APPENDIX 1: SEARCH STRATEGY February 3rd, 2017

("Arthroplasty, Replacement, Knee"[Mesh] OR knee arthroplasty[tiab] OR knee replac*[tiab] OR knee arthroplast*[tiab] OR arthroplasty of the knee*[tiab] OR "Arthroplasty, Replacement, Hip"[Mesh] OR hip replac*[tiab] OR hip arthroplast*[tiab] OR arthroplasty of the hip*[tiab] OR "Appendectomy"[Mesh] OR "Appendix/surgery"[Mesh] OR appendectom*[tiab] OR "Cholecystectomy"[Mesh] OR "Gallbladder/surgery"[Mesh] OR cholescystectom*[tiab] OR ((removal[tiab] OR remove[tiab]) AND gall bladder[tiab]) OR "Esophagectomy"[Mesh] OR "Esophagus/surgery"[Mesh] OR esophagectom*[tiab] OR "Pancreatectomy"[Mesh] OR "Pancreas/surgery"[mesh] OR pancreatectom*[tiab] OR "Aortic Aneurysm, Abdominal/surgery"[Mesh] OR ((abdominal aortic aneurysm[tiab] OR (aneurysm[tiab] AND abdominal aorta[tiab])) AND (repair[tiab] OR surgery[tiab] OR surgeries[tiab] OR surgical[tiab])) OR "Transcatheter Aortic Valve Replacement"[Mesh] OR ("Heart Valve Prosthesis Implantation"[Mesh] AND "Aortic Valve/surgery"[Mesh]) OR (aortic valve[tiab] AND replacement*[tiab]) OR "Coronary Artery Bypass"[Mesh] OR (coronary arter*[tiab] AND (bypass*[tiab] OR graft*[tiab])) OR cabg[tiab])

AND

("Mortality"[mesh] OR "mortality"[subheading] OR death*[tiab] OR mortalit*[tiab] OR "Length of Stay"[Mesh] OR length of stay[tiab] OR length of hospitalization[tiab] OR length of hospitalisation[tiab] OR los[tiab] OR hospital stay*[tiab] OR inpatient stay*[tiab] OR duration of stay[tiab] OR duration of hospitalization*[tiab] OR duration of hospitalisation*[tiab] OR shorter stay*[tiab] OR longer stay*[tiab] OR "Pulmonary Embolism"[Mesh] OR pulmonary embolism*[tiab] OR pulmonary thromboembolism*[tiab] OR pe[tiab] OR "Pneumonia"[mesh] OR pneumonia*[tiab] OR "Sepsis"[Mesh] OR sepsis[tiab] OR septic*[tiab] OR bacteremia*[tiab] OR fungemia*[tiab] OR "Infection"[mesh] OR infection*[tiab] OR abscess*[tiab] OR cellulitis[tiab] OR phlegmon*[tiab] OR "Stroke"[Mesh] OR stroke*[tiab] OR cerebrovascular accident[tiab] OR cva[tiab] OR cvas[tiab] OR brain ischemia*[tiab] OR intracranial hemorrhag*[tiab] OR intracranial haemorrhag*[tiab] OR "Bile Ducts"[Mesh] OR bile duct*[tiab] OR biliary duct* OR cystic duct*[tiab] OR hepatic duct*[tiab] OR "Reoperation"[mesh] OR reoperation*[tiab] OR re operation*[tiab] OR repeat surg*[tiab] OR repeated surg*[tiab] OR revision*[tiab] OR "Surgical Wound Dehiscence"[mesh] OR dehiscence[tiab] OR wound separation[tiab] OR wound rupture[tiab] OR wound disruption[tiab] OR separated wound*[tiab] OR ruptured wound*[tiab] OR disrupted wound*[tiab] OR wound opening[tiab] OR "Blood Transfusion"[Mesh] OR transfusion*[tiab] OR "Myocardial Infarction"[Mesh] OR myocardial infact*[tiab] OR heart attack*[tiab] OR mi[tiab]) OR Patient Readmission"[Mesh] OR readmission[tiab] OR re admission[tiab] OR rehospitalization*[tiab] OR rehospitalisation*[tiab] OR re hospitalization*[tiab] OR re hospitalisation*[tiab]

AND

("Databases, Factual"[mesh] OR canadian institute for health information[tiab] OR cihi[tiab] OR national surgical quality improvement program*[tiab] OR nsqip[tiab] OR healthcare cost and utilization project[tiab] OR hcup[tiab] OR nationwide inpatient sample[tiab] OR nis[tiab] OR kids inpatient

database[tiab] OR kid[tiab] OR thoracic surgeons national database[tiab] OR sts national database[tiab] OR sts database[tiab] OR vascular quality initiative[tiab] OR vqi[tiab] OR centers for medicare[tiab] OR medicaid services[tiab] OR CMS[tiab] OR centers for disease control[tiab] OR discharge survey[tiab] OR national center for health statistics[tiab] OR cdc[tiab] OR nchs[tiab] OR nds[tiab] OR ambulatory medical care survey[tiab] OR namcs[tiab] OR nhamcs[tiab] OR (care survey[tiab] AND national[tiab]) OR national health service*[tiab] OR nhs[tiab] OR hospital episode statistics[tiab] OR health and social care information centre[tiab] OR hes[tiab] OR hscic[tiab] OR patient episode database[tiab] OR (wales[tiab] AND informatics service[tiab]) OR NWIS[tiab] OR information Services division[tiab] OR inpatient system[tiab] OR clinical practice research datalink[tiab] OR cprd[tiab] OR cardiothoracic surgery database[tiab] OR scts[tiab] OR (national[tiab] AND confidential enquiry[tiab]) OR ncepod[tiab] OR (health quality[tiab] AND safety commission[tiab]) OR hqsc[tiab] OR national minimum dataset[tiab] OR nmds[tiab] OR (audit[tiab] AND surgical mortality[tiab]) OR anzasm[tiab] OR (austrailian[tiab] AND institute[tiab] AND welfare[tiab]) OR aihw[tiab])

AND

("2000/01/01"[PDAT] : "3000/12/31"[PDAT])

Embase Search 2016, 06, 13

1892 Records

("Arthroplasty, Replacement, Knee"[Mesh] OR knee arthroplasty[tiab] OR knee replac*[tiab] OR knee arthroplast*[tiab] OR arthroplasty of the knee*[tiab] OR "Arthroplasty, Replacement, Hip"[Mesh] OR hip replac*[tiab] OR hip arthroplast*[tiab] OR arthroplasty of the hip*[tiab] OR "Appendectomy"[Mesh] OR "Appendix/surgery"[Mesh] OR appendectom*[tiab] OR "Cholecystectomy"[Mesh] OR "Gallbladder/surgery"[Mesh] OR cholescystectom*[tiab] OR ((removal[tiab] OR remove[tiab]) AND gall bladder[tiab]) OR "Esophagectomy"[Mesh] OR "Esophagus/surgery"[Mesh] OR esophagectom*[tiab] OR "Pancreatectomy"[Mesh] OR "Pancreas/surgery"[mesh] OR pancreatectom*[tiab] OR "Aortic Aneurysm, Abdominal/surgery"[Mesh] OR ((abdominal aortic aneurysm[tiab] OR (aneurysm[tiab] AND abdominal aorta[tiab])) AND (repair[tiab] OR surgery[tiab] OR surgeries[tiab] OR surgical[tiab])) OR "Transcatheter Aortic Valve Replacement"[Mesh] OR ("Heart Valve Prosthesis Implantation"[Mesh] AND "Aortic Valve/surgery"[Mesh]) OR (aortic valve[tiab] AND replacement*[tiab]) OR "Coronary Artery Bypass"[Mesh] OR (coronary arter*[tiab] AND (bypass*[tiab] OR graft*[tiab])) OR cabg[tiab])

AND

("Mortality"[mesh] OR "mortality"[subheading] OR death*[tiab] OR mortalit*[tiab] OR "Length of Stay"[Mesh] OR length of stay[tiab] OR length of hospitalization[tiab] OR length of hospitalisation[tiab] OR los[tiab] OR hospital stay*[tiab] OR inpatient stay*[tiab] OR duration of stay[tiab] OR duration of hospitalization*[tiab] OR duration of hospitalisation*[tiab] OR shorter stay*[tiab] OR longer stay*[tiab]

OR "Patient Readmission"[Mesh] OR readmission[tiab] OR re admission[tiab] OR rehospitalization*[tiab] OR rehospitalisation*[tiab] OR re hospitalization*[tiab] OR re hospitalisation*[tiab] OR "Pulmonary Embolism"[Mesh] OR pulmonary embolism*[tiab] OR pulmonary thromboembolism*[tiab] OR pe[tiab] OR "Pneumonia"[mesh] OR pneumonia*[tiab] OR "Sepsis"[Mesh] OR sepsis[tiab] OR septic*[tiab] OR bacteremia*[tiab] OR fungemia*[tiab] OR "Infection"[mesh] OR infection*[tiab] OR abscess*[tiab] OR cellulitis[tiab] OR phlegmon*[tiab] OR "Stroke"[Mesh] OR stroke*[tiab] OR cerebrovascular accident[tiab] OR cva[tiab] OR cvas[tiab] OR brain ischemia*[tiab] OR intracranial hemorrhag*[tiab] OR intracranial haemorrhag*[tiab] OR "Bile Ducts"[Mesh] OR bile duct*[tiab] OR biliary duct* OR cystic duct*[tiab] OR hepatic duct*[tiab] OR "Reoperation"[mesh] OR reoperation*[tiab] OR re operation*[tiab] OR repeat surg*[tiab] OR repeated surg*[tiab] OR revision*[tiab] OR "Surgical Wound Dehiscence"[mesh] OR dehiscence[tiab] OR wound separation[tiab] OR wound rupture[tiab] OR wound disruption[tiab] OR separated wound*[tiab] OR ruptured wound*[tiab] OR disrupted wound*[tiab] OR wound opening[tiab] OR "Blood Transfusion"[Mesh] OR transfusion*[tiab] OR "Myocardial Infarction"[Mesh] OR myocardial infact*[tiab] OR heart attack*[tiab] OR mi[tiab]) OR Patient Readmission"[Mesh] OR readmission[tiab] OR re admission[tiab] OR rehospitalization*[tiab] OR rehospitalisation*[tiab] OR re hospitalization*[tiab] OR re hospitalisation*[tiab] OR Patient Readmission"[Mesh] OR readmission[tiab] OR re admission[tiab] OR rehospitalization*[tiab] OR rehospitalisation*[tiab] OR re hospitalization*[tiab] OR re hospitalisation*[tiab]

AND

("Databases, Factual"[mesh] OR canadian institute for health information[tiab] OR cihi[tiab] OR national surgical quality improvement program*[tiab] OR nsqip[tiab] OR healthcare cost and utilization project[tiab] OR hcup[tiab] OR nationwide inpatient sample[tiab] OR nis[tiab] OR kids inpatient database[tiab] OR kid[tiab] OR thoracic surgeons national database[tiab] OR sts national database[tiab] OR sts database[tiab] OR vascular quality initiative[tiab] OR vqi[tiab] OR centers for medicare[tiab] OR medicaid services[tiab] OR CMS[tiab] OR centers for disease control[tiab] OR discharge survey[tiab] OR national center for health statistics[tiab] OR cdc[tiab] OR nchs[tiab] OR nds[tiab] OR ambulatory medical care survey[tiab] OR namcs[tiab] OR nhamcs[tiab] OR (care survey[tiab] AND national[tiab]) OR national health service*[tiab] OR nhs[tiab] OR hospital episode statistics[tiab] OR health and social care information centre[tiab] OR hes[tiab] OR hscic[tiab] OR patient episode database[tiab] OR (wales[tiab] AND informatics service[tiab]) OR NWIS[tiab] OR information Services division[tiab] OR inpatient system[tiab] OR clinical practice research datalink[tiab] OR cprd[tiab] OR cardiothoracic surgery database[tiab] OR scts[tiab] OR (national[tiab] AND confidential enquiry[tiab]) OR ncepod[tiab] OR (health quality[tiab] AND safety commission[tiab]) OR hqsc[tiab] OR national minimum dataset[tiab] OR nmds[tiab] OR (audit[tiab] AND surgical mortality[tiab]) OR anzasm[tiab] OR (australian[tiab] AND institute[tiab] AND welfare[tiab]) OR aihw[tiab])

AND

("2000/01/01"[PDAT] : "3000/12/31"[PDAT])AND

[2000-2016]/py

Web of Science Search 2016, 06, 13

1098 Records

TS=((("knee" OR "hip") NEAR/3 ("replac*" OR "arthroplast*")) OR "appendectom*" OR
"cholescystectom*" OR (("removal" OR "remove*") NEAR/3 "gall bladder") OR "esophagectom*" OR
(("esophag*" OR "pancrea*") NEAR/3 "resect*") OR "pancreatectom*" OR (("abdominal aortic
aneurysm" OR "aneurysm of the abdominal aorta" OR "aneurysms of the abdominal aorta") NEAR/3
("repair" OR "surgery" OR "surgeries" OR "surgical")) OR (("aortic valve") NEAR/3 "replacement*") OR
("coronary artery" NEAR/3 ("bypass*" OR "graft*")) OR "cabg")

AND

TS=("death*" OR "mortalit*" OR (("length" OR "duration" OR "shorter" OR "longer") NEAR/3 ("stay" OR
"hospitalization*" OR "hospitalisation*")) OR "pulmonary embolism*" OR "pulmonary
thromboembolism*" OR "pe" OR "pneumonia*" OR "sepsis" OR "septic*" OR "bacteremia*" OR
"fungemia*" OR "infection*" OR "abscess*" OR "cellulitis" OR "phlegmon*" OR "stroke*" OR
"cerebrovascular accident*" OR "cva" OR "cvas" OR "brain ischemia*" OR "intracranial hemorrhag*" OR
"intracranial haemorrhag*" OR "bile duct*" OR "cystic duct*" OR "hepatic duct*" OR "reoperation*" OR
"re operation*" OR "repeat* surg*" OR "revision*" OR "dehiscence" OR ("wound*" NEAR/3
("separation*" OR "rupture*" OR "disruption*" OR "separated" OR "opening")) OR "transfusion*" OR
"myocardial infact*" OR "heart attack*" OR "mi")

AND

TS=("canadian institute for health information" OR "cihi" OR "national surgical quality improvement
program*" OR "nsqip" OR "healthcare cost and utilization project" OR "hcup" OR "nationwide inpatient
sample" OR "nis" OR "kids inpatient database" OR "kid" OR "thoracic surgeons national database" OR
"sts national database" OR "sts database" OR "vascular quality initiative" OR "vqi" OR "centers for
medicare" OR "medicaid services" OR "CMS" OR "centers for disease control" OR "discharge survey" OR
"national center for health statistics" OR "cdc" OR "nchs" OR "nds" OR "ambulatory medical care survey"
OR "namcs" OR "nhamcs" OR ("care survey" NEAR/3 "national") OR "national health service*" OR "nhs"
OR "hospital episode statistics" OR "health and social care information centre" OR "hes" OR "hscic" OR
"patient episode database" OR "wales informatics service" OR "NWIS" OR "information services division"
OR "hospital inpatient system" OR "clinical practice research datalink" OR "cprd" OR "cardiothoracic

surgery database" OR "scts" OR "national confidential enquiry" OR "ncepod" OR "health quality safety commission" OR "hqsc" OR "national minimum dataset" OR "nmds" OR "audit or surgical mortality" OR "anzasm" OR "austrailian institute of health and welfare" OR "aihw")

Cochrane Library

Search 2016, 06, 13

Cochrane Central Register of Controlled Clinical Trials

74 Records

NHS Economic Evaluation Database (2000-2014: ceased)

358 Records

Health Technology Assessments

2 Records

(((knee OR hip) W3 (replac* OR arthroplast*)) OR appendectom* OR cholescystectom* OR ((removal OR remove*) W3 gall bladder) OR esophagectom* OR ((esophag* OR pancrea*) W3 resect*) OR pancreatectom* OR (("abdominal aortic aneurysm" OR "aneurysm of the abdominal aorta" OR "aneurysms of the abdominal aorta") W3 (repair OR surgery OR surgeries OR surgical)) OR (("aortic valve") W3 replacement*) OR ("coronary artery" W3 (bypass* OR graft*)) OR cabg)

AND

(death* OR mortalit* OR ((length OR duration OR shorter OR longer) W3 (stay OR hospitalization* OR hospitalisation*)) OR "pulmonary embolism*" OR "pulmonary thromboembolism*" OR pe OR pneumonia* OR sepsis OR septic* OR bacteremia* OR fungemia* OR infection* OR abscess* OR cellulitis OR phlegmon* OR stroke* OR "cerebrovascular accident*" OR cva OR cvas OR "brain ischemia*" OR "intracranial hemorrhag*" OR "intracranial haemorrhag*" OR "bile duct*" OR "cystic duct*" OR "hepatic duct*" OR reoperation* OR re operation* OR "repeat surg*" OR "repeated surg*" OR revision* OR dehiscence OR (wound* W3 (separation* OR rupture* OR disruption* OR separated OR opening)) OR transfusion* OR "myocardial infact*" OR "heart attack*" OR mi)

AND

("canadian institute for health information" OR cihi OR "national surgical quality improvement program*" OR nsqip OR "healthcare cost and utilization project" OR hcup OR "nationwide inpatient sample" OR nis OR "kids inpatient database" OR kid OR "thoracic surgeons national database" OR "sts national database" OR "sts database" OR "vascular quality initiative" OR vqi OR "centers for medicare" OR "medicaid services" OR CMS OR "centers for disease control" OR "discharge survey" OR "national center for health statistics" OR cdc OR nchs OR nds OR "ambulatory medical care survey" OR namcs OR nhamcs OR ("care survey" W3 national) OR "national health service*" OR nhs OR "hospital episode statistics" OR "health and social care information centre" OR hes OR hscic OR "patient episode database" OR "wales informatics service" OR NWIS OR "information services division" OR "hospital inpatient system" OR "clinical practice research datalink" OR cprd OR "cardiothoracic surgery database" OR scts OR "national confidential enquiry" OR ncepod OR "health quality safety commission" OR hqsc OR "national minimum dataset" OR nmds OR "audit or surgical mortality" OR anzasm OR "austrailian institute of health and welfare" OR aihw)