Observation Units as Holding Units
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A holding area is described as a place to temporarily hold ED patients that already have a disposition (admission, transfer, OR, discharge)[1] but cannot be accommodated due to a lack of inpatient beds, OR availability, or discharge issues such as locating a responsible caretaker. It is not optimal for an observation unit (OU) to also function as a holding unit as it may diminish many of the advantages of a protocol-driven OU and negatively affect patient care[2,3,4]. See Table. OU have reported having admission 'holds' as exclusion criteria in their protocols[5,6].

Reduces bed availability for OU-appropriate patients. An advantage of an OU is to increase hospital bed capacity[7]. Because of its rapid turnover, an OU can accommodate about 1.6 - 1.7 patients per bed per day[3,8]. By taking up OU beds for admission-appropriate patients, this advantage diminishes. Likewise, bed availability for OU-appropriate patients is reduced.

Enables inefficient hospital processes. ED boarding is a major factor causing ED crowding. Using the OU to help fix ED boarding problems just moves the problem further downstream to the OU. ED boarding is a hospital-wide problem. By helping fix the ED boarding problem, use of the OU for boarding is enabling inefficient hospital or even health system processes. Furthermore, hospital administration may be slower and not be as motivated to solve the broader issues causing ED boarding.

Negatively impacts OU metrics. Having admitted patients in the OU will undoubtedly drive metrics towards inpatient metrics, thereby increasing OU LOS, admission and 30-day readmission rate. Since there will no longer be a single provider type managing patients, metrics will also be closer to those seen in open OU vs. closed OU[9,10]. All three previously described key operational metrics of an EDOU (occupancy rate, length of stay and discharge to home rate) will be affected by having boarded patients in the EDOU[7].

Rapid disposition culture suffers. There is a disposition-driven mindset in the EDOU that mirrors that in the ED. EDOU physicians, nursing and staff have a workflow that is similarly disposition-driven and accustomed to rapid turnover. Introducing sicker, more complex patients that will not be rapidly turned over disrupts this workflow.

Increases nursing and staff workload. Admitted patients are more complicated and require more intensive care and documentation that OU nurses and staff are not experienced with. There is also the extra burden involved in having to contact physicians not on site and of different specialties with different patient management styles. This is why floor patient to nursing ratios are generally 4:1 whereas they are 5:1 and even up to 8:1 in an OU[2,8]. Having to care for these patients may result in having to adjust staffing more suited to inpatient units. The EDOU is unlikely to be financially compensated for the increase in staffing. As these admitted patients are now considered inpatients vs. outpatients, services are reimbursed through bundled diagnosis-related group payment vs. still mostly fee-for-service costs, therefore the EDOU does not financially benefit from taking care of these patients[11]. The Emergency Nurses Association position statement on observation units states "an observation unit should not be used as a holding area for patients awaiting disposition to inpatient care or transfer to another facility"[12].

Adversely affects patient care. For all the above reasons, patient care for both boarded and OU patients will be adversely affected. Patients requiring inpatient or long-term care are inherently sicker, more complex, and require more consultants, ancillary services and hospital resources. Conversely, OU appropriate patients are generally stable, require investigation or treatment for only a single problem (the single problem principle) and generally require either no or just one consultant. The OU staff is experienced in treating OU appropriate patients with condition-specific protocols and pathways and is

less experienced in treating more complex patients outside these protocols. As with ED boarding, having admitted patients in an area that is not optimal for caring for these patients has been shown to negatively impact patient care including mortality[13]. In addition, admitted patients in general require more hospital resources that may not be as readily available as they would be on an inpatient floor. Conversely, available resources such as social work or case management will be expended with these patients leaving less time for the OU-appropriate patients.

Increases patient risk for errors. From a patient safety perspective, adding an additional transfer to another location in the hospital is not without risk and exposes the patient to another opportunity for errors that can occur during the transfer process: nursing and physician staff hand-off, physician and medication orders, patient transport, etc.

Decreases patient satisfaction. All the above challenges are likely to decrease patient satisfaction. It is in OU with clear protocols that include inclusion/exclusion criteria and active management with condition-specific pathways that better patient satisfaction has been demonstrated[14, 15].

In summary, having an OU function also as a holding unit will adversely impact OU efficiency and patient care. Problems inherent with ED boarding and open OU will be assimilated and the many advantages of a protocol-driven OU will be adversely affected.

Table. Impact of utilizing the OU as a Holding Unit

1. Decreases bed availability for OU-appropriate patients
2. Enables inefficient hospital processes
3. Negatively impacts OU metrics
4. Rapid disposition culture suffers
5. Increases nursing and staff workload
6. Adversely affects patient care
7. Increases patient risk for errors
8. Decreases patient satisfaction

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