Clinical and Sociodemographic Characteristics of Patients admitted to a Specialized Medical-Psychiatric Unit in an Academic Tertiary Care Hospital: A 6-month Analysis

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Background

Medical-Psychiatric Units (MPUs), alternatively referred to as “medical psychiatry units” and “joint care units,” are inpatient settings capable of integrating both medical and behavioral health issues with a specialized team of clinicians. Although MPUs have been were more popularly described in the literature in past decades (Fava et al, 1980; Kathol, 1194), they have gained increased attention in recent years in the context of value-based medicine (Chan et al, 2018). Consultation-liaison (CL) psychiatrists are uniquely equipped to either function in or manage such settings, and benefit from understanding of clinical and sociodemographic characteristics of an academically-based MPU as reported here.

Methods

A retrospective electronic medical record review of the past 6 months of admissions to a specific MPU at a large academic tertiary care hospital was performed. The unit is a medical inpatient floor with 25 beds, behaviorally-trained nurses/social workers, specialized social workers and case managers for complex disposition planning, rotating embedded CL psychiatrists, and enhanced supervision rooms for patient monitoring (see Figure for Clinical/Administrative features; Chan et al, 2018). Clinical and sociodemographic variables were collected and analyzed for trends. Descriptive statistics were used.

Results

468 total admissions over a 6-month period ranging from October 1 2020 to March 31 2021 were reviewed. Abbreviated and select findings are reported here. Ages ranged from 18 to 105; most were age 65 or older (n=332, 71%). 296 were female (63%). The most common neuropsychiatric diagnostic categories listed by the admitting medical service included “altered mental status”/encephalopathy with or without dementia (n= 141, 30%). Failure to thrive/weakness (n=38, 8%) and falls/syncope were also common (n=33, 7%).

Figure

Clinical, technical, and administrative features of the MPU at Long Island Jewish Medical Center

Clinical	
Base unit type	Separate
Physician team	Internist and NP + embedded C-L psychiatrist + geriatric internist
Triage model	By psychologist
Rounding model	Morning rounds with medicine, nursing, and psychology
Nursing staff	Medical nurses with additional psychiatric training
Other staff	Patient engagement specialist, SW, case manager, and rounding by security twice daily
Patient population	Medically ill patients with behavioral problems; evolved into geriatric psychiatric dementia/delirium unit
Beds	15 expanded to 25

Technical	
IV medications	Yes
Telemetry	Yes (10 of 25 beds)
Oxygen	Yes
Tube feeding	Yes
Negative pressure for airborne isolation (e.g., for patients with tuberculosis)	No
Obstetric patients	No
Seclusion	No
Locked	Alarmed but not locked

Administrative	
Funding	Initially, hospital administration
Billing	Medicine bills as primary service; psychiatry bills as consultant
Established	2014; expanded in 2016

Discussion

This specific MPU specializes in geriatric populations with significant psychiatric comorbidity, neurocognitive and functional decline, and extended hospitalizations. These findings are limited by the retrospective nature of the search and inherent limitations posed by the electronic medical record (e.g., failure to capture overlapping diagnoses). Findings cannot be generalized to other units or hospitals. Future analyses would benefit from a control sample to investigate differences across populations and better understand the direct impact of the MPU on certain clinical and cost parameters. Nonetheless, this specific unit has resulted in significant indirect cost savings for the hospital (approx $1.2 million dollars/year in 1:1 bedside companion and length of stay reductions across the system.

Discussion (continued)

This MPU was designed after a pilot showed numerous clinical benefits and reduced length of stay. Sinvani et al (Sinvani et al, 2018) demonstrated the superiority of this multicomponent model in a sample of 476 patient encounters matched with usual care. The intervention consisted of the basic elements of the current MPU: geographic unit cohorting, multidisciplinary teams, patient engagement specialists, staff education. The intervention group had lower mortality, reduced length of stay, less likelihood to be administered antipsychotics or benzodiazepines, less likely to be in restraints or constant observation, and less likely to be on bedrest or to be taking nothing by mouth (all with statistical significance with p values under 0.05 accordingly).

Conclusion

CL psychiatrists stand to benefit from greater awareness of MPUs and the clinical and sociodemographic characteristics of patients admitted to them. CL psychiatrists can add tremendous value to health systems by either operating in or managing MPUs. The literature on MPUs is reviewed, as well as future potential directions.

References

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