

Appendix 2 (as supplied by the authors): Definitions provided to reviewers for identifying factors that potentially contributed to avoidable readmissions

Medication related events:

Definition: Medication related events occur when patients experience symptoms as a result of medication administration.

Example: A patient with congestive heart failure was started on spironolactone in hospital. The patient was discharged on this medication in addition to ramipril, furosemide and potassium supplements (as patient had been taking prior to admission). No monitoring of patient's electrolytes following discharge was done. As a result, two weeks later, the patient developed extreme weakness and anorexia. Blood work at this time demonstrated a serum potassium concentration of 7 mmol/L.

Procedure related events:

Definition: Procedure related events occur when patients experience symptoms due to a medical procedure, such as endoscopy or central line insertion.

Example: Patient admitted for coronary angiogram and angioplasty, but was not told about limitations of activities following discharge. The patient developed a groin hematoma after squatting to lift a heavy object two days after discharge.

Nosocomial infection:

Definition: Nosocomial infections occur when patients acquire infections during the process of hospital care.

Example: Patient developed dysuria, frequency and flank pain two days after discharge. A foley catheter was required in the hospital to monitor urine output and was removed on the day of discharge. The patient saw his primary care physician and was started on antibiotics. Urine cultures were positive at that time.

Diagnostic error:

Definition: Diagnostic errors occur when a provider does not follow an appropriate diagnostic algorithm or when the provider does not act on the findings of a diagnostic test.

Example: Elderly patient was evaluated in the emergency department for generalized complaints of weakness and dizziness. Patient was seen and discharged home, but no electrocardiogram was done prior to discharge. The patient returned to the emergency room the next day with an acute ST elevation myocardial infarction, requiring transfer to a coronary care unit.

Management error:

Definition: Management errors occur when providers order a contra-indicated therapy, do not monitor the effects of therapies correctly, or do not initiate an indicated therapy.

Example: Elderly patient with known dilated cardiomyopathy is admitted with rapid atrial fibrillation. She is started on diltiazem for rate control and warfarin for preventing cardio-embolism. No follow-up was arranged. Seven days later, she is readmitted with decompensated left ventricular failure. Her INR at readmission is 6.0.

System error:

Definition: System errors occur when a faulty health care system design leads to inefficiency in care or patient harm (for example, communication failures).

Example: Patient was admitted to intensive care unit from the emergency department. Diagnosis of septic shock was made and patient was given initial dose of antibiotics and fluid resuscitation. Further doses of antibiotics were ordered but failed to be processed in a timely manner and thus the patient did not receive any antibiotics until the next day. Patient remained unstable and in florid septic shock.

Surgical complication:

Definition: Surgical complications occur when patients experience symptoms as a result of a surgical procedure.

Example: Patient was admitted for total knee replacement and discharged within a few days. One day after discharge, patient began to notice redness and swelling around incision site. Symptoms worsened and patient visited emergency room. Noted to have post operative infection at surgical site and required antibiotic treatment.