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# Emergency Department Wait Times for Geriatric Psychiatric Patients

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## ABSTRACT

**Objective:** Older adults with complicated illnesses such as Alzheimer's disease often require specialized treatment in geriatric facilities when inpatient psychiatric hospitalization is needed. However, there is a shortage of these inpatient facilities. Thus, patients could wait in the emergency department (ED) for days pending availability of a bed at an appropriate facility. The objective of this study was to quantify that wait time.

**Methods:** Records for patients aged 60–89 years who were seen in the ED and had a psychiatric consultation over a 2-year period (July 2014 to June 2016) were reviewed. Total mean time spent in the ED was calculated on the basis of check-in time and time discharged from the ED. We also attempted to calculate the mean wait time for psychiatric consultation and wait time to disposition; however, for many visits, there was no record of when the consultation request was placed and when the recommendations were relayed back to the ED physician.

**Results:** Mean age at time of visit was 66.67 years. Diagnosis of dementia or a neurocognitive disorder most commonly led to referral to geriatric psychiatry rather than other psychiatric services. Of the visits, the most common disposition recommendation was for discharge with outpatient follow-up, and the least common recommendation was admission to the medical unit. The mean time in the ED was over a day for patients with a recommendation for admission and only 13 hours for patients with a recommendation for discharge.

**Conclusions:** Overall, the findings of this study reiterate the need for more intensive research and improvements in the assessment and care of older adults with psychiatric needs in the ED setting.

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With the aging population, there is an increasing number of older adults in the community. Per the US Census Bureau,<sup>1</sup> recent population estimates show over 3 million people in Orange County, California, with 14% of those being aged 65 and over, which calculates to a little over 420,000 seniors in Orange County. Among that population, data<sup>1</sup> show that approximately 20.4% of older adults meet criteria for a mental disorder, including dementia. If we extrapolate from the Census data, there are over 82,000 older adults in Orange County with a mental disorder. Also, World Health Organization<sup>2</sup> estimates predict that between 2015 and 2050, the proportion of the world's population over age 60 years will almost double, from 12% to 22%.

Older adults with complicated geriatric illnesses such as Alzheimer's disease often require specialized treatment in geriatric facilities when inpatient psychiatric hospitalization is needed.<sup>3</sup> In Orange County, there is a shortage of these inpatient facilities. There is no geriatric unit at UC Irvine Medical Center, Irvine, California, thus the hospital is only able to accommodate patients who do not require specific geriatric care. Therefore, patients who require inpatient geriatric psychiatry care are referred to the few geriatric facilities in the area. Orange County currently has a total of 451 beds and 114 geriatric beds, which is less than 1 bed for every 700 seniors.<sup>4</sup> Given this shortage, patients could sometimes wait in the emergency department (ED) for days pending an available bed at an appropriate facility. The objective of this study was to quantify that wait time.

## METHODS

We chose a sample of patients seen at the UC Irvine Medical Center over a 2-year period (July 2014–June 2016) for analysis. Records for patients aged 60–89 years who were seen in the ED and had a psychiatric consultation were reviewed. Patients' age, sex, chief complaint, diagnosis, and recommendations for care were obtained from chart information. Patients were categorized on the basis of disposition recommendations (admit to medicine, admit to general inpatient psychiatry, admit to inpatient medical psychiatry, admit to geriatric inpatient psychiatry, discharge to nursing facility, discharge home).

Total mean time spent in the ED was calculated on the basis of check-in time and time discharged from the ED. We also attempted to calculate the mean wait time for psychiatric consultation and wait time to disposition; however, for many visits, there was no record of when the consultation request was placed and when the recommendations were relayed back to the ED physician. Instead, we estimated time to disposition from the time the patient was seen by the psychiatry team (either by the time the consultation note was entered or, if available, the time the nurse documented the psychiatry team as being at the patient's bedside).

- More intensive research and improvements in the assessment and care of older adults with psychiatric needs in the emergency department setting are needed.
- Older adults with complicated geriatric illnesses often require specialized treatment in geriatric facilities when inpatient psychiatric hospitalization is necessary.

## RESULTS

A total of 771 medical record numbers were obtained. Of those, 302 visits were included in the analysis. The most common reason for exclusion was that the patient was seen in the ED but was already admitted to another service in the hospital before the psychiatric consult was obtained. Of note, 32 of the visits were for the same patients seen in the ED for multiple separate visits, with 20 patients seen twice, 5 patients seen 3 times, and 7 patients seen 4 or more times.

Of the visits, 48% were for female patients. The mean age at time of visit was 66.67 years, and the patients referred to geriatric psychiatry were, on average, several years older than patients referred to other psychiatric services (Table 1). In addition to age, it appeared that a diagnosis of dementia or other neurocognitive disorder most commonly led to referral to geriatric psychiatry rather than to other psychiatric services (20 patients referred to geriatric psychiatry had a diagnosis of a neurocognitive disorder, whereas all other subgroups had 5 or less). A common reason for a recommendation for admission to inpatient medical psychiatry versus general inpatient psychiatry was a requirement of an ambulation device (wheelchair, cane) for assistance. The most common disposition recommendation was for discharge with outpatient follow-up, and the least common recommendation was medical admission. The mean wait time in the ED was over a day for patients with a recommendation for admission

and only 13 hours for patients with a recommendation for discharge. Thirty-six of the dispositions changed from the original recommendation. The most common change was from an initial recommendation for admission to discharge home after several days of observation with no available admission options.

## DISCUSSION

For all patients, extended stays in the ED can make an already stressful situation even more frustrating. This study gives us a rough estimate of the mean wait time for elderly patients seen in the ED who had a psychiatric consultation and, subsequently, a peek into the impact that the lack of available psychiatric beds in a community has on patient care. With the exception of patients who were initially recommended for discharge, all other subgroups of patients had total mean ED visits lasting longer than 24 hours, with a majority of that time spent waiting for disposition after already being assessed by the psychiatry team. As this particular academic center does not have a psychiatric ED or the capability to provide therapeutic services in the ED setting, patients with mental health issues necessitating inpatient psychiatric care were not receiving acute care for over 24 hours on average.

Of note, 1 patient in particular who was recommended for inpatient geriatric psychiatry admission was in the ED for over 5 days before eventually being discharged home, which was the longest observed ED stay seen in this study. That patient had a diagnosis of frontotemporal neurocognitive disorder, but on the basis of the limited data collected for this study, it is unclear if the diagnosis alone or other psychosocial or behavioral factors led to his extended stay and difficulty finding appropriate placement in a timely manner. A rating scale or other indicator of patient acuity level may have been helpful in further parsing out how this factor affected time to disposition.

**Table 1. Psychiatry Consult Recommendations and Final Dispositions**

Recommendation and Final Disposition <sup>a</sup>	No. of Visits	Patient Age, Mean, y	Total Patient Age, Mean, y	Time in ED, Mean, h	Total Time in ED, Mean, h	Time to Disposition, h	Total Time to Disposition, Mean, h
Admit to geriatric psychiatry	41	73.93	73.02	24:00	32:04	19:13	27:00
Admitted to psychiatry	1	70.00		21:35		15:51	
Admitted to medicine	5	68.00		21:53		17:46	
Discharged home	4	70.75		60:49		55:10	
Admit to medical psychiatry	68	64.25	64.50	22:31	28:28	17:30	22:58
Discharged home	5	68.20		22:32		19:40	
Admitted to medicine	1	63.00		34:25		31:45	
Admit to psychiatry	55	63.98	63.68	22:50	34:11	17:43	29:55
Discharged home	9	62.11		44:54		39:03	
Admitted to medicine	1	61.00		34:50		32:58	
Admit to medicine	18	67.83	67.65	19:35	29:43	15:45	24:52
Admitted to geriatric psychiatry	1	70.00		46:05		38:06	
Discharged home	1	62.00		23:29		20:46	
Outpatient follow-up	82	66.33	68.17	8:28	13:11	5:06	10:17
Admitted to psychiatry	2	65.00		9:13		5:49	
Admitted to medicine	6	73.17		21:53		14:45	
Discharge to dementia facility	1	73.00	...	13:41	...	3:31	...

<sup>a</sup>Change in recommendations may be the result of improvement in the patient's condition during the ED stay.

Abbreviation: ED = emergency department.

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There were several other limitations to this study. Only patients up to aged 89 years were included in this study, as the limited number of patients over age 90 years meant age in and of itself was a unique patient identifier. Therefore, it is unknown how many patients were seen who were aged  $\geq 90$  years and if including them in the study would have affected the outcome. Additionally, since this was a retrospective chart review, information obtained was limited by what was readily retrievable from the medical records. As noted previously, some of the time points were calculated based on when documents were entered into the electronic medical records; however, the actual flow of events may not be accurately depicted. It would be interesting to see how the data would compare with a prospective study in which the exact time points of interest were more purposefully recorded.

## CONCLUSIONS

Overall, the findings of this study reiterate the need for more intensive research and improvements in the assessment and care of older adults with psychiatric needs in the ED

setting. In general, patients who meet criteria for inpatient hospitalization are experiencing an acute exacerbation of symptoms necessitating urgent interventions. In addition to other acute symptoms, for patients with confusion or severe mental illness, the noisy and busy ED does not provide a good therapeutic environment or resources to provide interim care for these patients pending placement. Therefore, it is imperative to minimize wait time to disposition.

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## REFERENCES

1. The United States Census Bureau. 2016. US Census Bureau website. <https://www.census.gov/>. Accessed August 1, 2018.
2. World Health Organization. Aging and Health. WHO website. <http://www.who.int/mediacentre/factsheets/fs404/en/>. Accessed August 1, 2018.
3. Ng TP, Feng L, Chiam PC, et al. Psychiatric morbidity and acute hospitalization in elderly people. *Int Psychogeriatr*. 2006;18(4):701–711.
4. Health Care Agency Orange County. Mental/Behavioral Health. Psychiatric Hospitals. <http://orange.networkofcare.org/mh/services/subcategory.aspx?cid=8013&tax=RM-3300.6500>. Accessed August 1, 2018.

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