CENTER FOR SURGICAL TRIALS AND EVIDENCE-BASED PRACTICE (C-STEP):

Selected Publications

QUALITY AND PATIENT SAFETY

Checklists

1) ***Anderson KT***, ***Bartz-Kurycki MA***, Masada KM et al. Decreasing intraoperative delays with meaningful use of the surgical safety checklist. Surgery 2017 Nov 9. [Epub ahead of print].
2) ***Bartz-Kurycki MA***, ***Anderson KT*** et al. Debriefing: the forgotten phase of the surgical safety checklist. J Surg Res 2017 Jun; 213: 222-227.
3) ***Putnam LR***, ***Anderson KT***, Diffley MB et al. Meaningful use and good catches: More appropriate metrics for checklist effectiveness. Surgery 2016 Dec; 160(6): 1675-1681.
4) ***Putnam LR***, ***Levy SM,*** Sajid M et al. Multifaceted interventions improve adherence to the surgical checklist. Surgery 2014 Aug; 156(2): 336-44.
5) ***Levy SM***, Senter CE, Hawkins RB et al. Implementing a surgical checklist: more than checking a box. Surgery 2012 Sep; 152(3): 331-6.

Imaging wisely

6) ***Anderson KT***, ***Bartz-Kurycki M***, Austin MT et al. Approaching zero: Implications of a computed tomography reduction program for pediatric appendicitis evaluation. J Pediatr Surg 2017 Dec; 52(12): 1909-15.
7) ***Anderson KT***, ***Putnam LR***, et al. Imaging gently? Higher rates of computed tomography imaging for pediatric appendicitis in non-children's hospitals. Surgery 2017 May; 161(5): 1326-1333.
8) ***Anderson KT***, Greenfield S, ***Putnam LR*** et al. Don't forget the dose: improving computed tomography dosing for pediatric appendicitis. J Pediatr Surg 2016 Dec; 51(12): 1944-1948.

Healthcare Associated Infections

9) Lee JC, Williams GW, Kozar RA, Kao LS, ***Mueck KM*** et al. Multitargeted feeding strategies improve nutrition outcome and are associated with reduced pneumonia in a Level 1 Trauma Intensive Care Unit. JPEN J Parenter Enteral Nutr 2017 Mar 1. [Epub ahead of print].
10) ***Mueck KM***, Kao LS. Patients at high-risk for surgical site infection. Surg Infect 2017 May/Jun; 18(4): 440-446.
11) ***Mueck MK***, ***Putnam LR***, ***Anderson KT***, Lally KP, Tsao K, Kao LS. Does compliance with antibiotic prophylaxis in pediatric simple appendicitis matter? J Surg Res 2017 Aug; 216: 1-8.
12) ***Holihan JL***, Flores-Gonzalez JR, Mo J et al. How long is long enough to identify a surgical site infection? Surg Infect 2017 May/Jun; 18(4): 419-423.
13) ***Cherla DV***, ***Holihan JL***, Flores-Gonzalez JR et al. Decreasing surgical site infections after ventral hernia repair: a quality-improvement initiative. Surg Infect (Larchmt) 2017 Oct; 18(7): 780-6.

14) ***Putnam LR***, Chang CM, Rogers NB et al. Adherence to surgical antibiotic prophylaxis remains a challenge despite multifaceted interventions. Surgery 2015 Aug; 158(2): 413-9.
15) ***Alawadi ZM***, Kao LS. Chlorhexidine gluconate, 4% showers and surgical site infection reduction. JAMA Surg 2015 Nov; 150(11): 1033.
16) ***Levy SM***, Holzmann-Pazgal G, Lally KP et al. Quality check of a quality measure: surgical wound classification discrepancies impact risk-stratified surgical site infection rates in pediatric appendicitis. J Am Coll Surg 2013 Dec; 217(6): 969-73.
17) Kao LS and ***Phatak UR.*** Glycemic control and prevention of surgical site infection. Surg Infect (Larchmt) 2013 Oct; 14(5): 437-44.
18) Hawkins RB, ***Levy SM***, Senter CE et al. Beyond surgical care improvement compliance: antibiotic prophylaxis implementation gaps. Am J Surg 2013 Oct; 206(4): 451-6.

Perioperative Outcomes

19) ***Putnam LR***, ***Levy SM***, Johnson E et al. Impact of a 24-hour discharge pathway on outcomes of pediatric appendectomy. Surgery 2014 Aug; 156(2): 455-61.
20) ***Phatak UR***, Chan WM, Lew DF et al. Is nighttime the right time? Risk of complications after laparoscopic cholecystectomy at night. J Am Coll Surg 2014 Oct; 219(4): 718-24.
21) Goodenough CJ, Liang MK, Nguyen MT, Nguyen DH, ***Holihan JL***, ***Alawadi ZM*** et al. Preoperative glycosylated hemoglobin and postoperative glucose together predict major complications after abdominal surgery. J Am Coll Surg 2015 Oct; 221(4): 854-61.

Patient Safety Education

22) Landgren R, ****Alawadi Z***, Douma C, et al. Barriers of pediatric residents to speaking up about patient safety. Hosp Pediatr 2016 Dec; 6(12): 738-43.
23) ***Putnam LR***, Pham DH, Ostovar-Kermani TG, ***Alawadi ZM*** et al. How should surgical residents be educated about patient safety: a pilot randomized controlled trial. J Surg Educ 2016 Jul-Aug; 73(4): 660-7.
24) ***Putnam LR***, ***Levy SM***, Kellagher CM et al. Surgical resident education in patient safety: where can we improve? J Surg Res 2015 Dec; 199(2): 308-13.

Quality Reporting

25) ***Hamilton EC***, Pham DH, Minzenmayer AN et al. Are we missing the near misses in the OR? – underreporting of safety incidents in pediatric surgery. J Surg Res 2018 Jan; 221: 336-42.
26) ***Putnam LR***, Ostovar-Kermani TG, Le Blanc A, ***Anderson KT*** et al. Surgical site infection reporting: more than meets the agar. J Pediatr Surg 2017 Jan; 52(1): 156-160.
27) ***Mueck KM***, ***Putnam LR***, Kao LS. Improving the quality of quality improvement reporting: Standards for Quality Improvement Reporting Excellence (SQUIRE) 2.0 Guidelines. JAMA Surg 2016 Apr; 151(4): 311-2.
28) ***Putnam LR***, ***Levy SM***, Blakely ML et al. A multicenter, pediatric quality initiative improves surgical wound class assignment, but is it enough? J Pediatr Surg 2016; 51(4): 639-44.

29) ***Putnam LR***, ***Levy SM***, Holzmann-Pazgal G et al. Surgical wound classification for pediatric appendicitis remains poorly documented despite targeted interventions. J Pediatr Surg 2015 Jun; 50(6): 915-8.
30) ***Levy SM***, ***Phatak UR***, Tsao K et al What is the quality of reporting of studies of interventions to increase compliance with antibiotic prophylaxis? J Am Coll Surg 2013 Nov; 217(5): 770-9.

PEDIATRIC SURGERY

31) ***Hamilton EC***, Miller CC 3rd, Cox CS Jr et al. Variability of child access prevention laws and pediatric firearm injuries. J Trauma Acute Care Surg 2017 Dec 28. [Epub ahead of print].
32) ***Hamilton EC***, Balogh J, Nguyen DT et al. Liver transplantation for primary hepatic malignancies of childhood: The UNOS experience. J Pediatr Surg 2017 Oct 12. [Epub ahead of print].
33) ***Hamilton EC***, Curtin T, Slack RS et al. Surgical feeding tubes in pediatric and adolescent cancer patients: a single-institution retrospective review. J Pediatr Hematol Oncol 2017 Jul 3 [Epub ahead of print].
34) ***Hamilton EC***, Lazar D, et al. Pediatric tracheobronchial injury after blunt trauma. J Trauma Acute Care Surg 2017 May 22. [Epub ahead of print].
35) ***Putnam LR***, ***Anderson KT***, Tsao K et al. The impact of cardiac risk factors on short-term outcomes for children undergoing a Ladd procedure. J Pediatr Surg 2017 Mar; 52(3): 390-4.
36) ***Putnam LR***, Gupta V, Tsai K et al. Factors associated with early recurrence after congenital diaphragmatic hernia repair. J Pediatr Surg 2017 Jun; 52(6): 92-32.
37) ***Putnam LR***, Tsao K, Lally KP et al. Minimally invasive vs. open congenital diaphragmatic hernia repair: is there a superior approach? J Am Coll Surg 2017 Apr; 224(4): 416-22.
38) Harting MT, Hollinger L, Tsao K, ***Putnam LR*** et al. Aggressive surgical management of congenital diaphragmatic hernia: worth the effort? A multicenter, prospective, cohort study. Ann Surg 2017 Jan 217. [Epub ahead of print].
39) ***Putnam LR***, Harting MT, Tsao K et al. Congenital diaphragmatic hernia defect size and infant morbidity at discharge. Pediatrics 2016 Nov; 138(5).
40) ***Putnam LR***, Tsao K, Morini F et al. Evaluation of variability in inhaled nitric oxide use and pulmonary hypertension in patients with congenital diaphragmatic hernia. JAMA Pediatr Surg 2016 Dec 1; 170(12): 1188-1194.
41) Covey SE, ***Putnam LR***, ***Anderson KT***, Tsao K. Prophylactic versus symptomatic Ladd procedures for pediatric malrotation. J Surg Res 2016 Oct; 205(2): 327-330.
42) ***Putnam LR***, Richards MK, Sandvall BK et al. Laboratory evaluation for pediatric patients with suspected necrotizing soft tissue infections: A case-control study. J Pediatr Surg 2016 Jun 51(6): 1022-5.
43) Freemayer B, ***Hamilton E***, Warneke CL et al. Treatment outcomes in pediatric melanoma-Are there benefits to specialized care? J Pediatr Surg 2016 Dec; 51(12): 2063-7.
44) ***Putnam LR***, Nguyen LK, Lally KP et al. A statewide analysis of specialized care for pediatric appendicitis. Surgery 2015 Sep; 158(3): 787-92.

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46) ***Levy S***, Tsao K, Cox CS Jr, **Phatak UR**, et al. Component separation for complex congenital abdominal wall defects: not just for adults anymore. J Pediatr Surg 2013 Dec; 48(12): 2525-9.
47) ***Levy SM***, Lally PA, Lally KP et al. The impact of chylothorax on neonates with repaired congenital diaphragmatic hernia. J Pediatr Surg 2013 Apr; 48(4): 724-9.
48) Iqbal CW, ***Levy SM***, Tsao K et al. Laparoscopic versus open distal pancreatectomy in the management of traumatic disruption. J Laparoendosc Adv Surg Tech A 2012 Jul-Aug; 22(6): 595-8.

COMPARATIVE EFFECTIVENESS AND COST EFFECTIVENESS

49) Robinson JR, Avritscher EBC, Gay JC, Willis ZI, ***Putnam LR*** et al. Measuring the value of a clinical practice guideline for children with perforated appendicitis. Ann Surg 2017 Jul; 266(1): 195-200.
50) ***Holihan JL***, Hannon C, Goodenough C et al. Ventral hernia repair: a meta-analysis of randomized controlled trials. Surg Infect 2017 May 30 [Epub ahead of print].
51) ***Alawadi Z***, ***Phatak UR***, Huy CY et al. Comparative effectiveness of primary tumor resection in patients with stage IV colon cancer. Cancer 2016 Aug 1. [Epub ahead of print].
52) ***Holihan JL***, Nguyen DH, Flores-Gonzalez JR et al. A systematic review of randomized controlled trials and reviews in the management of ventral hernias. J Surg Res 2016 Aug; 204(2): 311-8.
53) ***Holihan JL***, Askenasy EP, Greenberg JA et al. Component separation vs. bridged repair for alrge ventral hernias: a multi-institutional risk-adjusted comparison, systematic review, and meta-analysis. Surg Infect 2016 Feb; 17(1): 17-26.
54) ***Holihan JL***, Nguyen DH, Nguyen MT et al. Mesh location in open ventral hernia repair: A systematic review and network meta-analysis. World J Surg 2016 Jan; 40(1): 89-99.
55) ***Phatak UR***, Li LT, Karanjawala B et al. Systematic review of educational interventions for ostomates. Dis Colon Rectum 2014 Apr; 57(4): 529-37.
56) ***Phatak UR***, Pedroza C, Millas SG et al. Revisiting the effectiveness of interventions to decrease surgical site infections in colorectal surgery: A Bayesian perspective. Surgery 2012 Aug; 152(2): 202-11.

DISPARITIES

57) Joseph M, ***Hamilton EC***, Hayes-Jordan A et al. The impact of racial/ethnic disparities on survival for children and adolescents with extremity sarcomas: A population-based study. J Pediatr Surg 2017 Oct 12. [Epub ahead of print].
58) ***Hamilton EC***, Miller CC, Cotton BA et al. The association of insurance status on the probability of transfer for pediatric trauma patients. J Pediatr Surg 2016 Dec; 51(12): 2048-2052.
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60) Austin MT, ***Hamilton E***, Zebda D et al. Health disparities and impact on outcomes in children with primary central nervous system solid tumors. J Neurosurg Pediatr 2016 Aug 19: 1-9. [Epub ahead of print].
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64) ***Putnam LR***, Tsao K, Nguyen HT et al. The impact of socioeconomic status on appendiceal perforation in pediatric appendicitis. J Pediatr 2016 Mar; 170: 156-60.
65) ***Alawadi ZM***, ***Phatak UR***, Kao LS, et al. Race not rural residency is predictive of surgical treatment for hepatocellular carcinoma: Analysis of the Texas Cancer Registry. J Surg Oncol 2016 Jan; 113(1): 84-8.
66) ***Alawadi ZM***, Leal I, ***Phatak UR*** et al. Facilitators and barriers of implementing enhanced recovery in colorectal surgery at a safety net hospital: A provider and patient perspective. Surgery 2016 Mar; 159(3): 700-12.
67) Millas SG, ***Alawadi ZM***, Wray CJ et al. Treatment delays of colon cancer in a safety-net hospital system. J Surg Res 2015 Oct; 198(2): 311-6.
68) ***Phatak UR***, Kao LS, Millas SG et al. Interaction between age and race alters predicted survival in colorectal cancer. Ann Surg Oncol 2013 Oct; 20(11): 3363-9.
69) Wray CJ, ***Phatak UR***, Robinson EK, et al. The effect of age on race-related breast cancer survival disparities. Ann Surg Oncol 2013 Aug; 20(8): 2541-7.

PATIENT-REPORTED AND PATIENT-CENTERED OUTCOMES

70) ***Cherla DV***, Moses ML, Viso CP, ***Holihan JL*** et al. Impact of abdominal wall hernias and repair on patient quality of life. World J Surg 2018 Jan; 42(1): 19-25.
71) ***Mueck KM***, Leal IM, Wan CC et al. Shared decision-making during surgical consultation for gallstones at a safety-net hospital. Surgery 2017 Dec 6. [Epub ahead of print].
72) ***Mueck KM***, ***Cherla DV***, Taylor A, Ko TC, Liang MK, Kao LS. Randomized controlled trials evaluating patient-reported outcomes after cholecystectomy: a systematic review. J Am Coll Surg 2017 Nov 4 [Epub ahead of print].
73) ***Holihan JL***, Flores-Gonzalez JR, Mo J et al. A prospective assessment of clinical and patient-reported outcomes of initial non-operative management of ventral hernias. World J Surg 2017 May; 41(5): 1267-1273.
74) ***Holihan JL***, Henchcliffe BE, Mo J et al. Is nonoperative management warranted in ventral hernia patients with comorbidities?: a case-matched, prospective, patient-centered study. Ann Surg 2016 Oct; 264(4): 585-90.

75) ***Alawadi ZM***, Leal IM, Flores JR et al. Underserved patients seeking care for ventral hernias at a safety net hospital: Impact on quality of life and expectations of treatment. J Am Coll Surg 2017 Jan; 224(1): 26-34.
76) ***Holihan JL***, Henchcliffe BE, Mo J et al. Is nonoperative management warranted in ventral hernia patients with comorbidities? A case-matched, prospective, patient-centered study. Ann Surg 2016 Oct; 264(4): 585-90.

TRIAL PROTOCOLS

77) ***Mueck KM***, ***Wei S***, Liang MK et al. Protocol for a randomized trial of the effect of the timing of cholecystectomy during initial admission for predicted mild gallstone pancreatitis at a safety-net hospital. Trauma Surgery & Acute Care Open 2018 (in press).
78) Price BA, Bednarski BK, You YN, Manandhar M, Dean EM, ***Alawadi ZM*** et al. Accelerated enhanced Recovery following Minimally Invasive colorectal cancer surgery (RecoverMI): a study protocol for a novel randomized controlled trial. BMJ Open 2017 Jul 20; 7(7): e015960.

HERNIAS

79) ***Holihan JL***, Liang MK. Nomenclature in ventral hernia repair. World J Surg 2017 Oct 10. [Epub ahead of print].
80) ***Cherla DV***, Lew DF, Escamilla RJ, ***Holihan JL*** et al. Differences of alternative methods of measuring abdominal wall hernia defect size: a prospective observational study. Surg Endosc 2017 Sep 15. [Epub ahead of print].
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82) ***Mueck KM***, Holihan JL, Mo J et al. Computed tomography findings associated with the risk for emergency ventral hernia repair. Am J Surg 2017 Jul; 214(1): 42-46.
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92) Goodenough CJ, Ko TC, Kao LS, Nguyen MT, ***Holihan JL***, ***Alawadi Z*** et al. Development and validation of a risk stratification score for ventral incisional hernia after abdominal surgery: hernia expectation rates in intra-abdominal surgery (the HERNIA project). J Am Coll Surg 2015 Apr; 220(4): 405-13.
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ETHICS

94) ***Cherla DV***, Olavarria OA, ***Bernardi K***, Viso CP, Moses ML, ***Holihan JL*** et al. Investigation of financial conflict of interest among published ventral hernia researchers. J Am Coll Surg 2017 Dec 21. [Epub ahead of print].
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TRAUMA

97) ***Pommerening MJ***, Rahbar E, Minei K et al. Splenectomy is associated with hypercoaguable thromboelastography values and increased risk of thromboembolism. Surgery 2015 Sep; 158(3): 618-26.
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100) McNutt MK, Chinapuvvula NR, Beckmann NM, Camp EA, ***Pommerening MJ*** et al. Early surgical intervention for blunt bowel injury: the Bowel Injury Prediction Score (BIPS). J Trauma Acute Care Surg 2015 Jan; 78(1): 105-11.
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102) ***Pommerening MJ***, Kao LS, Sowards KJ et al. Primary skin closure after damage control laparotomy. Br J Surg 2015 Jan; 102(1): 67-75.

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104) ***Pommerening MJ***, DuBose JJ, Zielinski MD et al. Time to first take-back operation predicts successful primary fascial closure in patients undergoing damage control laparotomy. Surgery 2014 Aug; 156(2): 431-8.

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