

(Järbrink et al., 2025). Systematic reviews of hospitalized older medical patients report adverse event rates of approximately 5%-6% in large chart review studies; however, when geriatric syndromes such as falls, delirium, and incontinence are included, incidence rates rise to as high as 60%, suggesting that both traditional complications and geriatric syndromes are important reflections of inadequate nursing quality. In nursing homes and skilled nursing facilities, more than one-third of residents or admissions are affected by adverse events such as falls, pressure injuries, medication errors, and acute infections, with particularly high rates during high-risk periods (e.g., early rehabilitation phases or pandemic conditions).



Figure 1 NSI data-to-action loop for quality improvement in geriatric inpatient care

NSI-based evaluations also reveal variability in nursing performance and the problem of “incomplete monitoring.” A large U.S. hospital survey showed that key nursing activities such as patient education, discharge preparation, and care planning were frequently left unfinished; higher levels of missed nursing care were associated with increased rates of medication errors, hospital-acquired infections, and injurious falls, indicating that process-level nursing gaps translate into measurable safety outcomes. In long-term care settings, serious adverse events are often concentrated in medication errors, falls, delayed or inappropriate interventions, and missed care, and are closely associated with inadequate staff competence, incomplete documentation, and deficiencies in teamwork and communication. Moreover, national-level NSI trend analyses suggest that routine monitoring covers only a small fraction of potential indicators, that mental health-related indicators are frequently absent, and that post-complication mortality has increased over time-implying that current monitoring systems may capture only part of the nursing quality landscape in geriatric care.

4.3 Major problems and weak points in nursing practice

At the level of nursing practice, NSI-based analyses consistently expose key vulnerabilities, including missed or delayed nursing care, underreporting of events, and deficiencies in competence and documentation. In hospital settings, higher levels of unfinished nursing tasks-often driven by workload pressures and staffing constraints-are directly associated with increased rates of medication errors, infections, and injurious falls, indicating that monitoring- and prevention-intensive nursing activities are not being reliably delivered. Retrospective studies and incident reports from long-term care facilities further show that serious adverse events are frequently linked to delayed or inappropriate interventions and missed care, with contributing factors including insufficient geriatric assessment and medication management skills, incomplete or missing documentation, weak teamwork, and poor communication. In addition, fear of blame and punitive responses may drive underreporting of events, undermining organizational learning and system-level quality improvement (Huang et al., 2025; Wang et al., 2025).