

A Retrospective Review of Factors Influencing Post-Hospital Discharge Follow-up in Patients with Burn Injuries

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Introduction

Approximately 486,000 burn injuries requiring medical treatment occur each year. Medical treatments for burns vary and are dependent on the extent of the injury. Several physical and psychosocial problems may develop after discharge, including pain, itching, scarring, anxiety and depression, making it important and necessary for burn care treatment to continue even after discharge. Often, patients do not continue outpatient care due to unknown circumstances. The purpose of this study is to help identify factors that affect outpatient burn clinic visits after hospital discharge.

Hypotheses

1. Living greater distances from the burn clinic, results in patients not returning for follow up appointments as directed.
2. Uninsured and underinsured patients do not return for follow up appointments as directed.

Methods

A retrospective chart review of patients admitted to the burn center who had an outpatient follow up visit in 2018 was performed. Patients were grouped by lost to follow up versus completed patients. Completed patients were categorized as those who were discharged from clinic with as needed follow up visits.

Results

A total of 211 patients were scheduled for outpatient visits in 2018, mean age was 36.4 years and 74% were male. Population consisted mainly of Caucasian (41%) and Hispanic (31%). The most common payor source was Medicaid (58%) and Medicare (17%). The mean TBSA was 5.8 % with the most common mechanisms were Flame/Flash and Scald (30% each). The mean length of stay was 10.3 days, mean number of surgeries was 1.5. Majority of patients were discharged Home (71%) and SNF (20%). The mean number of outpatient visits was 3.57. A total of 165 (78%) were lost to follow-up. Lost to follow up (LTF) patients had a smaller TBSA (4.69%) compared to those who completed follow-up (9.62%). Comparison between LTF and completed patients, showed no significant difference in age, race, distance from clinic, or disposition. However, larger TBSA ($p=0.0009$), longer length of stay ($p=0.01$), more surgeries ($p=0.0105$), patients with mental illness ($p<0.0403$), and patients with Workman's Comp ($p=0.048$) were more likely to complete outpatient follow up. Patients with substance abuse ($p=0.0168$) and smokers ($p=0.0192$) were less likely to complete outpatient follow up as directed. The number of complications was also higher ($p=0.0433$) in the LTF group.

Potential Predictors of Self-Discharge

	LTF	Completed	p
n	165	46	
Mean Age	37.61	36.38	0.858
Mean TBSA	4.69	9.62	0.0009
Mean Length of Stay	9.20	14.32	0.01
Mean # of OR trips	1.29	2.13	0.0105
Mean Missed Visits	1.61	2.06	0.055
Mean Miles to Burn Center	71.89	62.99	0.687
Complications	45%	28%	0.0433
Current Smoker	30%	16%	0.0192
Substance Abuse	33%	15%	0.0168
Mental Illness	15%	28%	0.0403

Payor

	LTF	Completed	p
n	165	46	
Private Insurance	16	9	0.067
Medicare	28	8	0.944
Medicaid	100	22	0.121
Workman's Comp	8	6	0.048
Other			
Government	6	0	0.190
None/Self Pay	7	1	0.515

Conclusion

There were a large percentage of patients who discharged themselves from clinic care. Factors that were associated with self-discharge include healed wounds, no scarring issues noted, and patients with complications, smokers, substance abuse and mental illness. Self-discharge/LTF may be related to resolution of ongoing issues prior to last scheduled appointment.

Applicability to Practice

Additional research is needed to determine additional factors affecting those lost to follow up in our outpatient burn clinic. Clinical care coordination at discharge, via high risk assessments, may prove beneficial at improving compliance with return visits to burn clinic.

