CASE STUDY

The Financial Implications of Delirium

Implementing a protocol to address the potential complication of post-operative delirium can significantly reduce hospital costs and improve patient outcomes. This model assumes 1,000 emergency general surgery cases are handled annually.

Length of Stay

Delirium extends hospital stays

Patients with delirium stay 6.7 days on average, compared to 3.4 days without.

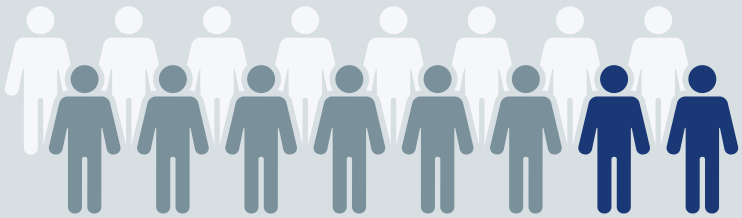
Prevalence of delirium

About **25%** of older adult elective and emergency general surgery (EGS) patients develop delirium.

Patient Population

Geriatric patients constitute **50%** of EGS admissions and **30-50%** of operative EGS cases.

For a hospital with 1000 EGS cases annually, approximately **500 are older adults (65+).**



Of these, 125 patients may develop delirium.

These 125 patients would account for **412.5 extra hospital days** per year due to delirium. These extra days could cost up to **$412,500** annually.*

**Each delirium episode costs a hospital about $20,000.*

Annual Savings

Preventing 125 cases of delirium could save $2,087,500 (additional costs) + $412,500 (LOS) = **$2,500,000** annually.

Risk of Readmission

Patients who experience postoperative delirium face a significantly higher risk of readmission, with ***more than half (53%) returning to the hospital***. In contrast, data show that the readmission rate for patients without delirium only have a 31% readmission rate.

The financial burden of readmissions is considerable, with the average cost per readmission totaling **$15,200**. For the 66 patients readmitted annually due to postoperative delirium, this translates to an estimated **$1,003,200** in additional costs each year.

Improving the Utilization of Hospital Bed Space

Efforts to reduce postoperative delirium could significantly improve the utilization of hospital bed space. ***By shortening the length of hospital stays, an additional 412.5 bed days could be freed up annually.*** This increase in available bed space would allow hospitals to accommodate approximately 103 more elective laparoscopic cholecystectomy patients each year. The additional procedures could generate an estimated **$1,480,395** in revenue.

Summary of Savings

For a hospital with 1,000 emergency general surgery cases, implementing a delirium protocol could save approximately **$2,500,000** per year, excluding readmission costs, which could add another **$1,003,200** in savings. Additionally, the protocol can free up bed space for more surgical patients, providing the opportunity to generate additional revenue.

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