PSI 36: In Hospital Hip Fracture or Fall	
Review of an OECD PSI (33).	
Dimension	**Description**
Description of Specific Aspects of Patient Safety	Falls are a common cause of morbidity and mortality especially among elderly in-patients over 65 years of age. Falls are associated with functional disability and injury, increased length of stay, and risk of nursing home placement from hospital. Often falls are the result of the interaction of many factors. Falls may be caused by the persons' health status, response to medical interventions, external factors such as the type of floor or other factors. Thus in-hospital hip fracture or fall is an adequate measure of patient safety.
Aim of the PSI	This PSI is intended to flag cases of in-hospital hip fractures or falls.
Level of Determination of Patient Safety	Safety is assessed at the aggregated patient level.
Source(s)	The complication screening programme (33).
Extent of Clinically Testing	The OECD Health Care Quality Indicators (HCQI) Project was initiated to implement quality measures for international benchmarking of medical care at the health system level. Five priority areas including patient safety were selected. International expert panels were formed to identify clinically important, scientifically sound, and feasible measures based on a structured consensus process. The consensus process was successfully completed in all five priority areas leading to a recommendation of 86 indicators of which 21 cover patient safety (33). The Complications Screening Program (CSP) aims to identify 28 potentially preventable complications of hospital care using computerised discharge abstracts, including demographic information, diagnosis and procedure codes. A study was set up to validate the CSP as a quality indicator. Explicit process of care criteria were used to determine whether hospital discharges flagged by the CSP experienced more process problems than unflagged discharges. The CSP was applied to computerised hospital discharge abstracts from Medicare beneficiaries > 65 years old admitted in 1994 to hospitals in California and Connecticut for major surgery or medical treatment. The final sample included 740 surgical and 416 medical discharges. Rates of process problems were high, ranging from 24.4 to 82.5% across CSP screens for surgical cases. Problems were lower for medical cases, ranging from 2.0 to 69.1% across CSP screens. Problem rates were 45.7% for surgical and 5.0% for medical controls. Rates of problems did not differ significantly across flagged and unflagged discharges. The researchers concluded: "The CSP did not flag discharges with significantly higher rates

	of explicit process problems than unflagged discharges" (37). Another study of the CSP was undertaken to study the accuracy of computer algorithms on administrative data to identify hospital complications. The assessment was based on a medical records indicator differentiating hospital-acquired conditions from pre-existing comorbidities. Indicators for identifying potential hospital complications were applied to all secondary diagnoses for all 1997-1998 discharges. The researchers concluded: "Current complication algorithms identify many cases where the condition was actually present on hospital admission. This fact, coupled with the known variability in coding between institutions, makes comparisons between hospitals on many of the complications problematic. Collection of the present-on-admission flag significantly reduces the noise in monitoring complication rates (38). The results suggest that this PSI may be useful as a measure of patient safety (33;37).
Evidence of Clinically use of Standards	No evidence of clinically use of standards was found.
PSI category	Theme Related PSI**:** "In-Hospital Fall".
Data definitions	Cases of in-hospital hip fracture or fall per 100 surgical discharges with an operating room procedure.
Numerator Description	Patients experiencing an in-hospital hip fracture or fall; defined as secondary diagnosis only. A fall is defined as unintentionally coming to rest on the ground, floor, or other lower level, but not as a result of syncope or overwhelming external force. Exclude cases: – With trauma or metastatic cancer as any diagnosis – With principal diagnosis of seizure, syncope, stroke, coma, cardiac arrest, or poisoning – In MDC 8.
Denominator Description	Inpatients undergoing major surgery OR minor or miscellaneous surgery OR invasive cardiac procedures OR invasive radiologic procedures OR endoscopy OR medical patients OR all patients as defined by the CSP.
Data Source	Administrative data.
Identifying the institutional context	The impact of falls makes this PSI important for both financial and quality improvement policies.
Care Setting	The PSI applies for high quality care.
Professionals Responsible for Health Care	All health care workers.

Lowest Level of Health Care Delivery Addressed	Individual clinical department.
Allowance for Patient Factors	No risk adjustment described.
Stratification by Vulnerable Populations	No stratification.
Standard of Comparison	No specific standards given.
Scoring	Not specified