DATA TRENDS

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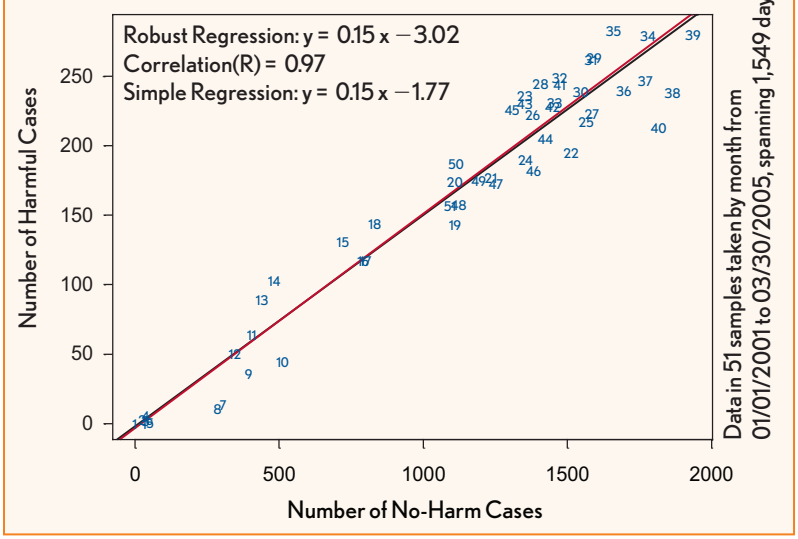
broad effort to detect adverse event needed to minimize patient harm

When it comes to medical errors, hospital financial leaders tend to focus more on catastrophic events because these events have the greatest financial and media impact. Every hour, according to the Institute of Medicine's landmark study *To Err is Human* (2000), about six to 11 patients will die as a result of medical errors in our hospitals.

But these events represent "the tip of the iceberg" in terms of the total number of adverse events that occur. It is important for hospitals to recognize and report all types of medical errors because unintended hazards, risks, or behaviors that are not detected can have disastrous consequences. To be effective, the overall error reporting process must identify not only adverse events that cause harm to patients, but also near-miss events that do not result in harm. Reporting should serve to help identify weaknesses in systems and care processes that lead to near-miss events, so that they can be strengthened before an event occurs that causes grievous harm to a patient.

QUANTROS RISK AND PATIENT SAFETY MANAGEMENT DATA, MARCH

SCATTER PLOT OF NO-HARM VERSUS HARMFUL EVENTS BY MONTH



Consider, for example, medication/infusion-related events. Quantros data from between 2001 and 2005 indicate these events constitute 32.4 percent of all reported events—the second largest number of events after clinical events, which make up 35.7 percent of the total number of self-reported events.

Data from a sampling of 51 monthly data points, reported over this same four-year period, suggest that, consistently, 15 percent of all medication/infusion events result in harm to patients. The r-correlation statistic between harmful and nonharmful medication/infusion-related events among the study hospitals is 0.98—an extremely tight correlation, almost a 1:1 relationship. This relationship implies that by recognizing nonharmful events and using evidence-based interventions to decrease their incidence over time, the incidence of harmful events can be decreased proportionately.

From a risk management perspective, this relationship also allows a hospital to predict the number of harmful events from a known number of nonharmful events, and vice versa. Thus, if an organization reports 100 nonharmful events each month, the 100 can be multiplied by 15 percent to predict the number of harmful events to patients—i.e.,15. By comparing this with the actual number of harmful events reported, the organization can further assess the impact of interventions in terms of saving lives and avoiding potential litigation. ●