Appendix B: Clinical, Quality, Safety, Operational, and Financial Patient Outcome Variables

Clinical Variables – Hospital Acquired Condition (HAC) Codes

- 1. Foreign object retained after surgery
- 2. Air embolism
- 3. Blood incompatibility
- 4. Stage III and IV pressure ulcers
- 5. Falls and trauma
- 6. Manifestations of poor glycemic control
- 7. Catheter-associated urinary tract infection
- 8. Vascular catheter-associated infection
- 9. Surgical site infection
- 10. Deep vein thrombosis or pulmonary embolism

Patient Quality and Safety Indicator Variables

- 1. All-cause mortality at 28 day, 60 day, and 1 year postoperatively
- 2. Death in low-mortality DRGs
- 3. Death among surgical inpatients with serious treatable complications ("failure-to-rescue")
- 4. Unplanned postoperative intubation
- 5. Iatrogenic pneumothorax
- 6. Prolonged mechanical ventilation (>48 hour)
- 7. Postoperative pneumonia
- 8. Postoperative SSI (including deep-wound or organ-space infection)
- 9. Selected infections due to medical care: CLABSI; CAUTI; HAP; VAP

- 10. Postoperative hip fracture
- 11. Postoperative hemorrhage or hematoma
- 12. Postoperative physiologic and metabolic derangements
- 13. Postoperative respiratory failure
- 14. Postoperative deep vein thrombosis or pulmonary embolism
- 15. Postoperative stroke
- 16. Postoperative acute renal failure
- 17. Postoperative myocardial infarction
- 18. Postoperative sepsis and septic shock
- 19. Postoperative abdominal wound dehiscence (including fascial dehiscence)
- 20. Decubitus pressure ulcer
- 21. Blood transfusion (intraoperative or postoperative)
- 22. Blood transfusion reaction
- Percent of surgery patients on β-blocker therapy before arrival who received a β-blocker during the perioperative period
- 24. Percent of surgery patients who had the urinary catheter removed on postoperative day 1 or postoperative day 2 (day of surgery being day 0)
- 25. Percent of surgery patients who receive an appropriate blood clot preventive therapy within24 hour before the surgical incision time to 24 hour after the surgery end time

Operational Variables

- 1. Day of surgery on-time starts
- 2. Day of surgery anesthesia-related delays

- 3. Day of surgery cancellations
- 4. Observed hospital length of stay
- 5. ICU admission rate
- 6. ICU readmission rate
- 7. ICU days
- 8. 30 day all cause readmission
- 9. 30 day surgery procedure-related cause readmission

Financial Variables

- 1. Total direct medical cost in US\$
- 2. Direct surgery cost in US\$ for all hip patients
- 3. Direct non-surgery cost in US\$ for all hip patients
- 4. Direct surgery cost in US\$ for all knee patients
- 5. Direct non-surgery cost in US\$ for all knee patients