**Appendix 1. MEDLINE Search Strategy**

1. (heart adj3 (transplant\* or surger$3 or surgical$2 or bypass\*)).tw.
2. (cardiac adj3 (transplant\* or surger$3 or surgical$2 or bypass\*)).tw.
3. (cardio\* adj3 (surger$3 or surgical$2 or bypass\*)).tw.
4. (coronary adj3 (surger$3 or surgical$2 or bypass\*)).tw.
5. (valve adj3 (surger$3 or surgical$2 or replacement? or repair?)).tw.
6. (aortic adj3 (surger$3 or surgical$2 or replacement? or repair?)).tw.
7. CAG.tw.
8. CABG.tw.
9. exp Cardiac Surgical Procedures/
10. Cardiopulmonary bypass/
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. ((prolonged or long$2 or extended or excess\*) adj3 ICU).tw.
13. ((prolonged or long$2 or extended or excess\*) adj3 Intensive care).tw.
14. ((prolonged or long$2 or extended or excess\*) adj3 LOS).tw.
15. ((prolonged or long$2 or extended or excess\*) adj3 ventilation).tw.
16. ((prolonged or long$2 or extended or excess\*) adj3 stay).tw.
17. (prolonged or long$2 or extended or excess\*).tw.
18. "Length of Stay"/
19. 17 and 18
20. Respiration, Artificial/
21. 12 or 13 or 14 or 15 or 16 or 19 or 20
22. Critical Care/
23. Intensive Care Units/
24. (critical$3 adj3 care).tw.
25. (critical$3 adj3 illness).tw.
26. (critical$3 adj3 ill).tw.
27. intensive care.tw.
28. ICU.tw.
29. 22 or 23 or 24 or 25 or 26 or 27 or 28
30. 11 and 21 and 29