



Letter to the editor

A business plan for multidisciplinary consultation liaison team: Return on investment

Mental health competency on medical units is a national issue [1]. Providers often lack knowledge and comfort when caring for patients with mental illness. This is reflected in recent findings at The Queen's Medical Center (QMC), a 530 bed tertiary care center in Honolulu, Hawaii. QMC is the only Level 1 trauma center with comprehensive psychiatric services and the largest private, non-profit, hospital in the state. It serves a disproportionately higher percentage of the significantly mentally ill population of Hawaii. Staff were asked, "How competent do you feel working with patients with mental health needs?" in a 2015 survey of which 54% of respondents stated low to neutral competency. The Multidisciplinary Consultation Liaison Team (MCLT) was used to educate staff, manage patients, reduce workplace violence, and improve patient outcomes. MCLT was additionally tasked with reducing the use of enhanced observation by addressing behaviors. As the team did not bill for service, cost savings through reduction of enhanced observation was a primary outcome measure to demonstrate value added by the team.

Composition of the MCLT was sought from key stakeholders including administration, psychiatry, medical services, nurse managers, security, and risk management. The final team comprised of five advanced practice registered nurses (APRNs) and two Creative Arts Therapists. The APRNs possessed certifications in mental health, geriatrics, and family practice, and the therapists were certified in music and art therapy. All members of the team were masters prepared or higher and had extensive psychiatric experience. Salaries were paid for by departmental funds.

At QMC, the use of enhanced observation followed national trends [2–4]. Stated reasons for enhanced observation (sitter) orders over a 12-month period (Jul 2014–Jun 2015) identified: 29% of sitters were ordered for fall risk, risk of injury from falls (osteoporosis, anticoagulants, etc.), and/or impulsively getting out of bed; 20% pulling at lines, drains, or other medical equipment; 18% impulsive behavior; 15% agitation or combativeness; 10% behaviors associated with dementia (wandering, intrusiveness, etc.); 9% behaviors associated with delirium, (combinations of some or all previously listed behaviors); with the remainder averaging 3% or less for elopement, self-harm, traumatic brain injury, or substance withdrawal. From May 2014–April 2015 sitters became a significant burden diverting 58,328 staffed hours and costing a total of US\$1,241,518.

After a review of existing literature [5–10], MCLT focused on changing hospital policy and procedure requiring administrative approval at the unit manager and director level, and creating an algorithm identifying alternative solutions to sitters prior to requesting a sitter

from unit administration: Step 1. Implement frequent visual checks and safety measures to prevent injury, reduce stimulus, and use of other discipline resources (psychiatry, pharmacy) to address behavior and delirium; if unsuccessful, Step 2. Meet patient needs and utilize diversional activities to enhance emotional wellbeing; if unsuccessful, Step 3. Encourage family/caregivers to help redirect patients; or if unsuccessful, Step 4. Use the least restrictive restraint for specific risks. If all interventions were unsuccessful, administrative approval would be required for a sitter order. Additionally, MCLT focused on individualized solutions that utilized the varied clinical expertise of MCLT members. Nursing and administrative committees were educated on policy changes and algorithm. Every unit was educated with roving carts, change of shift in-services, and supplied with a small binder of behavioral health quick references including the new algorithm.

MCLT consultation was by order with a proactive approach if a patient was on enhanced observation for more than a day. Measures tracked during implementation showed a 78% reduction of staffed sitter hours from Fiscal Year (FY) 2015 versus FY2016. Sitter staff use peaked at 6400 h per month in FY2015 then decreased to a low of 428 staff hours per month by FY2016, even with a continually rising patient census (Fig. 1). From May 2014–April 2015 (baseline prior to policy introduction), US\$1,241,518 was spent on sitters, representing 58,328 staffed hours. Sitter reduction at the medical center in the following 12 months resulted in a savings of US\$894,471, 96% of the MCLT team salaries if used as a revenue stream. The cost of the MCLT staff time dedicated to the sitter initiative was estimated at US\$130,325 (14% of MCLT consultations) for a net savings of US\$764,146. MCLT staffed hours involved multiple other projects, staff education, and direct patient care which numbered over 3700 visits prior to, and over 4400 visits the year after policy implementation.

The decrease in sitter use did not result in increased use of restraints. Results indicated there was an initial 29% reduction in restraint use following policy implementation. The decrease in sitter use was also not associated with fall injuries. On average, falls occurring after MCLT intervention happened 18 days after the consultation, and injuries were minimized due to safety recommendations implemented.

When using multidisciplinary teams, it is important to identify measurable objectives with financial implications in order to determine return on investment. Maintaining or improving quality of patient care may justify creation of such a team, but demonstrating return on investment helps perpetuate it. Our experience with utilizing MCLT to reduce sitter use is one example of how that was accomplished in a large medical center.

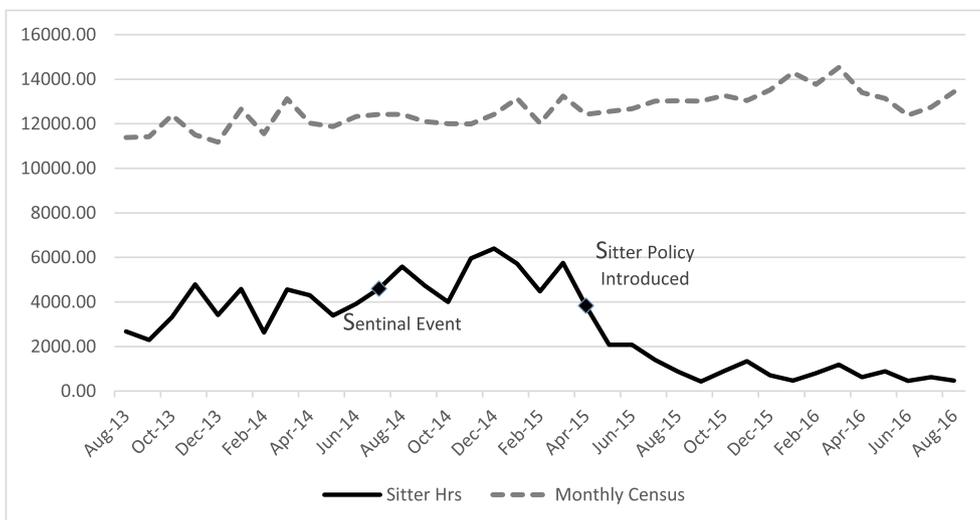


Fig. 1. Reduction in sitter use across time by number of hours and census.

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