Supplemental Table 2. The Leapfrog Group’s Hospital Safety Score Grade: Components, data sources, weights and letter grade boundaries for Spring 2014

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| **MEASURE** | **PRIMARY DATA SOURCE*****(Secondary data source)*** | **STANDARD WEIGHT** |
| **Process & Structural Measures (N=15; Domain Weight=50%)** |
| **Computerized Physician Order Entry** | 2013 Leapfrog Hospital Survey*(2012 HIT Supplement)* | 5.6% |
| **ICU Physician Staffing** | 2013 Leapfrog Hospital Survey*(2011 AHA Annual Survey)* | 6.8% |
| **SP #1: Culture of Safety Leadership Systems and Structures** | 2013 Leapfrog Hospital Survey | 2.5% |
| **SP #2: Culture Measurement, Feedback and Intervention** | 2013 Leapfrog Hospital Survey | 2.7% |
| **SP #3: Teamwork Training and Skill Building** | 2013 Leapfrog Hospital Survey | 2.7% |
| **SP #4: Risks and Hazards** | 2013 Leapfrog Hospital Survey | 2.6% |
| **SP #9: Nursing Workforce** | 2013 Leapfrog Hospital Survey | 3.5% |
| **SP #17: Medication Reconciliation** | 2013 Leapfrog Hospital Survey | 2.6% |
| **SP #19: Hand Hygiene** | 2013 Leapfrog Hospital Survey | 3.4% |
| **SP #23: Healthcare-Associated Complications in Ventilated Patients** | 2013 Leapfrog Hospital Survey | 2.6% |
| **SCIP INF 1: Antibiotic within 1 Hour** | CMS Hospital Compare | 3.1% |
| **SCIP INF 2: Antibiotic Selection** | CMS Hospital Compare | 2.4% |
| **SCIP INF 3: Antibiotic Discontinued After 24 Hours** | CMS Hospital Compare | 2.4% |
| **SCIP INF 9: Catheter Removal** | CMS Hospital Compare | 3.2% |
| **SCIP VTE 2: Venous Thromboembolism Prophylaxis** | CMS Hospital Compare | 3.9% |
| **Outcome Measures (N=13; Weight=50%)** |
| **Foreign Object Retained** | CMS HACs | 4.6% |
| **Air Embolism** | CMS HACs | 4.6% |
| **Falls and Trauma** | CMS HACs | 4.9% |
| **CLABSI** | 2013 Leapfrog Hospital Survey*(CMS Hospital Compare)* | 5.1% |
| **CAUTI** | 2013 Leapfrog Hospital Survey*(CMS Hospital Compare)* | 5.2% |
| **SSI: Colon** | CMS Hospital Compare | 3.8% |
| **Stage III and IV Pressure Ulcer** | CMS ARHQ PSIs | 6.1% |
| **PSI 4: Death Among Surgical Inpatients** | CMS Hospital Compare | 2.2% |
| **PSI 6: Iatrogenic Pneumothorax** | CMS ARHQ PSIs | 2.4% |
| **PSI 11: Postoperative Respiratory Failure** | CMS ARHQ PSIs | 2.3% |
| **PSI 12: Postoperative Pulmonary Embolism/Deep Vein Thrombosis** | CMS ARHQ PSIs | 2.5% |
| **PSI 14: Postoperative Would Dehiscence** | CMS ARHQ PSIs | 2.7% |
| **PSI 15: Accidental Puncture or Laceration** | CMS ARHQ PSIs | 3.4% |
| **LETTER GRADE BOUNDARIES** |
|  | **Safety Score Criteria****(at or above cut point)** | **Standard Deviations** |
| **A** | ≥3.151 | 0.6 SD Above Mean |
| **B** | ≥2.961 | 0.00 SD Above Mean |
| **C** | ≥2.485 | 1.5 SDs Below Mean |
| **D** | ≥2.009 | 3.0 SDs Below Mean |
| **F** |  | More than 3.0 SDs Below Mean |

*Note:*SP=Safe Practices; SCIP=Surgical Care Improvement Project; INF=Infection; VTE= Venous Thromboembolism;AHA=American Hospital Association; HIT=Health Information Technology; CLABSI=Central line-associated bloodstream infection; CAUTI=Catheter-associated urinary tract infection; SSI=Surgical site infection; PSI=Patient Safety Indicators; CMS=Centers for Medicare and Medicaid Services; AHRQ=Agency for Healthcare Research and Quality. Note that when measures are missing, weights within the same domain are adjusted proportionally upwards. For full methodological details, see Leapfrog Methodology Report from April 2014, available at <http://www.hospitalsafetyscore.org/media/file/HospitalSafetyScore_ScoringMethodology_Spring2014_Final.pdf>.