schneider JC. Outcomes and predictors in burn rehabilitation. J Burn Care Res. 2012 Jan-Feb;33(1):110-7.

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