

# Transforming the Experience of Patients with Dementia and Advanced Illness

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## Background

Patients with Advanced Illness (AI), based on a LACE Advanced Illness Score (a tool which calculates risk of readmission) of  $\geq 10$ , have been found to have a higher risk of readmission or death.

Investigators hypothesized that early identification of patients with AI upon hospital admission would enable staff to improve outcomes by providing care which is more specific, including a Geriatric and Palliative consult and a family meeting with a social worker, resulting in decreased utilization, earlier Goals of Care (GOC) Discussions, and greater satisfaction.

## Methods

All patients admitted with a diagnosis of dementia are given the LACE as standard of care. Patients with a LACE score of  $\geq 10$  with a diagnosis of dementia were screened by the study team for participation.

Demographics, LACE scores, LOS, and 30-day outcomes were collected. Descriptive statistics (means, standard deviations or medians and interquartile range for continuous data; frequencies and percentages for categorical data) were calculated. Patient groups by LACE score, age, referrals and gender were compared using SPSS.

## References

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## What We Learned

High LACE scores are associated greater utilization of resources  
Early referrals are helpful to reduce readmissions

Table 1. High and Low LACE Score vs. Study Outcomes

	High LACE ( $\geq 12$ )	Low LACE ( $< 12$ )	p-value
Overall LOS (average days)	14.1	8.9	0.03
LOS Between Admit & Consult (average days)	5.9	3.9	0.03
Post-Consult LOS (average days)	8.0	4.8	0.14
30-Day Readmissions	0.28	0.11	$< 0.01$

Table 2. Referred (Yes or No) vs. Study Outcomes

	Referred	Not Referred	p-value
Overall LOS (average days)	11.7	9.4	$< 0.01$
LOS Between Admit & Consult (average days)	3.7	4.5	0.11
Post-Consult LOS (average days)	8.2	4.5	$< 0.01$
30-Day Readmissions	10%	16%	0.05

Table 3. Age Groups  $\leq 85$  and  $> 85$  vs. Study Outcomes

	$\leq 85$ Years	$> 85$ Years	p-value
Overall LOS (average days, SD)	10.0	10.3	0.86
LOS Between Admit & Consult (average days, SD)	4.4	4.1	0.63
Post-Consult LOS (average days, SD)	5.3	6.1	0.55
30-Day Readmissions	0.18	0.09	$< 0.01$

## Results

In all, 138 patients were included, average age 84.5, 46% male. Average LACE score was 12.2, average overall LOS 10 days, average days from admission to evaluation: 4.3, average post-consult LOS: 5.7 days. Referrals for GOC consults were received for 32% of patients. Readmissions (30-day) were 12%.

Patients with a LACE of  $\geq 12$  had longer LOS (days): 14.1 vs. 8.9 ( $p=0.03$ ); longer time between admission and evaluation: 5.9 vs. 3.9 ( $p=0.03$ ); and longer post-consult LOS: 8.0 vs. 4.8 ( $p=0.14$ , Table 1).

Similarly, although patients who were referred to the team for a GOC discussion experienced longer LOS: 11.7 vs. 9.4 days; and longer post-consult LOS: 8.2 vs. 4.5 days, they were readmitted less often 10% vs 16% (Table 2).

No significant differences were found between age groups ( $\leq 85$  vs.  $> 85$ ), or gender for LOS, time between admission and evaluation, and post-consult LOS (Table 3).

## Conclusion

Early identification of dementia patients with AI upon hospital admission has helped us provide higher quality of care. Improving outcomes and management for individuals with moderate to advanced dementia receiving care within our health system has shown to increase early goals of care discussions, leading to a reduction in readmissions. Referrals to the team helped decrease the time to consults and should be encouraged.

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